

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Abrego, Lisandro

PD April 2000. **TI** Demand Side Considerations and the Trade and Wages Debate. **AU** Abrego, Lisandro; Whalley, John. **AA** Abrego: University of Warwick. Whalley: University of Western Ontario and NBER. **SR** National Bureau of Economic Research Working Paper: 7674; 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 U.S.). **JE** D31, D58, F12, J31, O33. **KW** Wage Inequality. Trade. Import Substitution.

AB Recent trade and wages literature focuses on whether trade or technology has been the major source of increases in wage inequality in Organization for Economic Cooperation and Development (OECD) countries since the 1980s. In this literature, no attention has been paid to demand side considerations. Using a simple heterogeneous goods trade model of the Armington type and UK data, we show how trade shocks affecting the price of unskilled-intensive goods can be absorbed on the demand side, with little or no impact on relative wage rates. No wage impact occurs if the elasticity of substitution in preferences between imports and import substitutes is one. As this elasticity increases, trade plays an ever larger role in explaining wage inequality changes, and as the elasticity goes below one the sign of the effect changes. We suggest that since many import demand elasticity estimates are in the neighborhood of one, there is a prima facie case that demand side considerations further lower the significance of trade as an explanation of recent trends in OECD wage inequality -- beyond that reported in recent literature.

Acemoglu, Daron

PD February 2002. **TI** Economic Backwardness in Political Perspective. **AU** Acemoglu, Daron; Robinson, James A. **AA** Acemoglu: MIT. Robinson: University of California at Berkeley. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/13; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 42. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** D72, N10, N40, O14, O38. **KW** Political Economy. Institutions. Development. Industrialization. Technological Development.

AB We construct a simple model where political elites may block technological and institutional development, because of a "political replacement effect." Innovations often erode elites' incumbency advantage, increasing the likelihood that they will be replaced. Fearing replacement, political elites are unwilling to initiate change, and may even block economic development.

We show that elites are unlikely to block development when there is a high degree of political competition, or when they are highly entrenched. It is only when political competition is limited and their power is threatened that elites will block development. We also show that such blocking is more likely to arise when political stakes are higher, and that external threats may reduce the incentives to block. We argue that this model provides an interpretation for why Britain, Germany, and the U.S. industrialized during the nineteenth century, while the landed aristocracy in Russia and Austria-Hungary blocked development.

PD February 2002. **TI** Cross-Country Inequality Trends. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/14; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 30. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** J31. **KW** Returns to Education. Skill-Biased Technical Change. Technology Adoption. Wage Inequality. Skill Supply.

AB The economics profession has made considerable progress in understanding the increase in wage inequality in the U.S. and the UK over the past several decades, but currently lacks a consensus on why inequality did not increase, or increased much less, in (continental) Europe over the same time period. I review the two most popular explanations for these differential trends: that relative supply of skills increased faster in Europe, and that European labor market institutions prevented inequality from increasing. I argue that these two explanations go some way towards accounting for the differential cross-country inequality trends, but do not provide an entirely satisfactory explanation. In addition, it appears that relative demand for skills increased differentially across countries. Motivated by this reasoning, I develop a simple theory where labor market institutions creating wage compression in Europe also encourage more investment in technologies increasing the productivity of less-skilled workers, thus implying less skill-biased technical change in Europe than in the U.S.

PD June 2002. **TI** Women, War and Wages: The Effect of Female Labor Supply on the Wage Structure at Mid-Century. **AU** Acemoglu, Daron; Autor, David H.; Lyle, David. **AA** Acemoglu and Autor: MIT and NBER. Lyle: MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/22; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 40. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** J16, J21, J22, J31, N32. **KW** Labor Supply. Wage

Structure. Gender Differentials. Wage Inequality. War.

AB This paper investigates the effects of female labor supply on the wage structure. To identify variation in female labor supply, we exploit the military mobilization for World War II, which drew many women into the workforce as males exited civilian employment. The extent of mobilization was not uniform across states, however, with the fraction of eligible males serving ranging from 41 to 54 percent. We find that in states with greater mobilization of men, women worked substantially more after the War and in 1950, though not in 1940. We interpret these differentials as labor supply shifts induced by the War. We find that increases in female labor supply lower female wages, lower male wages, and increase the college premium and male wage inequality generally. Our findings indicate that at mid-century, women were closer substitutes to high school graduates and relatively low-skill males, but not to those with the lowest skills.

Agenor, Pierre-Richard

PD October 2000. **TI** The Credit Crunch in East Asia: What Can Bank Excess Liquid Assets Tell Us? **AU** Agenor, Pierre-Richard; Aizenman, Joshua; Hoffmaister, Alexander W. **AA** Agenor: World Bank. Aizenman: Dartmouth College and NBER. Hoffmaister: International Monetary Fund and Central Bank of Costa Rica. **SR** National Bureau of Economic Research Working Paper: 7951; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 18. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E42, F31, F41. **KW** Bank Liquidity. East Asia. Financial Crisis.

AB The paper proposes a two-step approach to assessing the extent to which the fall in credit in crisis-stricken East Asian countries was a supply- or demand-induced phenomenon. The first step is based on the estimation of a demand function for excess liquid assets by commercial banks. Such a function is derived analytically in the first part of the paper. The second step consists of establishing dynamic projections for the periods following the crisis and assessing whether or not residuals are large enough to be viewed as indicators of "involuntary" accumulation of excess reserves. Results for Thailand indicate that the contraction in bank lending that accompanied the crisis was the result of supply factors.

Ahituv, Avner

PD November 2000. **TI** Technical Progress and Early Retirement. **AU** Ahituv, Avner; Zeira, Joseph. **AA** Hebrew University of Jerusalem. **SR** CEPR Discussion Paper: 2614; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** J24, J26, O15, O33. **KW** Human Capital. Labor Participation. Technical Progress.

AB This Paper claims that technical progress induces early retirement of older workers. It supports this claim both theoretically and empirically. We present a model where part of human capital is technology-specific, so that technical progress erodes some existing human capital. This affects mostly older workers, who do not learn the new technology, since their career horizon is short. As a result their participation in the labor force declines. We find strong support to this erosion effect in US data, which shows that labor supply of older workers is negatively related to technical progress across

sectors. Unlike the cross-section effect, the model is ambiguous about the aggregate effect of technical progress on labor participation of older workers. While in sectors with many innovations it falls due to erosion of human capital, in other sectors it increases due to higher wages. To examine which effect dominates, we run a time series test and find that the effect of average technical progress on aggregate labor force participation by the old is negative. Namely, the erosion effect dominates.

Aizenman, Joshua

TI The Credit Crunch in East Asia: What Can Bank Excess Liquid Assets Tell Us? **AU** Agenor, Pierre-Richard; Aizenman, Joshua; Hoffmaister, Alexander W.

Alberini, Anna

PD April 2001. **TI** Accidents Waiting to Happen: Liability Policy and Toxic Pollution Releases. **AU** Alberini, Anna; Austin, David. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/06; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 29. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D72, K13, K32, Q28. **KW** Liability Policy. Negligence. Pollution. Environmental Policy. Policy Endogeneity.

AB Proponents of environmental policies based on liability assert that strict liability imposed on polluters induces firms to handle hazardous wastes properly. We run regressions relating unintended pollution releases to strict liability imposed on polluters, exploiting variation across states and over time in the liability provisions of state mini-Superfund laws. Strict liability reduces the frequency and severity of pollution releases, provided it is modeled endogenously with the latter. Its effects vary with firm size. Partially sheltered from liability, small firms may have specialized in riskier production processes, but their number has not necessarily grown in response to the states' liability policy.

Albers, Heidi J.

PD October 2001. **TI** A Spatial-Intertemporal Model for Tropical Forest Management Applied to Khao Yai National Park, Thailand. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/35; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 21. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** O13, Q15, Q23, Q24, Q26. **KW** Parks. Spatial Analysis. Biodiversity. Forestry. Land Allocation.

AB This paper discusses the application of a spatial-intertemporal model for tropical forest management to Khao Yai National Park in Thailand. This type of model, especially the spatial components, finds different optimal land allocations than do traditional models at empirically relevant levels of benefits. The spatial analysis here suggests that most of this park can be best used as a preserved area and also provides support for expanding the park into an adjacent unpopulated area. The analysis demonstrates that the park's benefits to regional agriculture and villagers are large enough that preservation can proceed without international support, and that local people, as a group, have incentives to maintain most of the area as preserved land. Although the data cannot support

a full case study, these results underscore the need for empirical assessment of the spatial aspects of protected area management.

PD October 2001. **TI** State-Level Variation in Land-Trust Abundance: Could it Make Economic Sense. **AU** Albers, Heidi J.; Ando, Amy W. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/36; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 17. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** H41, L31, Q15, Q24, Q26. **KW** Land Trusts. Public Goods. Organizational Size. Conservation.

AB Few economic analyses examine land trusts, their decisions, and the land-trust "industry," despite their growing importance. For example, statistics on the wide variation in the number of trusts in different regions of the United States raise questions about whether such variation makes economic sense. This paper builds a model to identify the optimal number of private conservation agents. The model depicts two competing forces: regional spatial externalities in conservation benefits that increase the efficiency of having fewer agents and organizational costs, and fund-raising specialization, which increases the efficiency of having more agents. Using state-level variables, we perform a count-data analysis of the number of trusts conserving land in each state. We find that the number of trusts actually observed is consistent with the optimal number of trusts that is predicted by the model on the basis of the relative importance of spatial externalities and organizational size in different regions.

Altshuler, Rosanne

PD September 2000. **TI** The Effect of the Tax Reform Act of 1986 on the Location of Assets in Financial Services Firms. **AU** Altshuler, Rosanne; Hubbard, R. Glenn. **AA** Altshuler: Rutgers University. Hubbard: Columbia University. **SR** National Bureau of Economic Research Working Paper: 7903; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** F23, G28, H25, H32, H87. **KW** Tax Differentials. Financial Institutions. Asset Location. Tax Reform.

AB This paper examines the effects of the Tax Reform Act of 1986 on the international location decisions of U.S. financial services firms. The Act included rule change that made it substantially more difficult for U.S. firms to defer U.S. taxes on overseas financial services income held in low-tax jurisdictions. These same rule changes were not applied to other forms of income; in particular, income generated from active manufacturing operations was still eligible for deferral after the Act. We use information from the tax returns of U.S. corporations to examine how local taxes affect the allocation of assets held abroad. We find that, before the Act, the location of assets in financial subsidiaries was responsive to differences in host country tax rates across jurisdictions. However, after the Act, differences in host country tax rates no longer explain the distribution of assets held in financial services subsidiaries abroad. In contrast, we find that assets held in manufacturing subsidiaries have become more sensitive to variations in tax rates. Our results suggest that the tightening of the anti-deferral provisions applicable to financial services companies has been successful in neutralizing the effect of host country income taxes on investment location decisions.

Amat, Oriol

PD March 2001. **TI** One Hundred Issues of Revista Espanola de Financiacion y Contabilidad (REFC) -- Insights into Trends in the Spanish Academic Community. **AU** Amat, Oriol; Oliveras, Ester. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 540; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 29. **PR** Papers available for free on the web; no hardcopies. **JE** M41. **KW** Revista Espanola. Academic Community. Accounting.

AB From the year of its foundation until 1997, REFC has been the only referred accounting journal in Spain. Published by the Spanish Association for Accounting and Business Administration (AECA), this journal is at the heart of the emergence of a distinctly Spanish academic accounting community. The study is based on a 15-year publication analysis of the journal and a questionnaire to Spanish academics. *Key points emerging from this study include:* 1. A move away from interest in accounting concepts and rules and towards the impact of accounting information on capital markets, and financial analysis. 2. Spanish academics rate REFC highly compared to other Spanish journals for publication status, as a support for research, and as a support for teaching. A number of English language journals are rated more highly for both publication status and as a support for teaching.

Anderlini, Luca

PD December 2000. **TI** Bounded Rationality and Incomplete Contracts. **AU** Anderlini, Luca; Felli, Leonardo. **AA** Anderlini: Southampton University and Georgetown University. Felli: London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/00/407; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 42. **PR** no charge. **JE** C69, C79, D81, D89. **KW** Incomplete Contracts. Bounded Rationality. Complexity Costs. Contracts.

AB This paper explores the link between boundedly rational behavior and incomplete contracts. The bounded rationality of the agents in our world is embodied in a constraint that the contracts they write must be algorithmic in nature. We start with a definition of contract incompleteness that seems both appealing and widely applicable. Our first task is then to show that, by itself, the algorithmic nature of contracts is not enough to generate genuinely incomplete contracts in equilibrium. As in Anderlini and Felli (1994), we call this the Approximation Result. We then consider contractual situations in which the complexity costs of a contract are explicitly taken into account. We consider a broad (axiomatically defined) class of complexity measures, and in this framework we show that incomplete contracts occur in equilibrium. We also extensively discuss some recent literature directly related to the results reported here.

PD February 2001. **TI** Transaction Costs and the Robustness of the Coase Theorem. **AU** Anderlini, Luca; Felli, Leonardo. **AA** Anderlini: Southampton University and Georgetown University. Felli: London School of Economics and Political Science and Political Science. **SR** London

School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/01/409; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 40. PR no charge. JE C78, D23, D61, D62, D83. KW Transaction Costs. Hold-Up Problem. Coase Theorem. Negotiation Costs.

AB This paper explores the extent to which the presence of ex-ante transaction costs may lead to failures of the Coase Theorem. In particular we identify and investigate the basic "hold-up problem" which arises whenever the parties to a Coasian negotiation have to pay some ex-ante costs for the negotiation to take place. We then show that a "Coasian solution" to this hold-up problem is not available. This is because a Coasian solution to the hold-up problem typically entails a negotiation about the payment of the costs associated with the future negotiation, which in turn is associated with a fresh set of ex-ante costs, and hence with a new hold-up problem.

Andersen, Torben G.

PD October 2000. **TI** The Distribution of Stock Return Volatility. **AU** Andersen, Torben G.; Bollerslev, Tim; Diebold, Francis X.; Ebens, Heiko. **AA** Andersen: Northwestern University and NBER. Bollerslev: Duke University and NBER. Diebold: University of Pennsylvania and NBER. Ebens: Johns Hopkins University. **SR** National Bureau of Economic Research Working Paper: 7933; 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** C22, G12. **KW** Volatility. Stock Returns. Latent Volatility. Realized Volatility.

AB We exploit direct model-free measures of daily equity return volatility and correlation obtained from high-frequency intraday transaction prices on individual stocks in the Dow Jones Industrial Average over a five-year period to confirm, solidify and extend existing characterizations of stock return volatility and correlation. We find that the unconditional distributions of the variances and covariances for all thirty stocks are leptokurtic and highly skewed to the right, while the logarithmic standard deviations and correlations all appear approximately Gaussian. Moreover, the distributions of the returns scaled by the realized standard deviations are also Gaussian. Finally, there is strong evidence that equity volatilities and correlations move together, possibly reducing the benefits to portfolio diversification when the market is most volatile. Our findings are broadly consistent with a latent volatility factor or structure, and they see the stage for improved high-dimensional volatility modeling and out-of-sample forecasting, which in turn hold promise for the development of better decision making in practical situations of risk management, portfolio allocation, and asset pricing.

Anderson, Jock R.

TI Technologies for Meeting Future Global Demands for Food. **AU** Crosson, Pierre; Anderson, Jock R.

Ando, Amy W.

TI State-Level Variation in Land-Trust Abundance: Could it Make Economic Sense. **AU** Albers, Heidi J.; Ando, Amy W.

Angeletos, George-Marios

PD February 2002. **TI** Idiosyncratic Production Risk, Growth, and the Business Cycle. **AU** Angeletos, George-Marios; Calvet, Laurent E. **AA** Angeletos: MIT. Calvet: Harvard University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/10; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 33. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** D52, D92, E22, E32, O16. **KW** Capital Income. Entrepreneurial Risk. Business Cycle. Growth. Investment.

AB We introduce a neoclassical growth economy with idiosyncratic production risk and incomplete markets. The general equilibrium is characterized in closed form. Uninsurable production shocks introduce a risk premium on private equity and typically result in a lower steady-state level of capital than under complete markets. In the presence of such risks, the anticipation of low investment and high interest rates in the future feeds back into a high risk premium and low investment in the present. The endogenous countercyclical of the risk premium generates a macroeconomic complementarity between future and current investment, which slows down convergence and amplifies the magnitude and persistence of the business cycle. The results -- in sharp contrast with Aiyagari (1994) and Krusell and Smith (1998) -- highlight that idiosyncratic production or capital-income risk can have significant adverse effects on capital accumulation and aggregate volatility.

Antonovics, Kate

PD February 2002. **TI** Persistent Racial Wage Inequality. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/05; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 29. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D82, J15, J62, J71. **KW** Discrimination. Intergenerational Mobility. Wage Inequality.

AB This paper attempts to understand the forces that have led to persistent racial wage inequality by developing a dynamic model of statistical discrimination that accounts for the transmission of earnings across generations. The parameters of this model are then estimated using data from the 1970 and 1990 U.S. Census. The results indicate that racial disparities in the quality of information that firms receive about worker productivity are the primary cause of racial wage inequality in 1990. The results also indicate that neither the persistence of income across generations nor the presence of coordination failures explains a sizable fraction of ongoing inequality.

Antweiler, Werner

PD October 2000. **TI** Increasing Returns and All That: A View from Trade. **AU** Antweiler, Werner; Treffer, Daniel. **AA** Antweiler: University of British Columbia. Treffer: University of Toronto and NBER. **SR** National Bureau of Economic Research Working Paper: 7941; 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** D21, F11, F12. **KW** Scale Economies. Comparative

Advantage. Scale Elasticities.

AB Do scale economies contribute to our understanding of international trade? Do international trade flows encode information about the extent of scale economies? To answer these questions we examine the large class of general equilibrium theories that imply Helpman-Krugman variants of the Vanek factor content prediction. Using an ambitious database on output, trade flows, and factor endowments, we find that scale economies significantly increase our understanding of the sources of comparative advantage. Further, the Helpman-Krugman framework provides a remarkable lens for viewing the general equilibrium scale elasticities encoded in trade flows. In particular, we find that a third of all goods-producing industries are characterized by scale. (The model range of scale elasticities for this group is 1.10-1.20 and the economy-wide scale elasticity is 1.05.) Implications are drawn for the trade-and-wages debate (skill-biased scale effects) and endogenous growth.

Aragones, Enriqueta

PD September 2000. **TI** Mixed Equilibrium in a Downsian Model with a Favored Candidate. **AU** Aragones, Enriqueta; Palfrey, Thomas R. **AA** Aragones: Universitat Pompeu Fabra. Palfrey: California Institute of Technology. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 502; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 44. **PR** Papers available for free on the web; no hardcopies. **JE** C72, D72. **KW** Spatial Competition. Mixed Strategies. Candidate Quality.

AB This paper examines competition in the standard one-dimensional Downsian model of two-candidate elections, but where one candidate (A) enjoys an advantage over the other candidate (D). Voters' preferences are Euclidean, but any voter will vote for candidate A over candidate D unless D is closer to her ideal point by some fixed distance (FD). The location of the median voter's ideal point is uncertain, and its distribution is commonly known by both candidates. The candidates simultaneously choose locations to maximize the probability of victory. Pure strategy equilibria often fails to exist in this model, except under special conditions about FD and the distribution of the median ideal point. We solve for the essentially unique symmetric mixed equilibrium, show that candidate A adopts more moderate policies than candidate D, and obtain some comparative statics results about the probability of victory and the expected distance between the two candidates' policies.

PD September 2000. **TI** Campaign Rhetoric: A Model of Reputation. **AU** Aragones, Enriqueta; Postlewaite, Andrew. **AA** Aragones: Universitat Pompeu Fabra. Postlewaite: University of Pennsylvania. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 525; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 36. **PR** Papers available for free on the web; no hardcopies. **JE** C72, D72. **KW** Electoral Campaigns. Reputation. Commitment.

AB We analyze conditions under which a candidate's campaign rhetoric may affect the beliefs of the voters over what policy the candidate will implement in case he wins the election. We develop a model of repeated elections with complete information in which candidates are purely

ideological. Voter's strategies involve a credible threat to punish candidates that renege of their campaign promises, and in equilibrium all campaign promises are believed by voters, and honored by candidates. We obtain that the degree to which promises are credible in equilibrium is an increasing function of the value of a candidate's reputation.

Argiles, Josep M.

PD July 2000. **TI** New Opportunities for Farm Accounting. **AU** Argiles, Josep M.; Slob, Eric J. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 497; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 38. **PR** Papers available for free on the web; no hardcopies. **JE** L79, M41. **KW** Agricultural Accounting. Accounting Standards. Farm Accountancy. European Union.

AB There is a gap between the importance given to accounting and the low level of bookkeeping and accounting practice in the agricultural sector. Current general accounting rules do not adapt very well to the particularities of farming and are difficult and expensive to implement. The Farm Accountancy Data Network (FADN) and IASC's Proposed International Accounting Standard on Agriculture (PIASA) could be key elements to improve the use of accounting in European farms. The PIASA provides a strong conceptual framework but might need further instruments for its implementation in practice. FADN is an experienced network that has elaborated very detailed farm accounting procedures. Empirical data indicate that current FADN reports are already considered useful by farmers for different purposes. Some changes in the FADN procedures are suggested, while some aspects of FADN are worthwhile for the future IAS on agriculture.

TI Measuring and Explaining Farm Inefficiency in a Panel Data Set of Mixed Farms. **AU** Puig-Junoy, Jaume; Argiles, Josep M.

Arora, Ashish

TI Licensing the Market for Technology. **AU** Fosfuri, Andrea; Arora, Ashish.

Arrunada, Benito

PD December 2000. **TI** The Role of Institutions in the Contractual Process. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 521; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 27. **PR** Papers available for free on the web; no hardcopies. **JE** K22, L14. **KW** Contracts. Institutions. Enforcement. Safeguards.

AB Human beings increase their productivity by specializing their resources and exchanging their products. The organization of exchange is costly, however, because specialized activities need coordination and incentives have to be aligned. This work first describes how these exchanges are organized in an institutional environment. It then focuses on the dual effect of this environment -- as with any other specialized resource, institutions may be used for expropriation purposes. They enjoy specialization advantages in safeguarding exchange but they also make possible new forms of opportunism, causing new

costs of exchange. Three perverse tendencies are identified: In the legal field, there is a surplus of mandatory rules and, at the same time, a deficit in default rules. Second, courts' activity is biased against the quasi-judicial role of the parties and the market. Third, market enforcement is based on reputational assets that are badly exposed to opportunism.

Artis, Michael J.

PD September 2000. **TI** The Exchange Rate – A Shock-Absorber or Source of Shocks? A Study of Four Open Economies. **AU** Artis, Michael J.; Ehrmann, Michael. **AA** Artis: European University Institute, Firenze and CEPR. **SR** CEPR Discussion Paper: 2550; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C32, E42, F31, F33. **KW** Exchange Rates. EMU. Optimal Currency Area. Structural VAR. Monetary Union.

AB The paper provides structural vector autoregression (SVAR) estimates for four open economies: the UK, Canada, Sweden, and Denmark, making explicit a monetary policy reaction function and taking account of exchange rate targeting practices. The object of the analysis is to examine the idea that an independent money and exchange rate should allow for effective shock-absorption. An opposite extreme would be that exchange markets breed their own destabilizing shocks. The paper's findings vary from one economy to another: monetary union appears easy to recommend for Sweden and Denmark, much less so for Canada and the UK.

Atack, Jeremy

PD October 2000. **TI** Rising Wage Dispersion Across American Manufacturing Establishments, 1850-1880. **AU** Atack, Jeremy; Bateman, Fred; Margo, Robert A. **AA** Atack: Vanderbilt University and NBER. Bateman: University of Georgia. Margo: Bard College and NBER. **SR** National Bureau of Economic Research Working Paper: 7932; 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** N31, N61. **KW** Wage Dispersion. Wage Inequality. Establishment Size.

AB We use data from the manuscript censuses of manufacturing for 1850, 1860, 1870, and 1880 to study the dispersion of average monthly wages across establishments. We find a marked increase in wage inequality over the period, an increase that cannot be explained by biases in the data or changes in census enumeration procedures. Based on log wage regressions on establishment characteristics we compute a decomposition of the change in wage inequality between 1850 and 1880. The decomposition reveals that changes in "wage structure" -- the regression coefficients and the standard error of the residuals -- largely offset each: changes in the coefficients produced a reduction in wage inequality, while residual inequality increased. Most of the rise in wage inequality can be attributed to an increased concentration of employment in large establishments, which paid relatively low wages. We present indirect evidence that the negative effect of size on wages reflected differences in skill composition: workforces in large establishments were less skilled than in small establishments.

Athey, Susan

PD September 2000. **TI** The Impact of Information Technology on Emergency Health Care Outcomes. **AU** Athey, Susan; Stern, Scott. **AA** MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7887; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** I11, I12, L32, L86, O33. **KW** Emergency Health Care. Information Technology. Health Care. Medical Services.

AB This paper analyzes the productivity of technology and job design in emergency response systems, or "911 systems." During the 1990s, many 911 systems adopted "Enhanced 911" (E911), where information technology is used to link automatic caller identification to a database of address and location information. A potential benefit to E911 is improved timeliness of the emergency response. We evaluate the returns to E911 in the context of a panel dataset of Pennsylvania counties during 1994-1996, when almost half of the 67 counties experienced a change in technology. We measure productivity using an index of health status of cardiac patients at the time of ambulance arrival, where the index should be improved by timely response. We also consider the direct effect of E911 on several patient outcomes, including mortality within the first hours following the incident and total hospital charges incurred by the patient. Finally, we analyze the effect of job design, in particular the use of "Emergency Medical Dispatching", where call-takers gather medical information, provide medical instructions over the telephone, and prioritize the allocation of ambulance and paramedic services.

Auer, Peter

PD July 2001. **TI** Labour Law and Social Insurance in the New Economy: A Debate on the Supiot Report. **AU** Auer, Peter; de Calan, Dominique; Coats, David; Deakin, Simon; Freeman, Richard B.; Hoffmann, Reiner; Hornung-Draus, Renate; Lewis, Jane; Marsden, David; Meadows, Pamela; Sarfati, Hedva; Supiot, Alain. **AA** Auer: International Labour Office, Geneva. de Calan: French Engineering and Mining Employers' Union. Coats: Trades Union Congress' Economic and Social Affairs Department. Deakin: University of Cambridge. Freeman and Marsden: CEP and LSE. Hoffmann: European Trade Union Institute, Brussels. Hornung-Draus: Confederation of German Employers' Associations. Lewis: Oxford University. Meadows: National Institute of Economic and Social Research. Sarfati: International Social Security Association. Supiot: CNRS and National Council for the Development of the Human and Social Sciences. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 500; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 74. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E24, H53, J28, J29, K31. **KW** Employment. Insurance. Labor. Social Insurance.

AB We cover issues such as: whether the right employment institutions can create jobs; employment and its legal context; the meaning of the new forms of employment; social insurance and future work; and Europe's social dialogue.

Auerbach, Alan J.

PD April 2000. **TI** The Significance of Federal Taxes as

Automatic Stabilizers. **AU** Auerbach, Alan J.; Feenberg, Daniel. **AA** Auerbach: University of California, Berkeley and NBER. Feenberg: NBER. **SR** National Bureau of Economic Research Working Paper: 7662; 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** E62. **KW** Federal Taxes. Taxes. Stabilizers. Output Stabilizers.

AB Using the TAXSIM model -- a microsimulation model of the U.S. income tax systems -- for the period 1962-95, we consider the federal tax system's impact as an automatic stabilizer. Despite the many changes in the tax system, there has been relatively little change in its role as an automatic stabilizer. We estimate that individual federal taxes offset perhaps as much as 8 percent of initial shocks to gross domestic product (GDP). We also suggest that the progressive income tax may help to stabilize output via its effect on the supply of labor, an additional effect that may even be of similar magnitude to the more traditional path of stabilization through aggregate demand.

Austin, David

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

Autor, David H.

PD October 2000. **TI** Wiring the Labor Market. **AA** MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7959; 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 U.S.). **JE** J41, O31, O33. **KW** Internet. Worker-Firm Matches.

AB Workers and jobs are naturally heterogeneous and the quality of their interaction when paired is difficult to forecast. The Internet promises to open new channels for worker-firm communications. What are the consequences of this opening? I discuss three labor market features that may be altered: how worker-firm matches are made; how labor services are delivered; and how local markets shape labor demand. Theory predicts these developments will produce social benefits. But the gains are unlikely to be uniform and realizing them will generate novel problems. One result may be the formation of new institutions to address issues accompanying these opportunities.

TI Women, War and Wages: The Effect of Female Labor Supply on the Wage Structure at Mid-Century. **AU** Acemoglu, Daron; Autor, David H.; Lyle, David.

Ayuso, Juan

PD November 2000. **TI** A Model of the Open Market Operations of the European Central Bank. **AU** Ayuso, Juan; Repullo, Rafael. **AA** Ayuso: Banco de Espana. Repullo: Center for Monetary and Financial Studies and CEPR. **SR** CEPR Discussion Paper: 2605; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D44, E52, E58. **KW** European Central Bank. Monetary Auctions. Monetary Policy. Open Market Operations. Tender Procedures.

AB We construct a model to analyze the two types of tender

procedures used by the European Central Bank (ECB) in its open market operations. We assume that the ECB minimizes the expected value of a loss function that depends on the quadratic difference between the interbank rate and a target interest rate that characterizes the stance of monetary policy. We show that when the loss function penalizes more heavily interbank rates below the target, fixed rate tenders have a unique equilibrium characterized by extreme overbidding. We also show that variable rate tenders have multiple equilibria characterized by varying degrees of overbidding, and that in these tenders an equilibrium without overbidding can be obtained by preannouncing the intended liquidity injection. Finally, our empirical analysis supports the assumption of an asymmetric loss function for the ECB.

Bai, Chong-en

PD March 2001. **TI** Ownership, Incentives, and Monitoring. **AU** Bai, Chong-en; Xu, Chenggang. **AA** Bai: University of Hong Kong and University of Michigan Business School. Xu: London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/01/413; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 39. **PR** no charge. **JE** D23, J41, J54. **KW** Employee Ownership. Monitoring. Incentives. Ownership. Human Capital.

AB This paper studies the effect of ownership structure on workers' incentives for investing in firm-specific human capital. Particularly, we analyze such incentives and monitoring under employee ownership and capitalist ownership. In our model, the employee-owned firm is a firm bought by its workers who pay the competitive price. Under certain conditions, we show that the workers' investment and expected income are higher and the monitoring intensity is lower in an employee-owned firm than they are in a capitalist firm. We also show that the incentive effect of employee ownership increases as a worker's reservation wage decreases, and as the monitoring cost or the productivity uncertainty increases. Most of our results are consistent with the available empirical evidence.

Baker, Laurence C.

PD September 2000. **TI** Managed Care, Technology Adoption, and Health Care: The Adoption of Neonatal Intensive Care. **AU** Baker, Laurence C.; Phibbs, Ciaran S. **AA** Baker: Stanford University and NBER. Phibbs: VA Medical Center and Stanford University. **SR** National Bureau of Economic Research Working Paper: 7883; 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** I11, I12, J13, O33. **KW** Managed Care. Medical Technology. Health Care. Technology Adoption.

AB Managed care activity may alter the incentives associated with the acquisition and use of new medical technologies, with potentially important implications for health care costs, patient care, and outcomes. This paper discusses mechanisms by which managed care could influence the adoption of new technologies. We empirically examine the relationship between Health Maintenance Organization (HMO) market share and the diffusion of neonatal intensive care, a collection of technologies for the care of high-risk newborns.

We find that managed care slowed the adoption of neonatal intensive care units (NICUs), primarily by slowing the adoption of mid-level NICUs rather than the most advanced high-level units. Slowing the adoption of mid-level units would likely have generated savings. Moreover, contrary to the frequent supposition that slowing technology growth is uniformly harmful to patients, in this case reduced adoption of mid-level units could have benefited patients, since health outcomes for seriously ill newborns are better in higher-level NICUs, and reductions in the availability of mid-level units appear to increase the chance of receiving care in a high-level center.

Baker, Michael

PD October 2000. **TI** Does Comparable Worth Work in a Decentralized Labor Market? **AU** Baker, Michael; Fortin, Nicole M. **AA** Baker: University of Toronto and NBER. Fortin: University of British Columbia and CIRANO. **SR** National Bureau of Economic Research Working Paper: 7937; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. **Website:** www.nber.org. **PG** 29. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** J16, J38, J78. **KW** Comparable Worth. Decentralized Markets. Gender Gap. Pay Equity.

AB We investigate the effect of pro-active comparable worth legislation -- covering both the public and private sectors -- on wages, the gender wage gap and the gender composition of employment. The focus is the pay equity initiative of the Canadian province of Ontario in the early 1990s. We document substantial lapses in compliance and problems with the implementation of the law among smaller firms where the majority of men and women work. This evidence provides important lessons of the obstacles to extending pay equity to the private sector of a decentralized labor market. When we focus on those sectors of the labor market where compliance was relatively strict, our results suggest that any positive effects on the wages of women in female jobs were very modest. Our most consistently estimated effects of the law on wages are negative: slower wage growth for women in male jobs and for men in female jobs.

Baldacci, Emanuele

PD January 2002. **TI** Financial Crises, Poverty, and Income Distribution. **AU** Baldacci, Emanuele; de Mello, Luiz; Inchauste, Gabriela. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/02/04; International Monetary Fund, 700 19th Street, Washington, DC 20431. **Website:** www.imf.org. **PG** 42. **PR** not available. **JE** D31, E44, I32, I38, O15. **KW** Financial Crises. Poverty. Income Distribution. Mexico.

AB Developing and transition economies are prone to financial crises, including balance of payments and banking crises. These crises affect poverty and the distribution of income through a variety of channels: slowdowns in economic activity, relative price changes, and fiscal retrenchment, among others. This paper deals with the impact of financial crises on the incidence of poverty and income distribution, and discusses policy options that can be considered by governments in the aftermath of crises. Empirical evidence, based on both macro- and micro-level data, shows that financial crises are associated with an increase in poverty and, in some cases, income inequality. The provision of targeted safety nets and the protection of specific social programs from fiscal retrenchment remain the main short-term pro-poor policy responses to

financial crises.

Bandiera, Oriana

PD November 1999. **TI** On the Structure of Tenancy Contracts: Theory and Evidence from 19th Century Rural Sicily. **AA** London School of Economics. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/19; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. **Website:** sticerd.lse.ac.uk. **PG** 26. **PR** no charge. **JE** D82, N53, N83, O12, Q15. **KW** Asymmetric Information. Land Tenure. Tenancy Contracts. Contractual Incentives. Incentive Provision.

AB In a world with asymmetric information, contractual terms are an important incentive device. This paper studies the effect of crop characteristics on the choice between short-term and long-term tenancy contracts, and on the choice between sharecropping and fixed rent contracts when the production process depends on two non-contractible: effort devoted to current production and effort devoted to plant and soil maintenance. Long-term contracts are effective in providing incentive for non-contractible investment. Since, however, incentive provision is costly because of information rents, long-term contracts will be employed only when maintenance benefits are high enough. The predictions of the theory are tested on a unique data set containing 705 tenancy contracts signed between 1870 and 1880 in the province of Syracuse (Italy). The empirical evidence shows that indeed long-term contracts were used if the crops grown had higher maintenance needs. Other comparative static results are derived and tested empirically.

Banerjee, Abhijit

PD September 2001. **TI** Contracting Constraints, Credit Markets and Economic Development. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/17; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 47. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** D31, D82, O12, O16. **KW** Credit Markets. Distribution. Growth.

AB This paper begins by summarizing the micro-evidence on credit markets from a large number of studies from all over the world, with the goal of identifying a number of stylized facts. We argue that, in particular, the evidence strongly suggests that for poor people in developing countries, imperfections in the credit market are quantitatively very important. We then build a simple model that explains the observed patterns, based on the idea that monitoring and screening borrowers have both fixed and variable costs. We go on to build a simple dynamic model that allows us to understand what the observations about the credit market imply for the evolution of the wealth distribution.

Banzhaf, Spencer

TI Using Locational Equilibrium Models to Evaluate Housing Price Indexes. **AU** Sieg, Holger; Smith, V. Kerry; Banzhaf, Spencer; Walsh, Randy.

Baqir, Reza

PD December 2001. **TI** Government Spending, Legislature Size, and the Executive Veto. **AA** International

Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/208; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** not available. **JE** D72, D73, E62, H11, H73. **KW** Government Spending. Political Institutions. Executive Veto. Veto Power.

AB Recent work on the political economy of fiscal policy has asked how budgetary institutions affect fiscal outcomes. But what determines the budgetary institutions? In this paper I consider one such institution: the executive veto. A simple theoretical framework predicts that jurisdictions with more political actors spending from a common pool of tax resources will choose to empower their executives. Using an econometric framework to identify the exogenous variation in the number of districts, I present evidence from a cross-section of local governments in the United States that jurisdictions with more electoral districts are likely to have executives with veto powers.

PD February 2002. **TI** Social Sector Spending in a Panel of Countries. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/35; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 52. **PR** not available. **JE** D72, H40, H51, H52, O23. **KW** Government Expenditures. Social Sectors. Democracy. Education. Health.

AB This paper presents evidence on the political and economic determinants of social sector spending from a panel dataset. The principal finding is that democratization in countries, as measured by within-country variation in subjective indices of democracy, is a significant predictor of government spending on education and health. The relationship is robust to controlling for a variety of factors and the estimated magnitudes suggest that an increase from the lowest to the highest rating for democracy for a country is associated with approximately 1 percent more central government spending and 3 percent more general government spending in social sectors, as a percent of gross domestic product.

Barajas, Adolfo

PD March 2002. **TI** Credit Stagnation in Latin America. **AU** Barajas, Adolfo; Steiner, Roberto. **AA** Barajas: IMF. Steiner: Universidad de los Andes. **SR** International Monetary Fund Policy Working Paper: WP/02/53; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 48. **PR** not available. **JE** G21. **KW** Credit. Banking System. Latin America.

AB This study examines the recent marked slowdown in bank credit to the private sector in Latin America. Based on the study of eight countries (Argentina, Bolivia, Brazil, Chile, Colombia, Peru, Mexico, and Venezuela), the magnitude of the slowdown is documented and compared to historical behavior and to slowdown episodes in other regions of the world. Second, changes in bank balance sheets are examined to determine whether the credit slowdown is merely a reflection of a slowdown in bank deposits, or whether the asset side has changed. Third, following an econometric disequilibrium approach used in recent studies of credit slowdowns in East Asia and Finland, the paper investigates possible causes for the slowdown in three countries: Colombia, Mexico, and Peru. While both supply and demand factors appear to have played key roles, their relative importance has varied across countries.

Barbosa, Natalia

TI Determinants of Ownership Structure: A Comparative Analysis of Multinational Firms' Preferences in Greece and Portugal. **AU** Louri, Helen; Barbosa, Natalia.

Barth, Marvin J., III

PD April 2000. **TI** The Cost Channel of Monetary Transmission. **AU** Barth, Marvin J., III; Ramey, Valerie A. **AA** Barth: Federal Reserve Board of Governors. Ramey: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 7675; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 29. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E31, E32, E51, E52. **KW** Output. Supply Shocks. Monetary Transmission. Working Capital.

AB This paper presents evidence that the "cost channel" may be an important part of the monetary transmission mechanism. We argue that if working capital is an essential component of production and distribution, monetary contractions can affect output through a supply channel as well as the traditional demand-type channels. We specify an industry equilibrium model and use it to interpret the results of a vector autoregression analysis. We find that following a monetary contraction, many industries exhibit periods of falling output and rising price-wage ratios, consistent with a supply shock in our model. We also show that the effects are noticeably more pronounced during the period before 1979.

Bartlett, Peter L.

PD October 2000. **TI** Model Selection and Error Estimation. **AU** Bartlett, Peter L.; Boucheron, Stephane; Lugosi, Gabor. **AA** Bartlett: Australian National University. Boucheron: Universite Paris-Sud. Lugosi: Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 508; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 48. **PR** Papers available for free on the web; no hardcopies. **JE** C13, C51, C52. **KW** Complexity Regularization. Model Selection. Error Estimation. Concentration of Measure.

AB We study model selection strategies based on penalized empirical loss minimization. We point out a tight relationship between error estimation and data-based complexity penalization: any good error estimate may be converted into a data-based penalty function and the performance of the estimate is governed by the quality of the error estimate. We consider several penalty functions, involving error estimates on independent test data, empirical dimension, empirical entropy, and margin-based quantities. We also consider the maximal difference between the error on the first half of the training data and the second half, and the expected maximal discrepancy, a closely related capacity estimate that can be calculated by Monte Carlo integration.

Basu, Kaushik

PD February 2002. **TI** Sexual Harassment in the Workplace: An Economic Analysis with Implications for Worker Rights and Labor Standards Policy. **AA** Cornell University and MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/11; Massachusetts Institute of Technology, Department of

Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 39. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** D61, J28, J30, J78. **KW** Sexual Harassment. Occupational Safety. Discrimination. Labor Standards. Worker Rights.

AB Suppose a firm has a widespread reputation for sexually harassing its workers (or it follows the practice of telling workers that if they wish to work for the firm they must be prepared for sexual harassment). When a worker offers to work for such a firm and is accepted, there is, therefore, a Pareto improvement. Is there a case for banning such "contractual" sexual harassment? This paper argues that the answer is yes, and that we can be both Paretian and ask for a ban. A general principle, called the large-numbers argument, is developed to justify this, and it is shown that there are other areas, such as occupational safety, where this principle can be applied. That is, there may be a case for preventing firms from exposing its workers to excessive hazards even when each worker finds the pay attractive enough to want to submit to this. Hence, this argument provides a general principle for deciding which market transactions ought to be banned as obnoxious, instead of relying on ad hoc judgments. The paper goes on to discuss how our sexual harassment laws ought to be reformed so as to be more receptive to the needs of society.

PD April 2002. **TI** International Credit and Welfare: Some Paradoxical Results with Implications for the Organization of International Lending. **AU** Basu, Kaushik; Morita, Hodaka. **AA** Basu: Cornell University and MIT. Morita: University of New South Wales. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/18; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 31. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** D61, F31, F34, F35, O19. **KW** International Credit. Foreign Exchange. Foreign Aid. Developing Countries.

AB This paper models a developing nation that faces a foreign exchange shortage, and hence its demand for foreign goods is limited both by its income and its foreign exchange balance. Availability of international credit relaxes the second constraint. It is shown that in this setting the availability of international credit at concessionary rates can leave the borrowing nation worse off than if it had to borrow money at higher market rates. This "paradox of benevolence" is then used to motivate a discussion of policies pertaining to international lending and the Southern government's method of rationing out foreign exchange to the importers.

PD April 2002. **TI** Aggregating Infinite Utility Streams with Inter-Generational Equity. **AU** Basu, Kaushik; Mitra, Tappan. **AA** Basu: Cornell University and MIT. Mitra: Cornell University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/19; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 20. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** D63, D71, D91. **KW** Aggregating Utility. Social Welfare Function. Intergenerational Equity. Pareto. Utility Aggregation.

AB It has been known that, in aggregating infinite utility streams, there does not exist any social welfare function that satisfies the axioms of Pareto, inter-generational equity, and continuity. We show that the impossibility result persists even without imposing the continuity axiom. Hence, the problem of

accommodating inter-generational equity is more obstinate than previously supposed. The paper goes on to explore the scope for obtaining possibility results by weakening the Pareto axiom and placing restrictions on the domain of utilities.

Basu, Susanto

PD October 2000. **TI** Why is Productivity Procyclical? Why do we Care? **AU** Basu, Susanto; Fernald, John. **AA** Basu: University of Michigan and NBER. Fernald: Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Working Paper: 7940; 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** E31, E32, O49. **KW** Procyclical Productivity. Business Cycles. Microfoundations.

AB Productivity rises in booms and falls in recessions. There are four main explanations for this procyclical productivity: (i) procyclical technology shocks, (ii) widespread imperfect competition and increasing returns, (iii) variable utilization of inputs over the cycle, and (iv) resource reallocations. Recent macroeconomic literature views this stylized fact of procyclical productivity as an essential feature of business cycles because each explanation has important implications for macroeconomic modeling. In this paper, we discuss empirical methods for assessing the importance of these four explanations. We provide microfoundations for our preferred approach of estimating an explicitly first-order approximation to the production function, using a theoretically motivated proxy for utilization. When we implement this approach, we find that variable utilization and resource allocations are particularly important in explaining procyclical productivity. We also argue that the reallocation effects that we identify are not "biases" -- they reflect changes in an economy's ability to produce goods and services for final consumption from given primary inputs of capital and labor. Thus, from a normative viewpoint, reallocations are significant for welfare; from a positive viewpoint, they constitute potentially important amplification and propagation mechanisms for macroeconomic modeling.

Bateman, Fred

TI Rising Wage Dispersion Across American Manufacturing Establishments, 1850-1880. **AU** Attack, Jeremy; Bateman, Fred; Margo, Robert A.

Bau, Haim H.

PD March 2002. **TI** Chaos Theory and Its Application. **AU** Bau, Haim H.; Shachmurove, Yochanan. **AA** Bau: University of Pennsylvania. Shachmurove: City University of New York. **SR** University of Pennsylvania, CARESS Working Paper: 02/02; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 43. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** C61, F31, F41, G12. **KW** Chaos Theory. Dynamic Systems. Stochastic Behavior. Nonlinear Models. Embedding Theorem.

AB One consequence of dynamic system theory is that relatively simple systems, which can be described by a few non-linear equations, can exhibit very complicated, stochastic-like behavior. Such models simulate processes inexpensively.

They reveal insights into the underlying mechanisms while devising strategies to control these processes. Chaotic systems are sensitive to initial conditions. Since these conditions are not precisely known and are subject to perturbations, long-term predictions of the behavior of these systems are impossible. Thus, the availability of large computational resources will not enable one to generate long-term predictions for systems ranging from weather to economic forecasts.

Beetsma, Roel M.

PD November 2001. **TI** Is Fiscal Policy Coordination in EMU Desirable? **AU** Beetsma, Roel M.; Debrun, Xavier; Klaassen, Franc. **AA** Beetsma and Klaassen: University of Amsterdam. Debrun: IMF. **SR** International Monetary Fund Working Paper: WP/01/178; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 29. **PR** not available. **JE** E58, E61, E63, F33, F42. **KW** Fiscal Coordination. Shocks. Demand Management. European Monetary Union.

AB It is widely argued that Europe's unified monetary policy calls for international coordination at the fiscal level. We survey the issues involved in such coordination in the perspective of macroeconomic stabilization. A simple model identifies the circumstances under which coordination may be desirable. Coordination is beneficial when the cross-country correlation of the shocks is low. However, given the potentially adverse reaction by the European Central Bank (ECB), (as a result of free-riding or a conflict on the orientation of the policy mix), fiscal coordination is likely to prove counterproductive when demand or supply shocks are highly symmetric across countries and the governments are unable to acquire a strategic leadership position vis-à-vis the ECB.

PD December 1999. **TI** Inflation Targets and Debt Accumulation in a Monetary Union. **AU** Beetsma, Roel M.; Bovenberg, A. Lans. **AA** Beetsma: University of Amsterdam and CEPR. Bovenberg: Tilburg University and CEPR. **SR** CEPR Discussion Paper: 2324; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 56. **PR** 5 pounds, \$8 or 8 euros. **JE** E52, E63, F33, F41, F42. **KW** Monetary Policy. Fiscal Policy. Monetary Union. Inflation Targeting. Debt Targeting.

AB This paper explores the interaction between centralized monetary policy and decentralized fiscal policy in a monetary union. Discretionary monetary policy suffers from a failure to commit. Moreover, decentralized fiscal policymakers impose externalities on each other through the influence of their debt policies on the common monetary policy. These imperfections can be alleviated by adopting state-contingent inflation targets (to combat the monetary policy commitment problem) and shock-contingent debt targets (to internalize the externalities due to decentralized fiscal policy).

Beierle, Thomas C.

PD August 2001. **TI** Evaluating Dispute Resolution as an Approach to Public Participation. **AU** Beierle, Thomas C.; Cayford, Jerry. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/40; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 20. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D71, D74, D78, Q28. **KW** Dispute Resolution. Public Participation. Conflict

Resolution. Social Objectives. Environmental Decisions.

AB Public participation has become an integral part of environmental policymaking. Dispute resolution -- with its focus on deliberation, problem solving, and consensus seeking among a small group of people -- is one of the alternatives decisionmakers increasingly turn to for involving the public. This paper evaluates dispute resolution as a form of public participation by measuring its success against five "social goals": incorporating public values into decisions, increasing the substantive quality of decisions, resolving conflict, building trust, and educating the public. The findings have normative implications for the desirability of dispute resolution in certain types of environmental decisions. They also have practical implications, because the exclusion of the wider public from decisionmaking can come back to haunt project proponents in the implementation stage.

Belderbos, Rene

TI Undertakings and Antidumping Jumping FDI in Europe. **AU** Veugelers, Reinhilde; Vandenbussche, Hylke; Belderbos, Rene.

Bell, Ruth Greenspan

PD January 2001. **TI** Reaching Across the Communication Gulf: Reflections on the Challenges of Environmental Assistance Programs. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/05; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 21. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D78, Q28, Z13. **KW** Regulatory Design. Sustainable Development. Environmental Cooperation. International Cooperation.

AB This paper examines several experiences in international environmental cooperation and assistance in order to understand how communication across differing traditions, legal systems, cultures, history, and language has impacted joint efforts to develop stronger environmental regimes. The paper concludes that environmental protection efforts must become much smarter in overcoming communication barriers and related impediments to effective joint activities. Different traditions can coexist and even work productively together when there is strong and equal motivation on both sides. But when these conditions are absent, the international partners need to find additional bridging tools and must work explicitly to identify genuinely common goals.

Ben-David, Dan

PD April 2000. **TI** Trade and the Rate of Income Convergence. **AU** Ben-David, Dan; Kimhi, Ayal. **AA** Ben-David: Tel-Aviv University and NBER. Kimhi: Hebrew University. **SR** National Bureau of Economic Research Working Paper: 7642; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 16. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** F13, F15, F43, O19, O57. **KW** Trade. Growth. Income Convergence. Convergence.

AB To the extent that trade policy affects trade flows between countries, the ramifications can be far-reaching from an economic growth perspective. This paper examines one aspect of these ramifications, namely the impact of changes in the extent of trade between countries on the rate of reduction in the

size of the income gap between them. Export and import data are used as the criteria for determining bilateral trade between major trade partners, resulting in the creation of 127 pairs of countries on the basis of export data and 134 pairs on the basis of import data. An increase in trade between major trade partners -- and in particular, increased exports by poorer countries to their wealthier partners -- is shown to be related to an increase in the rate of convergence between the countries.

Benhabib, Jess

PD December 1999. **TI** The Perils of Taylor Rules. **AU** Benhabib, Jess.; Schmitt-Grohe, Stephanie; Uribe, Martin. **AA** Benhabib: New York University. Schmitt-Grohe: Rutgers University. Uribe: University of Pennsylvania. **SR** CEPR Discussion Paper: 2314; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E52, E63. **KW** Interest Rate Rules. Liquidity Trap. Nominal Interest Rates. Inflation.

AB Since John Taylor's (1993) seminal paper, a large literature has argued that active interest rate feedback rules, that is, rules that respond to increases in inflation with a more than one-for-one increase in the nominal interest rate, are stabilizing. In this paper, we argue that once the zero bound on nominal interest rates is taken into account, active interest rate feedback rules can easily lead to unexpected consequences. Specifically, we show that even if the steady state in which monetary policy is active is locally the unique equilibrium, typically there exists an infinite number of equilibrium trajectories originating arbitrarily close to that steady state which converge to a liquidity trap, that is, a steady state in which the nominal interest rate is near zero and inflation is possibly negative.

PD December 1999. **TI** Monetary Policy and Multiple Equilibria. **AU** Benhabib, Jess; Schmitt-Grohe, Stephanie; Uribe, Martin. **AA** Benhabib: New York University. Schmitt-Grohe: Rutgers University. Uribe: University of Pennsylvania. **SR** CEPR Discussion Paper: 2316; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E52, E63. **KW** Interest Rate Rules. Instability. Sticky Prices. Monetary Policy.

AB In this paper, we characterize the conditions under which interest rate feedback rules that set the nominal interest rate as an increasing function of the inflation rate induce aggregate instability by generating multiple equilibria. We show that these conditions depend not only on the monetary-fiscal regime (as emphasized in the fiscal theory of the price level), but also on the way in which money is assumed to enter preferences and technology. We provide a number of examples in which, contrary to what is commonly believed, active monetary policy in combination with a fiscal policy that preserves government solvency under all circumstances gives rise to multiple equilibria, and passive monetary policy renders the equilibrium unique. Our general conclusion holds in flexible- and sticky-price environments as well as under backward- or forward-looking interest rate feedback rules.

BenZion, Uri

TI A Moving Average Comparison of the Tel-Aviv 25 and S&P 500 Stock Indices. **AU** Shachmurov, Yochanan;

BenZion, Uri; Klein, Paul; Yagil, Joseph.

Berger, Allen N.

PD May 2000. **TI** Did U.S. Bank Supervisors Get Tougher During the Credit Crunch? Did They Get Easier During the Bank Boom? Did it Matter to Bank Lending? **AU** Berger, Allen N.; Kyle, Margaret K.; Scalise, Joseph M. **AA** Berger: Board of Governors of the Federal Reserve System and Wharton Financial Institutions Center. Kyle: MIT. Scalise: Bain & Company. **SR** National Bureau of Economic Research Working Paper: 7689; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 39. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E44, E58, G21, G28, G38. **KW** Bank Lending. Credit. Bank Supervisory Policy. Loans.

AB We test three hypotheses regarding changes in supervisory "toughness" and their effects on bank lending. The data provide modest support for all three hypotheses -- that there was an increase in toughness during the credit crunch period (1989-1992), that there was a decline in toughness during the boom period (1993-1998), and that changes in toughness, if they occurred, affected bank lending. However, all of the measured effects are small, with 1% or less of loans receiving harsher or easier classification, about 3% of banks receiving better or worse CAMEL (Capital adequacy, Asset quality, Management, Earnings, and Liquidity) ratings, and bank lending changing by 1% or less of assets.

Berger, Helge

TI Central Bank Independence: An Update of Theory and Evidence. **AU** de Haan, Jakob; Eijffinger, Sylvester; Berger, Helge.

PD March 2002. **TI** Optimal Central Bank Conservatism and Monopoly Trade Unions. **AU** Berger, Helge; Hefeker, Carsten; Schob, Ronnie. **AA** Berger: IMF. Hefeker: HWWA-Institute for International Economics. **SR** International Monetary Fund Policy Working Paper: WP/02/44; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 29. **PR** not available. **JE** E52, E58, J51. **KW** Central Banks. Monetary Policy. Trade Unions.

AB The "conservative central banker" has come under attack recently. On the basis of models in which there is explicit interaction between trade union behavior and monetary policy, it has been argued that if "trade unions" are averse to inflation, welfare will be lower with a conservative than with a liberal central bank. We reframe this discussion in a standard trade union model. We show that the case against the conservative central banker rests exclusively on the assumption of a strictly nominal outside option (for instance, unemployment benefits) for the union. There is no welfare gain associated with making the central bank less conservative than society, however, if the outside option is in real terms. As the nominal components of the trade union's outside option are mainly public transfers, we also show that the conservative central banker is always optimal if the government can choose the level of nominal unemployment benefits as well as the degree of central bank conservatism.

Bernard, Alain L.

PD October 2001. **TI** Is There a Rationale for Rebating Environmental Levies? **AU** Bernard, Alain L.; Fischer,

Carolyn; Vielle, Marc. AA Resources for the Future. SR Resources for the Future Discussion Paper: 01/31; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. PG 29. PR Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. JE D61, H23, H25, Q28, Q43. KW Environmental Taxation. Tax Rebate. Fiscal Distortions. Regulatory Issues.

AB Political pressure often exists for rebating environmental levies, particularly when incomplete regulatory coverage allegedly creates an "unlevel playing field" with other, unregulated firms or industries. This paper assesses the conditions under which rebating environmental levies is justified for the regulated sector. It combines a theoretical approach based on second-best modeling with numerical simulations aimed at determining the most sensitive parameters. We find that if an adequate tax on production can be levied in the unregulated sector, no rebate is justified for the regulated sector. Moreover, even in the case of constrained taxation in the unregulated sector, a tax rebate or a subsidy in the regulated sector is not necessarily a welfare-increasing policy. The exception occurs when the goods of the competing sectors are close substitutes. We find that these kinds of policy constraints can be quite costly in terms of welfare.

Bernard, Andrew B.

PD May 2000. TI Plants and Productivity in International Trade. AU Bernard, Andrew B.; Eaton, Jonathan; Jensen, J. Bradford; Kortum, Samuel. AA Bernard: Dartmouth College and NBER. Eaton and Kortum: Boston University and NBER. Jensen: Bureau of the Census and University of Maryland. SR National Bureau of Economic Research Working Paper: 7688; 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 F11, F12, F17, L60, O33. KW International Trade. Exporters. Productivity. Manufacturing Industry.

AB We reconcile international trade theory with findings of enormous plant-level heterogeneity in exporting and productivity. Our model extends basic Ricardian theory to accommodate many countries, geographic barriers, and imperfect competition. Fitting the model to bilateral trade among the United States and its 46 major trade partners, we see how well it can explain these basic facts about U.S. plants: (i) productivity dispersion, (ii) the productivity advantage of exporters, (iii) the small fraction who export, (iv) the small fraction of revenues from exporting among those that do export, and (v) the much larger size of exporters. We pick up all these basic qualitative features, and go quite far in matching them quantitatively. We examine counterfactuals to assess the impact of various global shifts on productivity, plant entry and exit, and labor turnover in U.S. manufacturing.

Bertrand, Marianne

PD October 2000. TI Ferretting Out Tunneling: An Application to Indian Business Groups. AU Bertrand, Marianne; Mehta, Paras; Mullainathan, Sendhil. AA Bertrand: University of Chicago, NBER, and CEPR. Mehta: MIT. Mullainathan: MIT and NBER. SR National Bureau of Economic Research Working Paper: 7952; 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 G32, G33. KW Tunneling. Shareholders. Performance Shocks.

AB In many countries, controlling shareholders are accused of tunneling, transferring resources from companies where they have few cash flow rights to ones where they have more cash flow rights. Quantifying the extent of such tunneling, however, has proven difficult because of its illicit nature. This paper develops a general empirical technique for quantifying tunneling. We use the responses of different firms to performance shocks to map out the flow of resources within a group of firms and to quantify the extent to which the marginal dollar is tunneled. We apply our technique to data on Indian business groups. The results suggest a significant amount of tunneling between firms in these groups.

Besley, Timothy

PD December 2000. TI The Political Economy of Government Responsiveness: Theory and Evidence from India. AU Besley, Timothy; Burgess, Robin. AA STICERD, London School of Economics. SR London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/28; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 42. PR no charge. JE D72, H41, H53, I38, P26. KW Government Responsiveness. Media. Political Accountability. Democracy. Disaster Relief.

AB The determinants of government responsiveness to its citizens are a key issue in political economy. Here we develop a model based on the solution of political agency problems. Having a more informed and politically active electorate strengthens incentives for governments to be responsive. This suggests that there is a role both for democratic institutions and the mass media in ensuring that the preferences of citizens are reflected in policy. The ideas behind the model are tested on panel data from India. We show that public food distribution and calamity relief expenditure are greater, controlling for shocks, where governments face greater electoral accountability and where newspaper circulation is highest.

PD October 1998. TI Land Reform, Poverty Reduction and Growth: Evidence from India. AU Besley, Timothy; Burgess, Robin. AA London School of Economics. SR London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/13; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 24. PR no charge. JE D31, I32, O11, Q15, R11. KW Land Reforms. Political Economy. Poverty. Growth. India.

AB In recent times there has been a renewed interest in relationships between distribution, growth, and welfare. Land reforms have been central to strategies to improve the asset base of the poor in developing countries, though their effectiveness has been hindered by political constraints on implementation. In this paper we use panel data on the sixteen main Indian states from 1958 to 1992 to consider whether the large volume of land reforms that have been legislated have had an appreciable impact on growth and poverty. The evidence presented suggests that land reforms do appear to be associated with poverty reduction.

PD August 1999. **TI** Public-Private Partnerships for the Provisions of Public Goods: Theory and an Application to NGOs. **AU** Besley, Timothy; Ghatak, Maitreesh. **AA** Besley: London School of Economics. Ghatak: University of Chicago. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/17; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 36. **PR** no charge. **JE** H41, L30, O12. **KW** Public Goods. NGOs. Incomplete Contracts. Partnerships.

AB This paper analyzes the role of public and private responsibility in the provision of public goods. We emphasize that a typical public good will require many different inputs, which raises the possibility of partnerships to exploit comparative advantages of different parties. But hold-up problems due to contractual incompleteness in specifying tasks discourage separation of ownership and management. We extend our analysis to examine the role of project design or "ideology" as a separate non-contractible input, and the possibility of crowding out in the form of a less caring government being elected, because of the presence of private providers. The main application developed here is to Non-Governmental Organizations in developing countries, which, in the last two decades, have been increasingly involved in various capacities in the provision of a wide range of public goods and services.

Betts, Julian R.

PD September 2000. **TI** The Impact of Grading Standards on Student Achievement, Educational Attainment, and Entry-Level Earnings. **AU** Betts, Julian R.; Grogger, Jeffrey. **AA** Betts: University of California, San Diego and Public Policy Institute of California. Grogger: University of California, Los Angeles and NBER. **SR** National Bureau of Economic Research Working Paper: 7875; 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** I21, J15. **KW** Grading Standards. Student Achievement. Educational Attainment. Earnings. Education Distribution.

AB *Despite recent theoretical work and proposals from educational reformers, there is little empirical work on the effects of higher grading standards. In this paper we use data from the High School and Beyond survey to estimate the effects of grading standards on student achievement, educational attainment, and entry level earnings. We consider not only how grading standards affect average outcomes but also how they affect the distribution of educational gains by skill level and race/ethnicity. We find that higher standards raise test scores throughout the distribution of achievement, but that the increase is greatest toward the top of the test score distribution. Higher standards have no positive effect on educational attainment, however, and indeed have negative effects on high school graduation among blacks and Hispanics. We suggest a relative performance hypothesis to explain how higher standards may reduce educational attainment even as they increase educational achievement.*

Bhalotra, Sonia

PD July 2000. **TI** Child Farm Labour: Theory and

Evidence. **AU** Bhalotra, Sonia; Heady, Christopher. **AA** Bhalotra: University of Cambridge. Heady: University of Bath. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/24; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** not available. **PR** no charge. **JE** J13, J22, O15. **KW** Child Labor. Poverty. Female Education. Agricultural Households. Labor Supply.

AB This paper presents a dynamic model of child labor supply in farming households. The model clarifies the roles of land, income, and household size, allowing labor and credit market imperfections. If labor markets are imperfect, child labor is increasing in farm size and decreasing in household size. The effect of income is shown to depend upon whether the effective choice is between work and school or whether leisure is involved. Credit market constraints tend to dilute the positive impact of farm size and reinforce the negative effect of income. The model is estimated for rural Ghana and Pakistan. A striking finding of the paper is that the effect of farm size at given levels of household income is significantly positive for girls in both countries, but not for boys. This is consistent with the finding, in other contexts, that females exhibit larger substitution effects in labor supply. We find interesting effects of household size and composition, female headship, and mothers' post-secondary education.

PD August 2000. **TI** Is Child Work Necessary? **AA** University of Cambridge. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/26; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 71. **PR** no charge. **JE** D12, I32, J13, J22, O12. **KW** Child Labor. Gender. Poverty. Labor Supply. Wage Elasticity.

AB This paper investigates why children work by studying the wage elasticity of child labor supply. Incorporating subsistence constraints into a model of labor supply, we show that negative wage elasticity favors the hypothesis that poverty compels work, whereas positive wage elasticity favors the view that children work because the relative returns to school are low. Distinguishing between these alternatives is important for policy. Existing studies have concentrated on income elasticity, but this is only able to tell us that leisure (or education) is a normal good. Using a large household survey for rural Pakistan, we estimate structural labor supply models for boys and girls in wage work, conditioning on full income and a range of demographic variables. Our estimates describe a labor supply curve for boys consistent with the view that boys work because of poverty, while the case for girls is less clear. Therefore raising the return to schooling for girls may draw them out of work, but eliminating boys' wage work requires alleviation of the poverty of their households. Trade sanctions or bans on child labor may have deleterious consequences for these households unless they are compensated for the loss in income.

Bharvirkar, Ranjit

TI Restructuring and the Cost of Reducing NOx Emissions in Electricity Generation. **AU** Palmer, Karen; Bharvirkar, Ranjit; Burtraw, Dallas; Paul, Anthony.

TI The Effect of Allowance Allocation on the Cost of

Carbon Emission Trading. AU Burtraw, Dallas; Palmer, Karen; Bharrvirkar, Ranjit; Paul, Anthony.

TI Uncertainty and the Cost-Effectiveness of Regional NO_x Emissions Reductions from Electricity Generation. AU Burtraw, Dallas; Bharrvirkar, Ranjit; McGuinness, Meghan.

Bhattacharya, Jay

PD May 2000. TI Youths at Nutritional Risk: Malnourished or Misnourished? AU Bhattacharya, Jay; Currie, Janet. AA Bhattacharya: RAND. Currie: University of California, Los Angeles and NBER. SR National Bureau of Economic Research Working Paper: 7686; 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 H51, I12, J13. KW Nutrition. Youth Health. Health Investments.

AB We use data from the third National Health and Nutrition Examination Survey to examine the prevalence and determinants of poor nutritional outcomes among American youths. One strength of our analysis is that we focus on an array of nutritional outcomes, and we find in fact that the determinants of these outcomes vary considerably from outcome to outcome. We interpret our results using a model in which investments in health capital are affected by both resource constraints and a human capital production function that summarizes available nutrition information. We find that although many youths suffer from nutrient deficiencies, these conditions are not generally sensitive to measures of resource constraints, and hence are unlikely to be due solely to a shortage of food. Conversely, we find that our proxies for information matter. Our results suggest that broad-based policies designed to alter the composition of the diet may hold the greatest promise for addressing the nutritional problems of American youths.

Bhattacharya, Sudipto

PD October 2000. TI Bank Capital Regulation with Random Audits. AU Bhattacharya, Sudipto; Plank, Manfred; Strobl, Gunter; Zechner, Josef. AA Bhattacharya: London School of Economics and CEPR. Zechner: University of Vienna and CEPR. SR CEPR Discussion Paper: 2597; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG not available. PR 5 pounds, \$8 or 8 euros. JE G21, G28. KW Bank Capital Regulation. Bankers' Rents. Closure Rules. Poisson Audits. Risk-Shifting Incentives.

AB We consider a model of optimal bank closure rules (cum capital replenishment by banks), with Poisson-distributed audits of the bank's asset value by the regulator, with the goal of eliminating (ameliorating) the incentives of levered bank shareholders/managers to take excessive risks in their choice of underlying assets. The roles of (tax or other) subsidies on deposit interest payments by the bank, and of the auditing frequency are examined.

Black, Stanley W.

PD December 2001. TI Convertibility Risk: The Precautionary Demand for Foreign Currency in a Crisis. AU Black, Stanley W.; Christofides, Charis; Mourmouras, Alex. AA Black: University of North Carolina. Christofides

and Mourmouras: International Monetary Fund. SR International Monetary Fund Working Paper: WP/01/210; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 28. PR not available. JE E41, F31. KW Convertibility. Currency Crises. Money Demand. Korea.

AB This paper presents theoretical work linking money demand to the perceptions of households about the risk that domestic currency may become inconvertible or that it may be devalued. An empirical investigation of the size of this effect is carried out using both cross section data and then monthly data for Korea to estimate an augmented demand for money equation. It is found that the fear of inconvertibility arising from the 1997 Korean currency crisis may have caused broad money demand to fall by 4-5 percentage points, equivalent to the loss of reserves of \$6-7 1/2 billion (or about 30 percent of reserves as measured at end-November 1997).

Blackman, Allen

PD January 2001. TI The Greening of Development Economics: A Survey. AU Blackman, Allen; Mathis, Mitchell; Nelson, Peter. AA Resources for the Future. SR Resources for the Future Discussion Paper: 01/08; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. PG 20. PR Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. JE B22, F18, O13, O14, Q20. KW Environment. Development. Growth. Trade.

AB Although ignored for decades, environmental issues now attract considerable attention in the literature on economic development. This paper describes research on environmental issues in seven topic areas that historically have been at the heart of development economics: the role of the state, economic growth, trade and industrialization, relations between rich and poor countries, structural adjustment and stabilization, population change, and the objectives and strategies of development.

PD April 2001. TI Why Don't Lenders Finance High-Return Technological Change in Developing-Country Agriculture? AA Resources for the Future. SR Resources for the Future Discussion Paper: 01/17; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. PG 21. PR Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. JE D82, O13, O16, O33, Q14. KW Agriculture. Asymmetric Information. Credit. Developing Countries. Technology Adoption.

AB Most of the literature attributes credit constraints in small-farm developing-country agriculture to the variability of returns to investment in this sector. But the literature does not fully explain lenders' reluctance to finance investments in technologies that provide both higher average and less variable returns. To fill this gap, this article develops an information-theoretic credit market model with endogenous technology choice. The model demonstrates that lenders may refuse to finance any investment in a riskless high-return technology - - regardless of the interest rate they are offered -- when they are imperfectly informed about loan applicants' time preferences and, therefore, about their propensities to default intentionally in order to finance current consumption.

Bloem, Adriaan M.

PD December 2001. TI The Treatment of Nonperforming

Loans in Macroeconomic Statistics. AU Bloem, Adriaan M.; Gorter, Cornelis N. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/01/209; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 17. PR not available. JE C82, G34, M41. KW Macroeconomic Statistics. Loan Accounting. Loan Provisioning. Nonperforming Loans.

AB This paper seeks to promote discussion on the treatment of nonperforming loans in macroeconomic statistics. After reviewing current recommendations in international statistical manuals and the guidelines provided by some main banking and accounting institutions, the paper recommends that the information on nonperforming loans provided by macroeconomic statistics should be expanded. The paper concludes with a list of issues that deserve further study.

Blomstrom, Magnus

PD January 2000. TI The Determinants of Host Country Spillovers from Foreign Direct Investment. AU Blomstrom, Magnus; Kokko, Ari; Globerman, Steve. AA Blomstrom and Kokko: Stockholm School of Economics. Globerman: Western Washington University. SR CEPR Discussion Paper: 2350; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 44. PR 5 pounds, \$8 or 8 euros. JE F23, O31, O34, O38. KW Foreign Direct Investment. Multinational Firms. Spillovers.

AB This paper reviews and synthesizes the available literature focusing on the determinants of efficiency spillovers from inward Foreign Direct Investment (FDI). In order to do so, we outline a theoretical framework for understanding the underlying "supply" and "demand" forces determining the scope and magnitude of FDI spillovers to host economies. The findings suggest that the competitiveness of host country markets and the technical capability of local firms are among the most important determinants of spillover benefits. Both of these characteristics can be influenced by host country policy.

Blouin, Jennifer L.

PD April 2000. TI Capital Gains Taxes and Stock Reactions to Quarterly Earnings Announcements. AU Blouin, Jennifer L.; Shackelford, Douglas A.; Raedy, Jana Smith. AA Blouin and Raedy: University of North Carolina. Shackelford: University of North Carolina and NBER. SR National Bureau of Economic Research Working Paper: 7644; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 29. PR \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). JE G12, G14, H24. KW Capital Gains Taxes. Stock Prices. Asset Pricing. Equity Pricing. Quarterly Earnings.

AB This paper examines the impact of capital gains taxes on equity pricing. Examining three-day cumulative abnormal returns for quarterly earnings announcements from 1983-1997, we present evidence consistent with shareholders' capital gains taxes affecting stock price responses. To our knowledge, this is the first study to link shareholder taxes and share price responses to earnings releases. The results imply that shares trade at higher (lower) prices when individual investors face incremental taxes (tax savings) created by selling appreciated (depreciated) shares before they qualify for long-term treatment. Unlike prior studies that have focused on price

reactions in settings where shareholder taxes are unusually salient (e.g., tax law changes, turn-of-the-year trading, or tax-sensitive transactions), this study finds the imprint of capital gains taxes in a more general setting.

Bollerslev, Tim

TI The Distribution of Stock Return Volatility. AU Andersen, Torben G.; Bollerslev, Tim; Diebold, Francis X.; Ebens, Heiko.

Bolton, Patrick

PD June 2000. TI Corporate Finance and the Monetary Transmission Mechanism. AU Bolton, Patrick; Freixas, Xavier. AA Bolton: Princeton University. Freixas: Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 511; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 48. PR Papers available for free on the web; no hardcopies. JE E52, G32. KW Asymmetric Information. Liabilities Structure. Capital Regulation. Monetary Policy. Transmission Mechanism.

AB This paper analyzes the transmission mechanisms of monetary policy in a general equilibrium model of securities markets and banking with asymmetric information. Banks' optimal asset/liability policy is such that in equilibrium capital adequacy constraints are always binding. Asymmetric information about banks' net worth adds a cost to outside equity capital, which limits the extent to which banks can relax their capital constraint. In this context monetary policy does not affect bank lending through changes in bank liquidity. Rather, it has the effect of changing the aggregate composition of financing by firms. The model also produces multiple equilibria, one of which displays all the features of a "credit crunch". Thus, monetary policy can also have large effects when it induces a shift from one equilibrium to the other.

PD March 2001. TI Ownership and Managerial Competition: Employee, Customer, or Outside Ownership. AU Bolton, Patrick; Xu, Chenggang. AA Bolton: Princeton University. Xu: London School of Economics and Political Science. SR London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/01/142; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 44. PR no charge. JE D23, D41, J41, L22. KW Ownership. Managerial Competition. Incomplete Contracts. Human Capital. Competition.

AB This paper centers on the issues of ownership of firms and managerial competition and how these affect manager and employees' incentives to invest in human capital. We argue that employees' incentives in human capital investment are affected by both ownership and competition, since both ownership structure and competition provide bargaining chips to employees. Ownership provides protections that may improve or dull employees' incentives for human capital investment. When there is fierce market competition and no lock-in, the allocation of ownership does not play a role (as one might expect), provided that human and physical assets are sufficiently complementary. If asset complementarity is low, ownership matters even in the absence of lock-in. In general, the most efficient ownership arrangement is that which maximizes managerial competition inside the firm.

Bordo, Michael D.

PD April 2000. **TI** Aggregate Price Shocks and Financial Instability: An Historical Analysis. **AU** Bordo, Michael D.; Wheelock, David C.; Dueker, Michael J. **AA** Bordo: Rutgers University and NBER. Wheelock and Dueker: Federal Reserve Bank of St. Louis. **SR** National Bureau of Economic Research Working Paper: 7652; 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** C25, E31, E52, N11, N12. **KW** Financial Instability. Price Level Shocks. Inflation. Monetary Policy. Price Stability.

AB This paper presents empirical evidence on the hypothesis that aggregate price disturbances cause or worsen financial instability. We construct two annual indexes of financial conditions for the United States covering 1790-1997, and estimate the effect of aggregate price shocks on each index using a dynamic ordered probit model. We find that price level shocks contributed to financial instability during 1790-1933, and that inflation rate shocks contributed to financial instability during 1980-97. Our research indicates that the size of the aggregate price shocks needed to substantially alter financial conditions depends on the institutional environment, but that a monetary policy focused on price stability would be conducive to financial stability.

PD September 2000. **TI** Are Financial Crises Becoming Increasingly More Contagious? What is the Historical Evidence on Contagion? **AU** Bordo, Michael D.; Murshid, Antu P. **AA** Bordo: Rutgers University and NBER. Murshid: World Bank Group. **SR** National Bureau of Economic Research Working Paper: 7900; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 45. **PR** \$5.00. **JE** F36, G15, N20. **KW** Contagion. Financial Crises. Latin America. Asia.

AB We examine the evidence of contagion during the pre-World War I and interwar eras, and contrast our findings with evidence of contagion from the recent crises in Asia and Latin America. Using weekly data on bond prices and interest rates, we investigate the extent to which bilateral cross-market correlations rise following the onset of a crisis. After correcting for heteroskedasticity, a la Forbes and Rigobon (1998, 1999), we find little evidence of significant increases in cross-market correlations in either the earlier regimes or in the more recent period. We use principle components analysis to assess the extent of comovement across all markets, as well as within various groups of markets, both prior to and after the onset of a crisis. Countries are grouped into regions, as well as along the lines of advanced and emerging. There is little evidence to suggest that cross-country linkages are tighter in the aftermath of a financial crisis for the recent period. There is, however, some evidence of stronger comovement during periods of instability in earlier regimes.

Boucheron, Stephane

TI Model Selection and Error Estimation. **AU** Bartlett, Peter L.; Boucheron, Stephane; Lugosi, Gabor.

Boughton, James M.

PD March 2002. **TI** Why White, Not Keynes? Inventing the Postwar International Monetary System. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/52; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 24.

PR not available. **JE** B22, B31, F33, F41. **KW** International Monetary Fund. White. Keynes. Open Economy Models.

AB The international monetary system is largely the product of negotiations during World War II between U.S. and U.K. officials, led respectively by Harry Dexter White and John Maynard Keynes. The design of the system, especially the International Monetary Fund, reflects the U.S. plan much more than the British. That outcome resulted not only from the superior economic position of the United States, but also from differences between White's and Keynes's views on key issues. Examination of White's economic papers shows that he was more multilateral than Keynes and placed a higher priority on monetary discipline.

Bouley, Dominique

PD March 2002. **TI** How Do Treasury Systems Operate in Sub-Saharan Francophone Africa? **AU** Bouley, Dominique; Fournel, Jerome; Leruth, Luc E. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/58; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 35. **PR** not available. **JE** H11, H50, H61, H72. **KW** Treasury. Arrears. Monitoring. Public Expenditure Process. Sub-Saharan Africa.

AB Treasury systems in sub-Saharan francophone African countries share many features with the French public expenditure management system of the sixties on which they were modeled. However, in a different economic and institutional environment, key elements of this framework have evolved in unexpected, unwelcome directions. This paper critically examines two main features of the French system in the sub-Saharan francophone African context: the strict separation between the person ordering payment and the one disbursing funds, and the centralization of funds in the treasury. This examination calls attention to -- and suggests remedies for -- the specific flaws that have evolved from the traditional framework.

Bovenberg, A. Lans

PD April 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 and NBER. **SR** National Bureau of Economic Research Working Paper: 7654; 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** D58, H21, H23, L71, Q28. **KW** Carbon Dioxide Abatement. Emissions Policies. Pollution Tax. Energy Industry. Efficiency Costs.

AB The most cost-effective policies for achieving carbon dioxide (CO2) abatement (e.g., carbon taxes) fail to get off the ground politically because of unacceptable distributional consequences. This paper explores CO2 abatement policies designed to address distributional concerns. Using an intertemporal numerical general equilibrium model of the U.S., we examine how efficiency costs change when these policies include features that neutralize adverse impacts on energy industries. We find that avoiding adverse impacts on profits and equity values in fossil fuel industries involves a relatively small efficiency cost. This stems from the fact that CO2 abatement policies have the potential to generate revenues that

are very large relative to the potential loss of profit. By enabling firms to retain only a very small fraction of these potential revenues, the government can protect firms' profits and equity values. Because the revenue sacrifice is small, the efficiency cost is small as well. We also find that there is a very large difference between preserving firms' profits and preserving their tax payments -- the efficiency costs of the latter situation are far greater.

TI Inflation Targets and Debt Accumulation in a Monetary Union. **AU** Beetsma, Roel M.; Bovenberg, A. Lans.

Boyd, James

PD March 2001. **TI** Financial Assurance Rules and Natural Resource Damage Liability: A Working Marriage? **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/11; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 43. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** K13, K32, Q38. **KW** Financial Assurance. Natural Resource Damages. Liability. Environmental Regulation. Oil Industry.

AB The study explores challenges associated with, and the feasibility of, financial assurance requirements for liabilities arising under U.S. environmental statutes, with a particular emphasis on liabilities associated with natural resource damages (NRDs). The overlap between federal NRD liability and financial assurance arises in the context of two financial assurance rules: one for waterborne vessels that carry oil or hazardous substances, and one for offshore facilities used for oil exploration, drilling, production, or transport. The report addresses the rules' history, their role as a complement to other forms of environmental regulation, and their impact on the regulated community and providers of coverage. Despite numerous difficulties, and over objections from the regulated community, the rules have been implemented with success and without significant shortfalls in coverage availability.

PD August 2001. **TI** Financial Responsibility for Environmental Obligations: Are Bonding and Assurance Rules Fulfilling Their Promise? **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/42; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 67. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** K13, K32, Q38. **KW** Financial Assurance. Bonding. Environmental Insurance. Cost Internalization. Liability.

AB Financial assurance rules, also known as financial responsibility or bonding requirements, foster cost internalization by requiring potential polluters to demonstrate the financial resources necessary to compensate for environmental damage that may arise in the future. Accordingly, assurance is an important complement to liability rules, restoration obligations, and other regulatory compliance requirements. The paper reviews the need for assurance, given the prevalence of abandoned environmental obligations, and assesses the implementation of assurance rules in the United States. From the standpoint of both legal effectiveness and economic efficiency, assurance rules can be improved. On the whole, however, cost recovery, deterrence, and enforcement are significantly improved by the presence of existing assurance regulations.

Braconnier, Henrik

TI Swedish Multinationals and Competition from High- and Low-Wage Locations. **AU** Ekholm, Karolina; Braconnier, Henrik.

Brennan, Jim

PD May 2002. **TI** The Renegotiation-Proofness Principle and Costly Renegotiation. **AU** Brennan, Jim; Watson, Joel. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/10; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 26. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C70, D23, D71, D82, K12. **KW** Contracting. Implementation. Mechanism Design. Renegotiation.

AB We study contracting and costly renegotiation in settings of complete but unverifiable information, using the mechanism-design approach. We show how renegotiation activity is best modeled in the fundamentals of the mechanism-design framework, so that noncontractibility of renegotiation amounts to a constraint on the problem. We formalize and clarify the Renegotiation-Proofness Principle (RPP), which states that any state-contingent payoff vector that is implementable in an environment with renegotiation can also be implemented by a mechanism in which renegotiation does not occur in equilibrium. We observe that the RPP is not generally valid. However, we prove a general monotonicity result that confirms the RPP's "renegotiation is bad" message. Our monotonicity theorem establishes that the set of implementable state-contingent payoffs increases with the costs of renegotiation.

Brennan, Timothy J.

PD August 2001. **TI** "Vertical Market Power" as Oxymoron: Getting Convergence Mergers Right. **AA** University of Maryland and Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/39; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 27. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D43, L22, L40, L51, L94. **KW** Vertical Mergers. Electricity Restructuring. Convergence Mergers. Energy Regulation. Regulation Evasion.

AB "Vertical market power" is a contradiction in terms because "market power" is essentially horizontal -- that is, it depends on relationships of firms within markets. The Federal Energy Regulatory Commission (FERC) invokes the term to assess "convergence" mergers between electricity generators and natural gas suppliers. It misapplies Department of Justice guidelines for vertical mergers and fails to identify exceptions to a presumption that market power depends only on competitive conditions at any single stage. A three-stage test can assess whether convergence mergers resemble horizontal ones. The key stage is the third: A convergence merger is more problematic the less vertical it is -- that is, if the acquiring generator had no prior dealings with the acquired gas supplier. FERC's analyses in leading convergence merger cases fail this test. Focusing on how convergence mergers facilitate regulatory evasion by linking regulated and unregulated enterprises, and how they reduce the ability to keep proprietary

information from competitors, would be more productive approaches.

PD December 2001. **TI** Implementing Electricity Restructuring: Policies, Potholes, and Prospects. **AU** Brennan, Timothy J.; Palmer, Karen; Martinez, Salvador. **AA** Brennan: University of Maryland and Resources for the Future. Palmer: Resources for the Future. Martinez: University of Florida. **SR** Resources for the Future Discussion Paper: 01/62; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 37. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D40, L11, L43, L51, L94. **KW** Electricity Restructuring. Regulation. Deregulation.

AB Electricity is one of the last U.S. industries in which competition is replacing regulation. We briefly review the technology for producing and delivering power, the history of electricity policy, and recent state and international experience. We then outline the major questions facing policymakers as they decide whether, when, and how to implement restructuring. We conclude with some thoughts on the California electricity crisis and other political controversies. Although the California experience has come to define what it means for electricity markets to fail, most of the problems it raised are solvable or preventable. The still unresolved make-or-break issue remains whether the cooperation necessary to maintain reliability is compatible with the degree of competition necessary to bring about greater efficiency and lower prices. This paper draws upon our forthcoming book, *Alternating Currents: Electricity Markets and Public Policy*.

Brodaty, Thomas

PD November 2000. **TI** Using Matching Estimators to Evaluate Alternative Youth Employment Programs: Evidence from France, 1986-1988. **AU** Brodaty, Thomas; Crepon, Bruno; Fougere, Denis. **AA** Brodaty: Universite de Paris I. Fougere: CREST and CEPR. **SR** CEPR Discussion Paper: 2604; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** J24, J68. **KW** Duration Models. Matching Estimators. Multiple Treatments. Youth Employment.

AB In this paper we apply the statistical framework recently proposed by Imbens (1999) and Lechner (1999) to identify the causal effects of multiple treatments under the conditional independence assumption. We show that under this assumption, matching with respect to the ratio of the scores allows to estimate nonparametrically the average conditional treatment effect for any pair of treatments. Consequently it is possible to estimate this effect by implementing nonparametric matching estimators, which were recently studied by Heckman, Ichimura, Smith and Todd (1998) and Heckman, Ichimura and Todd (1998). The application concerns the youth employment programs that were set up in France during the eighties to improve the labor market prospects of the most disadvantaged and unskilled young workers. The empirical analysis makes use of nonexperimental longitudinal micro data collected by INSEE (Institut National de la Statistique et des Etudes Economiques, Paris) from 1986 to 1988.

Brooks, Ray

PD February 2002. **TI** Why is Unemployment High in the

Philippines? **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/23; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 24. **PR** not available. **JE** E24, J21, J22, J23, J64. **KW** Philippines. Unemployment. Employment. **AB** Unemployment has remained high in the Philippines, at almost twice the level of neighboring countries, despite relatively fast employment growth in the past decade. Employment growth was not sufficient to reduce unemployment because of rapid population growth and increased labor force participation. This paper shows that Philippine employment growth and unemployment declines were positively correlated with real gross domestic product growth and, to a lesser extent, negatively with the real minimum wage. The key policy implications are that higher economic growth and moderation of increases in the real minimum wage are required to reduce unemployment.

Brooks, Robin

PD November 2001. **TI** Exchange Rates and Capital Flows. **AU** Brooks, Robin; Edison, Hali J.; Kumar, Manmohan S.; Slok, Torsten. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/190; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** F31, F32. **KW** Exchange Rates. Euro. Yen. Capital Flows.

AB This paper explores the ability of portfolio and foreign direct investment (FDI) flows to track movements in the euro and the yen against the dollar. Net portfolio flows from the euro area into U.S. stocks -- possibly reflecting differences in expected productivity growth -- track movements in the euro against the dollar closely. Net FDI flows, which capture the recent burst in cross-border mergers and acquisitions (M&A) activity, appear less important in tracking movements in the euro-dollar rate, possibly because many M&A transactions consist of share swaps. Movements in the yen versus the dollar remain more closely tied to such conventional variables as the current account and interest differential.

Brueckner, Jan

PD November 2000. **TI** Local Labor Markets, Job Matching and Urban Location. **AU** Brueckner, Jan; Thisse, Jacques-Francois; Zenou, Yves. **AA** Brueckner: University of Illinois. Thisse: CERAS, Paris and Universite Catholique de Louvain. Zenou: Southampton University. **SR** CEPR Discussion Paper: 2612; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** J42, J61, R14. **KW** Imperfect Labor Markets. Spatial Mismatch. System Of Cities.

AB We present a new way of modeling local labor markets by linking the space of workers' skills and the physical space of cities. The key lesson of our analysis is that firms exploit workers in these two spaces by setting wages that are below the competitive level. The degree of monopsony power depends on the elasticity of the firm's labor pool, which is inversely related to the costs workers incur in commuting and acquiring skills. Our analysis thus shows how socioeconomic ghettos emerge as workers with poor skill matches are also those who incur the highest commuting costs.

Bryson, Alex

PD April 2001. **TI** Union Effects On Managerial and Employee Perceptions of Employee Relations in Britain. **AA** CEP and Policy Studies Institute. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 494; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 59. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J51, J53. **KW** Trade Unions. Employee Relations. Matched Labor Data. Unions.

AB This paper uses matched employer-employee data from the 1998 Workplace Employee Relations Survey to estimate influences on managerial and employee perceptions of the employee relations climate. Both the strength and direction of union effects differ according to the nature of the union and employer responses to it. Employee and employer perceptions of climate differ according to the strength of the union, bargaining arrangements adopted, and managerial attitudes to union membership. Employees' perceptions of climate are also strongly associated with employees' perceptions of union effectiveness.

Burgess, Robin

TI The Political Economy of Government Responsiveness: Theory and Evidence from India. **AU** Besley, Timothy; Burgess, Robin.

PD December 2000. **TI** Modernisation and Son Preference. **AU** Burgess, Robin; Zhuang, Juzhong. **AA** Burgess: STICERD, London School of Economics. Zhuang: Asian Development Bank. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/29; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 36. **PR** no charge. **JE** D12, I12, J16, J18, J71. **KW** Son Preference. Intra-household Allocation. Demand Analysis. China. Gender Bias.

AB Gaps in welfare attainment between boys and girls in China have attracted international attention. In this paper demand analysis is used to try and uncover the factors that may be driving the emergence of the gender gaps. Drawing on household expenditure data from a poor (Sichuan) and a rich (Jiangsu) Chinese province, we are able to test for different types of gender bias in intra-household allocation. We find spending on health to be biased against young girls in the poor province but not in the rich province, whereas there is a bias in education spending against older girls in both provinces. These biases in household spending were found to correspond to gender biases in mortality and school enrollment outcomes as revealed in census data for the same year. Split sample analysis reveals that poorer, less diversified households exhibit stronger biases against girls. Taken together, the results suggest that son preference in rural China is not driven solely by cultural factors, pointing to a potential role for public policy.

TI Land Reform, Poverty Reduction and Growth: Evidence from India. **AU** Besley, Timothy; Burgess, Robin.

Burgess, Simon

PD April 2001. **TI** Externalities in the Matching of

Workers and Firms in Britain. **AU** Burgess, Simon; Profit, Stefan. **AA** Burgess: CEP, University of Bristol and CEPR. Profit: German Ministry of Labour and Social Affairs. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 490; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 31. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E24, J41, J64. **KW** Matching Model. Externalities. Spatial Dependence. Unemployment Outflows.

AB We provide empirical evidence on the nature of spatial externalities in a matching model for the UK. We use a monthly panel of outflows, unemployment, and vacancy stocks data from the registers at Jobcentres in the UK; these are mapped onto travel-to-work areas. We find evidence of significant spillover effects that are generally in line with the predictions of theory. For example, we find that conditional on local labor market conditions, high unemployment levels in neighboring areas raise the number of local filled vacancies but lower the local outflow from unemployment.

PD April 2001. **TI** Jobs, Workers and Changes in Earnings Dispersion. **AU** Burgess, Simon; Lane, Julia; Stevens, David. **AA** Burgess: CEP, University of Bristol and CEPR. Lane: American University and Census Bureau. Stevens: University of Baltimore. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 491; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 43. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D31, J31. **KW** Earnings Inequality. Labor Reallocation. Job Allocation. Matched Labor Data.

AB The "fractal" nature of the rise in earnings dispersion is one of its key features and remains a puzzle. In this paper, we offer a new perspective on the causes of changes in earnings dispersion, focusing on the role of labor reallocation. Once we drop the assumption that all firms pay a given worker the same, the allocation of workers to firms matters for the dispersion of earnings. This perspective highlights two new factors that can affect the dispersion of earnings: rates of job and worker reallocation, and the nature of the allocating process of workers to jobs. We set out a framework capturing this idea, and quantify the impact of reallocation on earnings dispersion using a dataset that comprises almost the universe of workers and employers in Maryland. We show that reallocation factors have potentially large effects in general on earnings dispersion. In the case of Maryland over the period 1985-1994, the changing allocation of workers to jobs played a significant role in explaining movements in the dispersion of earnings.

Burkart, Mike

PD November 2000. **TI** Club Enlargement: Early Versus Late Admittance. **AU** Burkart, Mike; Wallner, Klaus. **AA** Burkart: Stockholm School of Economics and CEPR. Wallner: Oregon State University, Stockholm School of Economics, and CEPR. **SR** CEPR Discussion Paper: 2600; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D71, G34. **KW** Club Theory. Governance. Incomplete Contracts. Reform Incentives.

AB We develop an incomplete contract model to analyze the enlargement strategy of a club. An applicant is characterized by his wealth and the degree of conformity with the club standard. The club gains only from a fully reformed new member, but reform is costly. The club chooses between early admittance, where it can enforce reform through its partial control power, and late admittance, where entry is conditional on completed reform. Under the optimal enlargement strategy of the club, wealthy applicants pay an entrance fee and enter early, and poor applicants enter in reversed order: A less advanced member is admitted early, and a more advanced one, late. Moreover, poor applicants extract rents that increase in the ratio of reform distance to wealth. If the club can impose a deadline for late entry, it can eliminate all rents with stage financing. In the dynamic game, renegotiation undermines the viability of the late admittance strategy. In the finite game, the applicant's rent from a late offer is non-monotonic in his reform distance and the ability to deteriorate his reform status strategically need not be detrimental to the club.

Burnside, A. Craig

PD September 2000. **TI** On the Fundamentals of Self-Fulfilling Speculative Attacks. **AU** Burnside, A. Craig; Eichenbaum, Martin; Rebelo, Sergio. **AA** Burnside: World Bank. Rebelo: Northwestern University and CEPR. **SR** CEPR Discussion Paper: 2565; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F31, F34, F41, G15, G21. **KW** Exchange Rates. Government Guarantees. Hedging. Speculative Attacks. Twin Crises.

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, ultimately twin crises happen in countries where there are fundamental problems, such as guarantees to the financial sector.

Burtraw, Dallas

PD March 2001. **TI** Workshop Report: Pollution Abatement Costs and Expenditures (PACE) Survey Design for 2000 and Beyond. **AU** Burtraw, Dallas; Krupnick, Alan; Morgenstern, Richard; Pizer, William; Shih, Jih-Shyang. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/09; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 7. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** C81, K23, Q28, R38. **KW** Pollution Abatement Costs. Environmental Policy.

AB Accurate estimates of pollution abatement costs are crucial to any effort to set or evaluate environmental policies. A primary source for estimates in the U.S. has been the Bureau of the Census Pollution Abatement Costs and Expenditures (PACE) survey, which collected annual establishment-level data on abatement costs for most years between 1972 and 1994.

After a five-year lapse, the PACE survey was restarted in 2000, collecting 1999 data. As firms have turned to more comprehensive abatement strategies involving process and design changes, pollution prevention, and recycling, the PACE survey faced problems with accurately measuring costs. Meanwhile, national and international interest in true costs of environmental protection has grown, along with the complexity of research and policy issues. There is widespread interest in redesigning the PACE survey to improve usefulness to policymakers and researchers. In March 2000, Resources for the Future (RFF) convened a workshop to consider the issues. This paper presents conclusions based on workshop discussions.

TI Restructuring and the Cost of Reducing NO_x Emissions in Electricity Generation. **AU** Palmer, Karen; Bharvirkar, Ranjit; Burtraw, Dallas; Paul, Anthony.

PD August 2001. **TI** The Effect of Allowance Allocation on the Cost of Carbon Emission Trading. **AU** Burtraw, Dallas; Palmer, Karen; Bharvirkar, Ranjit; Paul, Anthony. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/30; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 30. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** L94, Q25, Q28, Q48. **KW** Emission Permits Allocation. Electricity Sector. Auctions. Restructuring. Allocation Effects.

AB We investigate the cost-effectiveness and distributional effects of a revenue-raising auction, grandfathering, and a generation performance standard as alternative approaches for distributing carbon emission allowances in the electricity sector. We solve a detailed national electricity market model and find the auction is roughly one-half the societal cost of the other approaches. This result holds under a variety of assumptions about the future state of economic regulation and competition in the electricity sector. The differences in the cost of the approaches result from the effect of each approach on electricity price. Grandfathering is the best for producers but it imposes a substantial cost on consumers. The generation performance standard yields the lowest electricity price but highest natural gas price. The auction does better than the generation performance standard at protecting households and at preserving asset values for producers. It also yields revenues that can help meet other efficiency and distributional goals.

PD December 2001. **TI** Ancillary Benefits of Reduced Air Pollution in the United States from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael A.; Bloyd, Cary. **AA** Burtraw, Krupnick, Palmer, Paul, and Toman: Resources for the Future. Bloyd: Argonne National Laboratory. **SR** Resources for the Future Discussion Paper: 01/61; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 35. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** H23, I18, Q25, Q28, Q48. **KW** Greenhouse Gases. Ancillary Benefits. Air Pollution. Nitrogen Oxides. Pollution Abatement.

AB This paper considers how moderate actions to slow atmospheric accumulation of greenhouse gases from fossil fuel use also could reduce conventional air pollutants in the United States. The benefits that result would be "ancillary" to greenhouse gas abatement. Moreover, the benefits would tend to accrue locally and in the near term, while benefits from

reduced climate change mostly accrue globally and over a time frame of several decades or longer. The previous literature suggests that changes in nitrogen oxides (NOx) would be the most important consequence of moderate carbon policies. We calculate these changes in a detailed electricity model linked to an integrated assessment framework to value changes in human health. Total ancillary benefits of a tax of \$25 per metric ton of carbon emissions are estimated to be \$12-\$14, which appear to justify the costs of a \$25 tax even though marginal benefits are less than marginal costs. At a tax of \$75 per ton carbon, the value of ancillary benefits per ton of carbon reductions remains roughly constant at about \$12.

PD January 2002. **TI** Uncertainty and the Cost-Effectiveness of Regional NOx Emissions Reductions from Electricity Generation. **AU** Burtraw, Dallas; Bharvirkar, Ranjit; McGuinness, Meghan. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 02/01; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 44. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** Q25, Q28, Q48. **KW** Emissions Trading. Electricity Sector. Nitrogen Oxides. Market Structure. Deregulation.

AB This paper analyzes uncertainties surrounding the benefits and costs of a policy to reduce nitrogen oxides (NOx) emissions from electricity generation in the eastern U.S. Under each of 18 scenarios examined, we find an annual policy would yield net benefits that are at least as great as those expected under the U.S. Environmental Protection Agency's (EPA's) currently planned seasonal policy. Preferred (midpoint) assumptions yield additional benefits of \$724 million per year under an annual policy compared to a seasonal one (1997 dollars). The subset of 11 northeastern states benefit the most from an annual policy relative to a seasonal one, but relative net benefits are also positive in the remaining states in the region. An annual policy implemented on a national basis appears to be slightly less cost-effective than the EPA's policy under midpoint assumptions, but it is more cost-effective under half of the scenarios we examine.

Caballero, Ricardo J.

PD January 2002. **TI** A Dual Liquidity Model for Emerging Markets. **AU** Caballero, Ricardo J.; Krishnamurthy, Arvind. **AA** Caballero: MIT and NBER. Krishnamurthy: Northwestern University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/03; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 8. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** E44, E52, F34, F41, O16. **KW** External Crises. Liquidity. Fiscal Policy. Emerging Markets. Financial Constraints.

AB The last few years have seen a significant re-evaluation of the models used to analyze crises in emerging markets. Recent models typically stress financial constraints or distorted financial incentives. While this certainly represents progress, these models share a weakness with the earlier work: neither is uniquely about emerging markets. Adaptations of the Mundell-Fleming model represent Argentina as a Belgium with larger external shocks. Likewise, emerging market models of financial constraints are adaptations of developed economy ones with tighter financial constraints. In our work, we have advocated a model that distinguishes between the financial constraints

affecting borrowing and lending among agents within an emerging economy, and those affecting borrowing from foreign lenders. This "dual liquidity" model offers a parsimonious description of the behavior of firms, governments, and asset prices during financial crises. It also provides prescriptions for optimal policy responses to these crises.

PD March 2002. **TI** Excessive Dollar Debt: Financial Development and Underinsurance. **AU** Caballero, Ricardo J.; Krishnamurthy, Arvind. **AA** Caballero: MIT and NBER. Krishnamurthy: Northwestern University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/15; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 23. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** F31, F34, G15, G38, O16. **KW** Currency Mismatch. Thin Markets. Limited Participation. Underinsurance. Emerging Markets.

AB We propose that the limited financial development of emerging markets is a significant factor behind the large share of dollar-denominated external debt present in these markets. We show that when financial constraints affect borrowing and lending between domestic agents, agents undervalue insuring against an exchange rate depreciation. Since more of this insurance is present when external debt is denominated in domestic currency rather than in dollars, this result implies that domestic agents choose excessive dollar debt. We also show that limited financial development reduces the incentives for foreign lenders to enter emerging markets. The retarded entry reinforces the underinsurance problems.

PD March 2002. **TI** A "Vertical" Analysis of Monetary Policy in Emerging Markets. **AU** Caballero, Ricardo J.; Krishnamurthy, Arvind. **AA** Caballero: MIT and NBER. Krishnamurthy: Northwestern University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/16; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 29. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** E44, E52, F31, F34, F41. **KW** External Crises. International Liquidity. Monetary Policy. Commitment. Underinsurance.

AB During emerging market crises, domestic agents might have sufficient collateral to borrow from the other domestic agents, but they are unable to borrow from foreigners because the country, as a whole, lacks international collateral. In this setting, we show that an (ex-post) optimizing central bank's response to an external crisis is to tighten monetary policy to support the exchange rate. Although this response can be rationalized ex-post, it has negative ex-ante consequences when domestic financial markets are underdeveloped: it reduces the already insufficient private sector incentives to insure against external crises. If a central bank could commit, it should instead expand monetary policy. Indeed, lacking the willingness, credibility, or feasibility to implement an expansionary monetary policy during crises has important drawbacks. It means that the central bank must resort to other, potentially more costly instruments to address the underinsurance problem, such as capital controls and international liquidity requirements.

PD December 1999. **TI** The Cost of Recessions Revisited: A Reverse-Liquidationist View. **AU** Caballero, Ricardo J.; Hammour, Mohamad L. **AA** Caballero: MIT. Hammour: DELTA. **SR** CEPR Discussion Paper: 2331;

Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** E24, E32, G33, G34. **KW** Recessions. Liquidations. Restructuring. Creative Destruction. Job Flows. **AB** The observation that liquidations are concentrated in recessions has long been the subject of controversy. One view holds that liquidations are beneficial in that they result in increased restructuring. Another view holds that liquidations are privately inefficient and essentially wasteful. This paper proposes an alternative perspective. Based on a combination of theory with empirical evidence on gross job flows and on financial and labor market rents, we find that recessions cumulatively result in reduced restructuring, and that this is likely to be socially costly once we consider inefficiencies on both the creation and destruction margins.

Cabrales, Antonio

PD September 2000. **TI** Estimating Learning Models from Experimental Data. **AU** Cabrales, Antonio; Garcia-Fontes, Walter. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 501; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 41. **PR** Papers available for free on the web; no hardcopies. **JE** C51, C91, D83. **KW** Experimental Data. Learning. Unobserved Heterogeneity.

AB We study the statistical properties of three estimation methods for a model of learning that is often fitted to experimental data: quadratic deviation measures without unobserved heterogeneity, and maximum likelihood with and without unobserved heterogeneity. After discussing identification issues, we show that the estimators are consistent and provide their asymptotic distribution. Using Monte Carlo simulations, we show that ignoring unobserved heterogeneity can lead to seriously biased estimations in samples which have the typical length of actual experiments. Better small sample properties are obtained if unobserved heterogeneity is introduced. That is, rather than estimating the parameters for each individual, the individual parameters are considered random variables, and the distribution of those random variables is estimated.

PD December 2000. **TI** La Crema: A Case Study of Mutual Fire Insurance. **AU** Cabrales, Antonio; Calvo-Armengol, Antoni; Jackson, Matthew O. **AA** Cabrales: Universitat Pompeu Fabra. Calvo-Armengol: Universidad Carlos III, Madrid. Jackson: California Institute of Technology. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 518; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 26. **PR** Papers available for free on the web; no hardcopies. **JE** A13, C72, D64, D81. **KW** Insurance. Contract Theory. Mechanism Design. Truthful Revelation.

AB We analyze a mutual fire insurance mechanism used in Andorra, which is called La Crema in the local language. This mechanism relies on households' announced property values to determine how much a household is reimbursed in the case of a fire and how payments are apportioned among other households. The only Pareto efficient allocation reachable through the mechanism requires that all households honestly report the true value of their property. However, such honest

reporting is not an equilibrium except in the extreme case where the property values are identical for all households. Nevertheless, as the size of the society becomes large, the benefits from deviating from truthful reporting vanish, and all of the non-degenerate equilibria of the mechanism are nearly truthful and approximately Pareto efficient.

Cadima, Nuno

PD October 2000. **TI** The Impact of Mobile Phone Diffusion on the Fixed-Link Network. **AU** Cadima, Nuno; Pita Barros, Pedro Luis. **AA** Pita Barros: Universidade Nova de Lisboa and CEPR. **SR** CEPR Discussion Paper: 2598; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** L96, O32. **KW** Mobile Phone Diffusion. Telecommunications.

AB There is currently little knowledge on the consequences of diffusion of cellular technology on the incumbent fixed-link telephony service. We address this issue by estimation of diffusion curves for both technologies, allowing for potential cross-effects, using data from a small European economy. Our main findings are a negative effect of the mobile phone diffusion on the fixed-link telephony penetration rate. The effect is, roughly, a ten percent decrease in the fixed-link penetration rate (in comparison with the absence of mobile phones). No effect on the reverse direction seems to exist. Mobile phone market growth seems to be determined essentially by technological advances.

Cadot, Olivier

PD September 2000. **TI** The Protectionist Bias of Duty Drawbacks and the New Regionalism. **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo. **AA** Cadot: Universite de Lausanne and CEPR. de Melo: Universite de Geneve and CEPR. Olarreaga: World Bank and CEPR. **SR** CEPR Discussion Paper: 2559; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F11, F13, F15, R19. **KW** Duty Drawbacks. Mercosur. Regionalism. Political Economy. Tariffs.

AB In a political economy setting where tariffs and duty drawbacks are endogenously chosen through industry lobbying, it is shown that full duty drawbacks are granted to exporters who use imported intermediates in their production. This in turn decreases their incentives to counter-lobby against high tariffs on their inputs. In equilibrium, higher tariffs will be observed on these goods. The creation of a regional block will change the political equilibrium. Duty drawbacks will be eliminated on intra-regional exports, which in turn will lead to lower tariffs for goods used as inputs by intra-regional exporters. Evidence from the Common Market of the Southern Cone (Mercosur) suggests that the elimination of duty-drawbacks for intra-regional exports led to increased counter-lobbying by users of intermediate products. In its absence the common external tariff would have been on average 3.5 percentage points (25 percent) higher.

PD November 1999. **TI** Asymmetric Regionalism in Sub-Saharan Africa: Where Do We Stand? **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo. **AA** Cadot: INSEAD and CEPR. de Melo: Universite de Geneve, CERDI, and CEPR. Olarreaga: World Bank and CEPR. **SR** CEPR

Discussion Paper: 2299; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 24. **PR** 5 pounds, \$8 or 8 euros. **JE** F11, F13, F15. **KW** Regionalism. Comparative Advantage. Redistribution. Asymmetries. Africa.

AB The paper reviews the likely economic effects of the Regional Economic Partnership Agreements (REPAs) proposed by the European Union (EU) to the African, Caribbean, and Pacific (ACP) countries to succeed the Lome IV agreements. We argue that, in spite of some likely positive effects because of reciprocity and because of the North-South partnership, the pronounced asymmetries among the Southern partners will lead to strong redistributive and marginalization effects that will require compensations that are likely to be costly to implement. We also point out that efforts at regional cooperation agreements would avoid some of the shortcomings associated with the proposed discriminatory trade preferences that would accompany the proposed REPAs. And if the REPAs are negotiated, they should be accompanied by compensatory transfers from the EU for tax revenue losses attributable to the agreements.

PD December 1999. **TI** A Political Economy Model of Infrastructure Allocation: An Empirical Assessment. **AU** Cadot, Olivier; Roller, O.; Stephan, A. **AA** Cadot: INSEAD and CEPR. Roller and Stephan: WZB. **SR** CEPR Discussion Paper: 2336; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, D78, O41, P16, R42. **KW** Growth. Infrastructure. Political Economy. Lobbying. France.

AB This paper proposes a simultaneous-equation approach to the estimation of the contribution of transport infrastructure accumulation to regional growth. We model explicitly the political-economy process driving infrastructure investments; in doing so, we eliminate a potential source of bias in production-function estimates and generate testable hypotheses on the forces that shape infrastructure policy. Our empirical findings on a panel of France's regions over 1985-91 suggest that influence activities were, indeed, significant determinants of the cross-regional allocation of transportation infrastructure investments. Moreover, we find little evidence of concern for the maximization of economic returns to infrastructure spending, even after controlling for pork-barrel and when imposing an exogenous preference for convergence in regional productivity levels.

Calvet, Laurent E.

TI Idiosyncratic Production Risk, Growth, and the Business Cycle. **AU** Angeletos, George-Marios; Calvet, Laurent E.

Calvo, Guillermo

PD February 2002. **TI** Nominal Exchange Rate Anchoring Under Inflation Inertia. **AU** Calvo, Guillermo; Celasun, Oya; Kumhof, Michael. **AA** Calvo: Inter-American Development Bank and University of Maryland. Celasun: IMF. Kumhof: IMF and Stanford University. **SR** International Monetary Fund Policy Working Paper: WP/02/30; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 36. **PR** not available. **JE** E31, E52, F41. **KW** Inflation Inertia. Staggered Pricing. Exchange Rate Anchoring. Nontradable Goods.

AB This paper develops a theory of inflation inertia based on forward-looking staggered price setting in the nontradable goods sector of a small open economy. Unlike current theories of sticky prices, transitions to a lower steady state inflation rate take time even if they are fully credible, and they are associated with significant output losses in nontradables. There is a welfare trade-off between these output losses and the gains from smaller inflationary distortions. Gains exceed losses for most calibrations. The optimal steady state is the Friedman rule.

Calvo-Armengol, Antoni

TI La Crema: A Case Study of Mutual Fire Insurance. **AU** Cabrales, Antonio; Calvo-Armengol, Antoni; Jackson, Matthew O.

Calza, Alessandro

PD November 2001. **TI** Euro Area Money Demand: Measuring the Opportunity Costs Appropriately. **AU** Calza, Alessandro; Gerdesmeier, Dieter; Levy, Joaquim. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/179; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 18. **PR** not available. **JE** C22, C32, E41. **KW** European Monetary Union. Money Demand. Own Rate of Money. M3. Cointegration.

AB The existence of a well-specified and stable relationship between money and prices has long been perceived as a prerequisite for the use of monetary aggregates in the conduct of monetary policy. This paper contributes to the ongoing discussion about the stability of euro area money demand by constructing an own rate of return on euro area M3 and by analyzing its implications in a standard money demand system. Over the sample period, one cointegrating vector relating real M3, real gross domestic product, and the spread between the short-term interest rate and the own rate of M3 can be identified and interpreted as a long-run euro area money demand equation. A dynamic money demand system is subsequently estimated. Standard diagnostics, stability tests, and out-of-sample forecasts confirm the good statistical performance of the model.

Campa, Jose Manuel

PD November 2000. **TI** Exchange Rates and Trade: How Important is Hysteresis in Trade? **AA** Campa: IESE, Barcelona New York University, and CEPR. **SR** CEPR Discussion Paper: 2606; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F31, F33, F36. **KW** Export Markets. Exchange Rate Volatility. Export Elasticity. Hysteresis.

AB This paper looks at the responsiveness of a country's export supply to exchange rate changes and measures its quantitative importance by breaking down export adjustments between changes in output levels by existing exporters (intensive margin) and movements due to changes in the number of exporters (extensive margin). Using data on a representative sample of Spanish manufacturing firms, the paper finds sunk costs hysteresis in entry and exit to be an important factor in determining export market participation, but unrelated to exchange rate uncertainty. The sunk costs of entering the market appear to be much larger than the costs of exiting the market. Finally, although hysteresis exists, its effect

on the responsiveness of aggregate trade volumes to exchange rate changes is quantitatively small. A 10% home currency depreciation results in an increase in export volume due to the increase in the number of exporting firms of only 1.5 percent of export volume.

PD November 2000. **TI** An Options-Based Analysis of Emerging Market Exchange Rate Expectations: Brazil's Real Plan, 1994-1999. **AU** Campa, Jose Manuel; Chang, Kevin; Refalo, James F. **AA** Campa: IESE, Barcelona, New York University, and CEPR. **SR** CEPR Discussion Paper: 2611; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F31, G13, G15. **KW** Exchange Rate Credibility. Implied Distributions. Options.

AB This Paper uses currency option data from the BMF, the Commodities and Futures exchange in Sao Paulo, Brazil, to investigate market expectations on the Brazilian Real-US dollar exchange rate from October 1994 through to March 1999. Using options data, we derive implied probability density functions (PDF) for expected future exchange rates and thus measures of the credibility of the "crawling peg" and target zone ("maxiband") regimes governing the exchange rate. Since we do not impose an exchange rate model, our analysis is based on either the risk-neutral PDF or arbitrage-based tests of target zones. The Paper, one of the first to use options data from an emerging market, finds that target zone credibility was poor prior to February 1996, improved afterwards through September 1997 and later started to worsen again. The market anticipated periodic band adjustments, and estimated distributions are very sensitive to political and economic news affecting the credibility of the regime. We also test whether devaluation intensities estimated from these option prices can be explained by standard macroeconomic factors.

Campbell, Jeffrey R.

PD October 2000. **TI** Idiosyncratic Risk and Aggregate Employment Dynamics. **AU** Campbell, Jeffrey R.; Fisher, Jonas D. M. **AA** Campbell: University of Chicago and NBER. Fisher: Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Working Paper: 7936; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 39. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D81, J41, L23. **KW** Idiosyncratic Risk. Aggregate Fluctuations. Employment Dynamics.

AB This paper studies how producers' idiosyncratic risks affect an industry's aggregate dynamics in an environment where certainty equivalence fails. In the model, producers can place workers in two types of jobs, organized and temporary. Workers are less productive in temporary jobs, but creating an organized job requires an irreversible investment of managerial resources. Increasing productivity risk raises the value of an unexercised option to create an organized job. Losing this option is one cost of immediate organized job creation, so an increase in its value induces substitution towards cheaper temporary jobs. Because they are costless to create and destroy, a producer using temporary jobs can be more flexible, responding more to both idiosyncratic and aggregate shocks. If all of an industry's producers adapt to heightened idiosyncratic risk in this way, the industry as a whole can respond more to a

given aggregate shock. This insight is used to better understand the observation from the U.S. manufacturing sector that groups of plants displaying high idiosyncratic variability also have large aggregate fluctuations.

Campos, Nauro F.

PD September 2000. **TI** Who is Afraid of Political Instability? **AA** University of Newcastle and CEPR. **SR** CEPR Discussion Paper: 2555; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, E23, O41, P16. **KW** Economic Growth. Political Instability. Sub-Saharan Africa.

AB An unstable macroeconomic environment is often regarded as detrimental to economic growth. Among the sources contributing to such instability, the literature has assigned most of the blame to political issues. This paper empirically tests for a causal and negative long-term relationship between political instability and economic growth, but finds no evidence of such a relationship. Sensitivity analysis indicates that there is a contemporaneous negative relationship and that in the long run, ignoring institutional factors, the Sub-Saharan Africa group plays the determining role in steering this relationship into becoming causal and negative.

PD November 2000. **TI** Investment and Instability. **AU** Campos, Nauro F.; Nugent, Jeffrey B. **AA** Campos: University of Newcastle and CEPR. **SR** CEPR Discussion Paper: 2609; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, E23, O40. **KW** Aggregate Investment. Granger Causality. Political Instability.

AB Although recent research has repeatedly found a negative association between investment and political instability, the existence and direction of causality between these two variables has not yet been investigated. This paper empirically tests for such a causal and negative long-run relationship between political instability and investment. It finds that there is a robust causal relationship from instability to investment, and that it is positive. In other words, an increase in political instability causes an increase in investment (Granger). We identify three different theories that can explain this result.

Canova, Fabio

PD December 1999. **TI** Monetary Policy Misspecification in VAR Models. **AU** Canova, Fabio; Pina, Joaquim Pires. **AA** Canova: Universitat Pompeu Fabra, University of Southampton and CEPR. Pina: Universitat Pompeu Fabra. **SR** CEPR Discussion Paper: 2333; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** C32, C68, E32, E52. **KW** General Equilibrium. Monetary Policy. Identification. Structural VAR. Misspecification.

AB We examine the effects of extracting monetary policy disturbances with semi-structural and structural vector autoregressions, using data generated by a limited participation model under partial accommodative and feedback rules. We find that, in general, misspecification is substantial: short run coefficients often have wrong signs, and impulse responses and

variance decompositions give misleading representations of the dynamics. Explanations for the results and suggestions for macroeconomic practice are provided.

Card, David

PD April 2000. **TI** Can Falling Supply Explain the Rising Return to College for Younger Men? A Cohort-Based Analysis. **AU** Card, David; Lemieux, Thomas. **AA** Card: UC Berkeley and NBER. Lemieux: University of British Columbia and NBER. **SR** National Bureau of Economic Research Working Paper: 7655; 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** I21, J24, J31. **KW** Education Returns. Age Cohorts. Cohort Effects. Wage Differentials.

AB Although the college-high school wage gap for younger men has doubled over the past 30 years, the gap for older men has remained nearly constant. We argue that these shifts reflect changes in the relative supply of highly educated workers across age groups. Cohorts born in the first half of the century had steadily rising educational attainments that offset rising demand for better-educated workers. This trend ended abruptly in the early 1950s and has only recently resumed. Using a model with imperfect substitution between similarly-educated workers in different age groups, we show that a slowdown in the rate of growth of educational attainment across cohorts will lead to a rise in the return to college for young workers that eventually works its way through the age distribution. This prediction is remarkably consistent with data for the U.S. over the period from 1959 to 1995. We also examine data for the United Kingdom and Canada; results from these countries are comparable to the U.S. findings. These results underscore the importance of cohort-specific relative supplies in interpreting movements in education-related wage differentials.

PD April 2000. **TI** Dropout and Enrollment Trends in the Post-War Period: What Went Wrong in the 1970s? **AU** Card, David; Lemieux, Thomas. **AA** Card: UC Berkeley and NBER. Lemieux: University of British Columbia and NBER. **SR** National Bureau of Economic Research Working Paper: 7658; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 39. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** I21. **KW** Cohort Effects. Schooling Attainment. Education Attainment. College Enrollment.

AB Over most of the 20th century successive generations of U.S. children had higher enrollment rates and rising levels of completed education. This trend reversed with the baby boom cohorts who attended school in the 1970s, and only resumed in the mid-1980s. In this paper, we use a variety of data sources to address the question "What went wrong in the 1970s?" We focus on both demand-side factors and on a particular supply-side variable -- the relative size of the cohort currently in school. Among other results, we find that larger cohorts have lower schooling attainment, and that aggregate enrollment rates are correlated with changes in the earnings gains associated with a college degree. For women, it seems the slowdown in education in the 1970s was a temporary response to these factors. For men, however, the decline in enrollment rates in the 1970s point to a permanent shift in the inter-cohort trend in educational attainment that will affect U.S. economic growth and trends in inequality for many decades to come.

Carranza, Luis

PD March 2000. **TI** Financial Intermediation, Variability and the Development Process. **AU** Carranza, Luis; Galdon-Sanchez, Jose E. **AA** Carranza: BBVA Banco Continental. Galdon-Sanchez: London School of Economics. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/21; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 38. **PR** no charge. **JE** E23, E44, O11, O16, O47. **KW** Output Volatility. Market Imperfections. Growth. Sunspot Equilibria. Credit Markets.

AB In this paper we have built a model of financial intermediation that explains the gross domestic product variability pattern of an economy during the development process. In our model, per capita output is more volatile in the middle-income economies than in both low- and high- income economies. We show that, if the model economy is in the early or in the mature stages of development there is a unique equilibrium. However, in the middle stages of development multiple equilibria arise. Moreover, we find that in economies with imperfect credit markets, per capita output volatility tends to be higher than in economies with perfect or non-existent credit markets.

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 FEEM. Metcalf: Tufts University and NBER. **SR** National Bureau of Economic Research Working Paper: 7648; 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** H21, H23, Q28. **KW** Environmental Policy.

AB This paper summarizes research presented at the Fondazione Eni Enrico Mattei-National Bureau of Economic Research (FEEM-NBER) Conference on the Behavioral and Distributional Effects of Environmental Policy, held in Milan Italy in June 1999.

Carrillo, Juan D.

PD September 2000. **TI** Try Me! On Job Assignments as a Screening Device. **AA** Columbia University and CEPR. **SR** CEPR Discussion Paper: 2552; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D21, D73, D82, D83, L22. **KW** Career Concerns. Job Allocation. Personnel Selection. Screening.

AB We study the optimal allocation of screening tasks between two agents (incumbent vs. outsider, or senior vs. junior) competing for one job. First, we characterize the inefficiencies from the principal's viewpoint of delegating the selection of the screening procedure to the incumbent. In general, the information disclosed by the screening tasks and the turnover rates will be inefficiently small due to the incumbent's willingness to undertake too many of these tasks. Second, we show that it may be optimal for organizations to favor the selection of outsider/junior agents relative to incumbent/senior agents because the former have greater implicit (career concern type) incentives than the latter to exert

effort and perform efficiently.

Carson, Carol S.

PD November 2001. **TI** Manuals on Macroeconomic Statistics: A Stocktaking to Guide Future Work. **AU** Carson, Carol S.; Laliberte, Lucie. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/183; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 15. **PR** not available. **JE** B41, E69. **KW** Macroeconomic Datasets. National Accounts. Balance of Payments. Monetary Accounts. Price Index.

AB Over the last decade, a number of methodological manuals on macroeconomic datasets were produced by the international community. For a number of reasons, these manuals could be viewed as fragmented, disconnected, and branching in various directions. This paper groups by topics and broad classifications a critical mass (some 40) of manuals that have been published since 1993 or that are nearing completion. Viewing the manuals in an integrated framework prompts a reflection with four broad types of issues to be addressed for future work: awareness and accessibility of the manuals; their relevance; the need for further harmonization; and the need for updating procedures.

PD February 2002. **TI** Assessing Accuracy and Reliability: A Note Based on Approaches Used in National Accounts and Balance of Payments Statistics. **AU** Carson, Carol S.; Laliberte, Lucie. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/24; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** C19, C82, E29, F32. **KW** Data Quality Assessment. Judgmental Evaluation. Data Revisions. National Accounts. Balance of Payments.

AB Both national accounts and balance of payments are based on multiple, complex source data and typically undergo several routine revisions as more and better source data are incorporated into the final estimates. As a result, neither dataset can be subjected directly to the usual statistical measures of sampling biases, variances, and other measurement error properties. In this context, this note, which is addressed to those interested in these datasets and others, explores four approaches that shed light on the accuracy and reliability of these datasets: examination of statistical discrepancies, comparison with other data, analysis of revisions, and judgmental evaluation.

Case, Anne

PD May 2000. **TI** Mother and Others: Who Invests in Children's Health? **AU** Case, Anne; Paxson, Christina. **AA** Princeton University and NBER. **SR** National Bureau of Economic Research Working Paper: 7691; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 26. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D12, I12, J12, J13. **KW** Child Health. Health Investments. Family Structure. Mothers. Stepmothers.

AB We estimate the impact of family structure on investments made in children's health, using data from the 1988 National Health Interview Survey Child Health Supplement. Controlling for household size, income, and characteristics, we find that children living with stepmothers are significantly less likely to have routine doctor and dentist visits, or to have a place for usual medical care or for sick care. If children living

with stepmothers have regular contact with their birth mothers, however, their health care does not suffer relative to that reported for children who reside with their birth mothers. In addition to health investments, we find a significant effect of stepmothers on health-related behaviors: children living with stepmothers are significantly less likely to wear seatbelts, and are significantly more likely to be living with a cigarette smoker. We cannot reject that investments for children living with birth fathers and stepmothers are the same as those made by birth fathers living alone with their children. Who invests in children's health? It appears these investments are made, largely, by a child's mother, and that stepmothers are not substitutes for birth mothers in this domain.

Casella, Alessandra

TI Overcoming Informational Barriers to International Resource Allocation: Prices and Ties. **AU** Rauch, James E.; Casella, Alessandra.

Caselli, Francesco

PD September 2000. **TI** The World Technology Frontier. **AU** Caselli, Francesco; Coleman, Wilbur John, II. **AA** Caselli: Harvard University, CEPR, and NBER. Coleman: Duke University. **SR** National Bureau of Economic Research Working Paper: 7904; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** E25, O14, O15, O33, O41. **KW** Technology Frontier. Capital Efficiency. Skilled Labor. Unskilled Labor. Labor Efficiency.

AB We define a country's technology as a triple of efficiencies: one for unskilled labor, one for skilled labor, and one for capital. We find a negative cross-country correlation between the efficiency of unskilled labor and the efficiencies of skilled labor and capital. We interpret this finding as evidence of the existence of a World Technology Frontier. On this frontier, increases in the efficiency of unskilled labor are obtained at the cost of declines in the efficiency of skilled labor and capital. We estimate a model in which firms in each country optimally choose from a menu of technologies, i.e., they choose their technology subject to a Technology Frontier. The optimal choice of technology depends on the country's endowment of skilled and unskilled labor, so that the model is one of appropriate technology. The estimation allows for country-specific technology frontiers, due to barriers to technology adoption. We find that poor countries tend disproportionately to be inside the World Technology Frontier.

Cashin, Paul

PD December 2001. **TI** An Unbiased Appraisal of Purchasing Power Parity. **AU** Cashin, Paul; McDermott, C. John. **AA** Cashin: IMF. McDermott: IMF and National Bank of New Zealand. **SR** International Monetary Fund Working Paper: WP/01/196; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 31. **PR** not available. **JE** C22, F31. **KW** Median-Unbiased Estimation. Purchasing Power Parity. Shock Persistence. Exchange Rates.

AB Univariate studies of the hypothesis of unit roots in real exchange rates have yielded consensus point estimates of the half-life of deviations from purchasing power parity of between three to five years. However, least squares-based estimates of half-lives are biased downward. Accordingly, we

follow Andrews (1993) and use median-unbiased estimators of the half-life of deviations from parity as a preferred measure of the persistence of real exchange rate shocks. We study this issue using real effective exchange rate (REER) data for 22 industrial countries in the post-Bretton Woods period. Three methods of bias correction are implemented, which yield cross-country averages of half-lives of deviations from parity ranging between 4 to 15 years, with the REER of several countries displaying permanent deviations from parity.

Cassiman, Bruno

PD August 2000. **TI** Endogeneizing Know-How Flows through the Nature of R&D Investments. **AU** Cassiman, Bruno; Perez-Castrillo, David; Veugelers, Reinhilde. **AA** Cassiman: Universitat Pompeu Fabra. Perez-Castrillo: Universitat Autònoma de Barcelona. Veugelers: Katholieke Universiteit Leuven, Belgium. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 512; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 29. **PR** Papers available for free on the web; no hardcopies. **JE** L13, O32, O34. **KW** Spillovers. Basic R&D. Intellectual Property. Protection. **AB** In this paper we carefully link knowledge flows to and from a firm's innovation process with this firm's investment decisions. We present a model of a leading firm facing a competitive fringe. The leading firm considers three types of investments: investments in applied research, investments in basic research, and investments in intellectual property protection. Our model assumes that the firm can effectively access incoming knowledge flows by doing basic research. These incoming spillovers serve to increase the efficiency of own applied research. The firm can at the same time influence outgoing knowledge flows, improving appropriability of its innovations, by investing in protection. Our results indicate that the ratio of basic to applied research is non-decreasing in the size of the pool of accessible external know-how, the size and opportunity of the market, and, the effectiveness of intellectual property rights protection.

TI R&D Cooperation and Spillovers: Some Empirical Evidence. **AU** Veugelers, Reinhilde; Cassiman, Bruno.

TI Importance of International Linkages for Local Know-How Flows: Some Econometric Evidence from Belgium. **AU** Veugelers, Reinhilde; Cassiman, Bruno.

Castellani, Francesca

PD December 2001. **TI** Central Bank Independence and the Design of Fiscal Institutions. **AU** Castellani, Francesca; Debrun, Xavier. **AA** Castellani: Graduate Institute of International Studies, Geneva. Debrun: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/205; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 37. **PR** not available. **JE** E52, E58, E61, E62, E63. **KW** Central Bank Independence. Policy Mix. Fiscal Rules. Linear Contracts. Quadratic Contracts.

AB We study the desirability of reforming fiscal institutions along with the delegation of monetary policy to an independent central bank. The model provides a rationale for discipline-enhancing fiscal institutions and highlights some of their desirable features. Three main results emerge. First, when the government can pre-commit on fiscal strategies, fiscal

discretion is optimal only if the central bank strictly targets the socially optimal inflation rate. Second, without pre-commitment technology, fiscal restraints are desirable and contingent on the strategic interaction between monetary and fiscal authorities. Third, deficit rules are generally inefficient, and instrument-specific rules based on a combination of linear and quadratic contracts with targets are called for.

Caucutt, Elizabeth M.

PD October 2001. **TI** The Timing of Births: A Marriage Market Analysis. **AU** Caucutt, Elizabeth M.; Guner, Nezhir; Knowles, John. **AA** Caucutt: University of Rochester. Guner: Pennsylvania State University. Knowles: University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/23; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 38. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** J12, J13, J16, J22, J24. **KW** Income Distribution. Marriage. Fertility. Gender Economics. Labor Supply. **AB** We argue that one of the key channels linking the labor and marriage markets is the decision of when to become a parent. We develop an equilibrium model of marriage, divorce, and human capital accumulation, which allows for differential timing of fertility. We calibrate the model to US panel data and analyze the effects of raising women's wages relative to men's, and increasing the rate of return to experience for women. We find that an increase in the returns to experience for women causes an increase in the fraction of children born to women over age 30, and that raising women's wages reduces marriage rates.

Cavanagh, Sheila M.

PD September 2001. **TI** National Environmental Policy During the Clinton Years. **AU** Cavanagh, Sheila M.; Hahn, Robert W.; Stavins, Robert N. **AA** Cavanagh: Harvard University. Hahn: AEI-Brookings Joint Center for Regulatory Studies, American Enterprise Institute and Harvard University. Stavins: Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/38; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 43. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D61, D63, H41, Q24, Q28. **KW** Air Quality Standards. Benefit-Cost Analysis. Voluntary Programs. Environmental Policy. Land Management.

AB We review major developments in national environmental policy during the Clinton Administration, defining environmental policy to include not only the statutes, regulations, and policies associated with reducing pollution, but also major issues of public lands management and species preservation. We adopt economic criteria for policy assessment -- principally efficiency, cost-effectiveness, and distributional equity. While the paper is primarily descriptive, we highlight a set of five themes that emerge in the economics of national environmental policy over the past decade.

Cayford, Jerry

TI Evaluating Dispute Resolution as an Approach to Public Participation. **AU** Beierle, Thomas C.; Cayford, Jerry.

Cecchetti, Stephen G.

PD May 2000. **TI** Price Level Convergence Among United States Cities: Lessons for the European Central Bank. **AU** Cecchetti, Stephen G.; Mark, Nelson C.; Sonora Robert J. **AA** Cecchetti: Ohio State University and NBER. Mark: Ohio State University. Sonora: University of Texas, Arlington. **SR** National Bureau of Economic Research Working Paper: 7681; 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** E31, F31, F33, F37, F41. **KW** Price Level Convergence. European Monetary Union. EMU.

AB We study the dynamics of price indices for major U.S. cities using panel econometric methods, and find that relative price levels among cities mean-revert at an exceptionally slow rate. In a panel of 19 cities from 1918 to 1995, we estimate the half-life of convergence to be approximately nine years. These estimates provide an upper bound on the speed of convergence that participants in European Monetary Union are likely to experience. The surprisingly slow rate of convergence can be explained by a combination of the presence of transportation costs, differential speeds of adjustment to small and large shocks, and the inclusion of non-traded good prices in the overall price index.

Celasun, Oya

TI Nominal Exchange Rate Anchoring Under Inflation Inertia. **AU** Calvo, Guillermo; Celasun, Oya; Kumhof, Michael.

Celentani, Marco

PD January 2001. **TI** Organized vs. Competitive Corruption. **AU** Celentani, Marco; Ganuza, Juanjo. **AA** Celentani: Universidad Carlos III, Madrid. Ganuza: Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 526; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 21. **PR** Papers available for free on the web; no hardcopies. **JE** C72, D73, K42. **KW** Competitive Corruption. Organized Corruption. Bureaucracy. Equilibrium Corruption.

AB We study bureaucratic corruption in a model in which a constituency sets required levels for a given set of activities. Activities are carried out by external providers who are supervised by bureaucrats. Bureaucrats can allow providers to deliver lower activity levels than contracted in exchange for a bribe. The constituency sets the optimal activity levels weighing off the value of activity levels, their costs, as well as the possibility for the bureaucrats to be corrupt. We compute equilibrium corruption in two different settings: 1) Each bureaucrat maximizes his own individual utility (competitive corruption); 2) An illegal syndicate maximizes total proceeds from corruption (organized corruption). We show that the illegal syndicate acts in such a way as to restrain the total number of corrupt transactions, so that corruption is lower when it is organized than when it is competitive.

Cespa, Giovanni

PD December 2000. **TI** Short-Term Investment and Equilibrium Multiplicity. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business

Working Paper: 520; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 29. **PR** Papers available for free on the web; no hardcopies. **JE** G12, G14. **KW** Financial Economics. Information. Market Efficiency.

AB I study the effects of the heterogeneity of traders' horizon in the context of a 2-period NREE model where all traders are risk averse. Owing to inventory effects, myopic trading behavior generates multiplicity of equilibria. In particular, two distinct patterns arise. Along the first equilibrium, short term traders anticipate higher second period price reaction to information arrival and, owing to risk aversion, scale back their trading intensity. This, in turn, reduces both risk sharing and information impounding into prices enforcing a high returns' volatility-low price informativeness equilibrium. In the second one, the opposite happens and a low volatility-high price informativeness equilibrium arises.

PD May 2001. **TI** A Comparison of Stock Market Mechanisms. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 545; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 43. **PR** Papers available for free on the web; no hardcopies. **JE** G12, G14. **KW** Financial Economics. Asset Pricing. Information. Market Efficiency.

AB This paper studies the relationship between the amount of public information that stock market prices incorporate and the equilibrium behavior of market participants. The analysis is framed in a static, NREE setup where traders exchange vectors of assets accessing multidimensional information under two alternative market structures. In the first (the unrestricted system), both informed and uninformed speculators can condition their demands for each traded asset on all equilibrium prices; in the second (the restricted system), they are restricted to condition their demand on the price of the asset they want to trade. I show that informed traders' incentives to exploit multidimensional private information depend on the number of prices they can condition upon when submitting their demand schedules, and on the specific price formation process one considers. Building on this insight, I then give conditions under which the restricted system is more efficient than the unrestricted system.

Chalk, Nigel A.

PD November 2001. **TI** Tax Incentives in The Philippines: A Regional Perspective. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/181; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 22. **PR** not available. **JE** F21, F23, H25. **KW** Corporate Taxation. Tax Incentives. ASEAN. Fiscal Incentives. Philippines.

AB The Philippines is faced with a policy dilemma in the area of corporate taxation. On the one hand, the country has, over the past few years, witnessed a decline in revenue as a share of output. On the other, it is operating in an increasingly competitive regional market for foreign direct investment. In order to remain competitive, the Philippines offers a broad array of fiscal incentives to entice inward investment and pursue the country's development goals. This paper looks at the fiscal incentives available in the Philippines, compares them with

those available in the Association of Southeast Asian Nations (ASEAN) region, and with the evidence on the efficacy of tax incentives in a global context. The paper provides some broad conclusions on the use of the various forms of tax incentives in the Philippines and on their administration.

Chami, Ralph

PD February 2002. **TI** Trust as a Means of Improving Corporate Governance and Efficiency. **AU** Chami, Ralph; Fullenkamp, Connel. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/33; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 33. **PR** not available. **JE** A13, D20, D64, D82, M12. **KW** Asymmetric Information. Efficiency. Trust. Moral Hazard. Corporate Governance.

AB Agency problems within the firm are a significant hindrance to efficiency. We propose trust between coworkers as a superior alternative to the standard tools used to mitigate agency problems: increased monitoring and incentive-based pay. We show how trust induces employees to work harder, relative to those at firms that use the standard tools. In addition, we show that employees at trusting firms have higher job satisfaction, and that these firms enjoy lower labor costs and higher profits. Finally, we show how trust may also be easier to use within the firm than the standard agency-mitigation tools.

Chan-Lau, Jorge A.

PD December 2001. **TI** Corporate Restructuring in Japan: An Event-Study Analysis. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/202; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 11. **PR** not available. **JE** G14, G34. **KW** Japan. Corporate Restructuring. Corporate Governance. Event-Study Analysis. Restructuring.

AB The implementation of the Commercial Rehabilitation Law (CRL) on April 1, 2000, was considered a key event in setting up the official infrastructure supporting corporate restructuring in Japan. This study evaluates the stock price impact of restructuring announcements before and after the CRL implementation using event-study analysis. Following the CRL implementation, the results suggest an improvement in market credibility of restructuring announcements based on improvements in disclosure, mergers, and to a lesser extent, labor force reductions. In contrast, the credibility of restructuring announcements aimed at reducing excess capital deteriorated.

PD December 2001. **TI** The Impact of Corporate Governance Structures on the Agency Cost of Debt. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/204; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 11. **PR** not available. **JE** G31, G33, G34. **KW** Corporate Governance. Agency Cost of Debt. Exit Decision. Bankruptcy.

AB This paper uses a stochastic continuous-time model of the firm to study how different corporate governance structures affect the agency cost of debt. In the absence of asymmetric information, the paper shows that control of the firm by debtholders with a minority stake delays the exist decision and reduces the underinvestment problem. Such a governance structure may play an important role in diminishing conflicts between shareholders and debtholders.

PD January 2002. **TI** The Corporate Spread Curve and Industrial Production in the United States. **AU** Chan-Lau, Jorge A.; Ivaschenko, Iryna V. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/02/08; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 40. **PR** not available. **JE** E32, E37, E43, E44. **KW** Corporate Spreads. Term Structure. Real Activity. GMM Estimation. Forecasting.

AB The term structure of domestic investment grade bond spreads -- or corporate spread curve -- contains useful information to predict future changes in industrial production, beyond the information already contained in interest rates, commercial paper-treasury bill spreads, and lagged values of industrial production. In fact, the corporate spread curve can explain the cumulative growth rate of industrial production over 3- to 48-month horizons, and the marginal growth rate over 6- to 18-month horizons. Unlike other financial variables, the corporate spread curve has been a stable predictor of real activity for the last fifteen years.

Chang, Kevin

TI An Options-Based Analysis of Emerging Market Exchange Rate Expectations: Brazil's Real Plan, 1994-1999. **AU** Campa, Jose Manuel; Chang, Kevin; Refalo, James F.

Charlwood, Andy

PD June 2001. **TI** Why Do Non-Union Employees Want to Unionise? Evidence from Britain. **AA** CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 498; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 37. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D71, J51. **KW** Trade Union Membership. Employee Union Attitudes. Unionization.

AB The introduction of a statutory recognition procedure offers British unions the opportunity to reverse membership decline by organizing non-union workers. The aim of this paper is to test theories of individual union joining in order to assess the likely impact of the new procedure on British union membership. Responses of a nationally representative sample of non-union employees to the question "how willing would you be to join a union if one were available at your workplace?" are analyzed. Results suggest that the new legislation will cause union membership to rise among manual employees, but that unions will face a much harder challenge organizing non-manual employees. Unless unions can change their environment or change themselves, long-term decline is likely.

PD August 2001. **TI** Influences on Trade Union Organising Effectiveness in Great Britain. **AA** CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 504; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 52. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J51. **KW** Trade Unions. Organizing Effectiveness. Unions.

AB This paper brings together data from the 1998 Workplace Employee Relations Survey, National Survey of Unions, and

Trades Union Congress (TUC) focus on recognition survey to investigate influences on union organizing effectiveness. Organizing effectiveness is defined as the ability of trade unions to recruit and retain members. Results suggest that there are big differences in organizing effectiveness between unions. The results also indicate that while national union recruitment policies are an important influence on a union's ability to get new recognition agreements, local factors are a more important influence on organizing effectiveness in workplaces where unions have a membership presence. There are also important differences in organizing effectiveness among blue- and white-collar employees. These differences suggest that unions will face a strategic dilemma about the best way to appeal to the growing number of white-collar employees.

Chen, Joseph

PD May 2000. **TI** Forecasting Crashes: Trading Volume, Past Returns and Conditional Skewness in Stock Prices. **AU** Chen, Joseph; Hong, Harrison; Stein, Jeremy C. **AA** Chen and Hong: Stanford University. Stein: Harvard University, MIT, and NBER. **SR** National Bureau of Economic Research Working Paper: 7687; 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** G12, G14. **KW** Skewness. Stock Returns. Asymmetric Stock Returns. Trading Volume.

AB This paper investigates the determinants of asymmetries in stock returns. We develop a series of cross-sectional regression specifications that attempt to forecast skewness in the daily returns of individual stocks. Negative skewness is most pronounced in stocks that have experienced: 1) an increase in trading volume relative to trend over the prior six months; and 2) positive returns over the prior thirty-six months. The first finding is consistent with the model of Hong and Stein (1999), which predicts that negative asymmetries are more likely to occur when there are large differences of opinion among investors. The latter finding fits with a number of theories, most notably Blanchard and Watson's (1982) rendition of stock-price bubbles. Analogous results also obtain when we attempt to forecast the skewness of the aggregate stock market, though our statistical power in this case is limited.

Chen, Xiaohong

PD March 2002. **TI** Asymptotic Properties of Some Projection-Based Robbins-Monro Procedures in a Hilbert Space. **AU** Chen, Xiaohong; White, Halbert. **AA** Chen: London School of Economics. White: University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/07; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 47. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C14. **KW** Recursive Estimation. Nonparametric Estimation. Hilbert Space. GMM.

AB Let H be an infinite-dimensional real separable Hilbert space. Given an unknown mapping $M: H$ onto H that can only be observed with noise, we consider two modified Robbins-Monro procedures to estimate the zero point theta-naught in H of M . These procedures work in appropriate finite dimensional sub-spaces of growing dimension. Almost-sure convergence,

functional central limit theorem (hence asymptotic normality), law of iterated logarithm (hence almost-sure loglog rate of convergence), and mean rate of convergence are obtained for Hilbert space-valued mixingale, theta-dependent error processes.

Chen, Yu-chin

PD February 2002. **TI** Commodity Currencies and Empirical Exchange Rate Puzzles. **AU** Chen, Yu-chin; Rogoff, Kenneth. **AA** Chen: Harvard University. Rogoff: IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/27; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 45. **PR** not available. **JE** F31, F41. **KW** Exchange Rates. Commodity Prices. Capital Flows.

AB This paper re-examines empirical exchange rate puzzles by focusing on three Organization for Economic Cooperation and Development (OECD) economies (Australia, Canada, and New Zealand) where primary commodities constitute a significant share of their exports. For Australia and New Zealand especially, we find that the U.S. dollar price of their commodity exports (generally exogenous to these small economies) has a strong and stable influence on their floating real rates, with the quantitative magnitude of the effects consistent with predictions of standard theoretical models. However, after controlling for commodity price shocks, there is still a purchasing power parity puzzle in the residual. Nevertheless, the results here are relevant to many developing country commodity exporters, as they liberalize their capital markets and move towards floating exchange rates.

Cherian, Joseph A.

TI Option Pricing and Foreign Investment under Political Risk. **AU** Perotti, Enrico C.; Cherian, Joseph A.

Chernichovsky, Dov

PD September 2000. **TI** The Public-Private Mix in the Modern Health Care System -- Concepts, Issues, and Policy Options Revisited. **AA** Ben Gurion University of the Negev, Israel and NBER. **SR** National Bureau of Economic Research Working Paper: 7881; 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, I11, I18, L33. **KW** Health Care. Private Health Care. Public-Private Mix.

AB Private financing of health care can make universal entitlement to care more comprehensive and complete. However, the possible combination of privately acquired entitlement with public entitlement can impinge upon the goals, (e.g. improved health, equity, cost containment, care production efficiency, and client satisfaction from service), of the publicly supported health system. The potential to achieve these goals is at greatest risk in the "combined system" (e.g., Australia) where, contrary to the "segregated system" (e.g., Canada), the same providers are sanctioned to provide medical care under both private and public contracts. A combined system may be inevitable, however, for both economic and political reasons, especially where medical resources are relatively scarce. In this case, the Emerging Paradigm in health systems can offer the best possible solution to the public-private mix issue. In this paradigm, budget-holding institutions, which exist as intermediaries between financing entities and providers, organize and manage the consumption of care (OMCC) under

public entitlement. The OMCC institutions can offer private insurance to supplement the public insurance, but they supervise separate groups of providers -- those working under public contracts and those working under private.

Chernozhukov, Victor

PD December 2001. **TI** An IV Model of Quantile Treatment Effects. **AU** Chernozhukov, Victor; Hansen, Christian. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/06; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 33. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** C14, C30, C51, D40, J24. **KW** Quantile Regression. Treatment Effects. Empirical Likelihood. Training. Demand Models.

AB This paper develops a model of quantile treatment effects that allows for treatment endogeneity. The model primarily exploits a similarity assumption as a main identifying restriction. From this model we derive a Wald instrumental variables estimating equation, and show that the model does not require functional form assumptions for identification. We then characterize the quantile treatment function as solving an "inverse" quantile regression problem and suggest its finite-sample analog as a practical estimator. This estimator, unlike generalized method-of-moments, can be easily computed by solving a series of conventional quantile regressions, and does not require grid searches over high-dimensional parameter sets. A properly weighted version of this estimator is also efficient. The model and estimator apply to either continuous or discrete variables. We apply this estimator to characterize quantile treatment effects in a market demand model and a job training program.

PD February 2002. **TI** Likelihood Inference in a Class of Non-Regular Econometric Models. **AU** Chernozhukov, Victor; Hong, Han. **AA** Chernozhukov: MIT. Hong: Princeton University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/05; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 38. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** C13, C51, C53, D11, D44. **KW** Extreme Value Theory. Structural Econometric Model. Auctions. Likelihood. Point Process. Stochastic Equisemicontinuity.

AB In this paper we analyze a conditional density model with a jump, where the location and size of the jump are described by regression lines. This interesting structure is shared by several structural econometric models. Two prominent examples include the standard auction models where density jumps from zero to a positive value, and the equilibrium job search models, where the density jumps from one level to another, inducing kinks in the cumulative distribution function. This paper develops the asymptotic inference theory for likelihood-based estimators of these models -- the Bayes and maximum likelihood (ML) estimators. Bayes and ML estimators are useful classical procedures. While MLE is transformation invariant, Bayes estimators offer some theoretic and computational advantages. They also have desirable efficiency properties. We characterize the limit likelihood as a function of a Poisson process that tracks the near-to-jump events and depends on regressors. The approach is applied to an empirical model of a highway procurement auction. We

estimated a pareto model of Paarsch (1992) and an alternative flexible parametric model.

PD February 2002. **TI** Inference on Quantile Regression Process, An Alternative. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/12; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 15. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** C13, C14, C30, C51, J64. **KW** Bootstrap. Subsampling. Quantile Regression. Kolmogorov-Smirnov Test. Unemployment Duration.

AB A very simple and practical resampling test is offered as an alternative to inference based on Khmaladzatian, as developed in Koenker and Xiao (2001). This alternative has competitive or better power, accurate size, and does not require estimation of non-parametric sparsity and score functions. It applies not only to iid but also time series data. Computational experiments and an empirical example that re-examines the effect of a re-employment bonus on unemployment duration support this approach.

PD May 2002. **TI** Inference for Distributional Effects Using Instrumental Quantile Regression. **AU** Chernozhukov, Victor; Hansen, Christian. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/20; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 33. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** C13, C14, C30, C51, J31. **KW** Quantile Regression. Instrumental Quantile Regression. Treatment Effects. Endogeneity. Returns to Education.

AB In this paper we describe how quantile regression can be used to evaluate the impact of treatment on the entire distribution of outcomes, when the treatment is endogenous or selected in relation to potential outcomes. We describe an instrumental variable quantile regression process and the set of inferences derived from it, focusing on tests of distributional equality, non-constant treatment effects, conditional dominance, and exogeneity. The inference, which is subject to the Durbin problem, is handled via a method of score resampling. The approach is illustrated with a classical supply-demand and a schooling example. Results from both models demonstrate substantial treatment heterogeneity and serve to illustrate the rich variety of hypotheses that can be tested using inference on the instrumental quantile regression process.

Cheslock, John J.

TI Paying our Presidents: What do Trustees Value? **AU** Ehrenberg, Ronald G.; Cheslock, John J.; Epifantseva, Julia.

Chinn, Menzie D.

TI Fin de Siecle Real Interest Parity. **AU** Fujii, Eiji; Chinn, Menzie D.

PD September 2000. **TI** International Capital Inflows, Domestic Financial Intermediation and Financial Crises under Imperfect Information. **AU** Chinn, Menzie D.; Kletzer, Kenneth M. **AA** Chinn: UC Santa Cruz and NBER. Kletzer: UC Santa Cruz and IMF. **SR** National Bureau of Economic Research Working Paper: 7902; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 20. **PR** \$5.00. **JE** D82,

F31, F41, G21. **KW** Financial Crises. Currency Crises. Agency. Banking Sector. Lending.

AB We develop a model of financial crises in emerging markets, based on problems of agency in financial intermediation. This model generates dynamic relationships between foreign capital inflows, domestic investment, and domestic bank debt in an endogenous growth model. As a consequence of loan renegotiation between limited liability banks and firms, financial crises inevitably occur. Banking and currency crises are concurrent events under an exchange rate peg combined with deposit insurance and implicit government guarantees of foreign currency loans. The model links high pre-crisis growth rates, the accumulation of bank debt, and increasing concentration of domestic lending and investment, to the anticipation of contingent government insurance of private financial transactions. The dynamics of capital inflows and growth before and after a financial crisis are compared to the experience of the Asian crisis countries. We find evidence consistent with this agency model of domestic bank intermediation of foreign capital inflows under exchange rate pegs.

Chirwa, Ephraim W.

TI Financial Reforms and Interest Rate Spreads in the Commercial Banking System in Malawi. **AU** Mlachila, Montfort; Chirwa, Ephraim W.

Choi, James J.

PD September 2000. **TI** Does the Internet Increase Trading? Evidence from Investor Behavior in 401(k) Plans. **AU** Choi, James J.; Laibson, David; Metrick, Andrew. **AA** Choi: Harvard University. Laibson: Harvard University and NBER. Metrick: University of Pennsylvania and NBER. **SR** National Bureau of Economic Research Working Paper: 7878; 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** D12, G11, L86, O33. **KW** Internet Trading. Investor Behavior. 401k Plans. Trading Activity.

AB We analyze the impact of a Web-based trading channel on the trading activity in two corporate 401(k) plans. Using detailed data on about 100,000 participants, we compare trading growth in these firms to growth for a sample of firms without a Web channel. After 18 months of access, the inferred Web effect is very large: trading frequency doubles, and portfolio turnover rises by over 50 percent. We also document several patterns of Web-trading behavior. Young, male, and wealthy participants are more likely to try the Web channel. Frequent traders (before Web introduction) are less likely to try the Web. Participants who try the Web tend to stick with it. Web trades tend to be smaller than phone trades both in dollars and as a fraction of portfolio. "Short-term" trades make up a higher proportion of phone trades than of Web trades.

Choi, Woon Gyu

PD November 2001. **TI** Monetary Policy and Corporate Liquid Asset Demand. **AU** Choi, Woon Gyu; Kim Yungsan. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/177; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 23. **PR** not available. **JE** C23, E41, E52. **KW** Monetary Policy. Liquid Asset Demand. Loan Commitments. Panel Data.

Corporate Liquidity Demand.

AB In contrast to conventional money demand literature, this paper proposes that monetary policy affects corporate liquidity demand directly through a separate channel -- what we call "the loan commitment channel." Upon persistent monetary policy shocks, firms make substitutions between sources of funds for intertemporal liquidity management, taking advantage of loan commitments and sluggish movements in loan rates. To test this proposition, we estimate corporate liquidity demand, controlling for firm characteristics, using U.S. quarterly panel data. The results indicate that when monetary policy is tightened, S&P 500 firms initially increase their liquid assets before reducing them, whereas non-S&P firms reduce them more quickly.

Choudhri, Ehsan U.

PD December 2001. **TI** Exchange Rate Pass-Through to Domestic Prices: Does the Inflationary Environment Matter? **AU** Choudhri, Ehsan U.; Hakura, Dalia S. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/194; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** E31, E52, F31, F41. **KW** Pass-Through. Inflation. Exchange Rates.

AB The paper tests a hypothesis suggested by Taylor (2000) that a low inflationary environment leads to a low exchange rate pass-through to domestic prices. To test this hypothesis, the paper derives a pass-through relation based on new open economy macroeconomic models. A large database that includes 1979-2000 data for 71 countries is used to estimate this relation. There is strong evidence of a positive and significant association between the pass-through and the average inflation rate across countries and periods. The inflation rate, moreover, dominates other macroeconomic variables in explaining cross-regime differences in the pass-through.

Christiano, Lawrence J.

PD April 2000. **TI** Understanding the Fiscal Theory of the Price Level. **AU** Christiano, Lawrence J.; Fitzgerald, Terry J. **AA** Christiano: Northwestern University and NBER. Fitzgerald: Federal Reserve Bank of Cleveland. **SR** National Bureau of Economic Research Working Paper: 7668; 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** E31, E58, E61, E62, E64. **KW** Price Level. Fiscal Theory.

AB We review the fiscal theory of the price level. We place special emphasis on the theory's implications for the feasibility of price stability.

Christofides, Charis

TI Convertibility Risk: The Precautionary Demand for Foreign Currency in a Crisis. **AU** Black, Stanley W.; Christofides, Charis; Mourmouras, Alex.

Chui, Michael

TI Winners and Losers in a North-South Model of Growth, Innovation and Product Cycles. **AU** Levine, Paul L.; Pearlman, Joseph; Chui, Michael.

Ciccarelli, Matteo

PD March 2002. **TI** The Transmission Mechanism of European Monetary Policy: Is There Heterogeneity? Is it Changing over Time? **AU** Ciccarelli, Matteo; Rebucci, Alessandro. **AA** Ciccarelli: Universitat d' Alicante. Rebucci: IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/54; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 41. **PR** not available. **JE** C11, C33, E52, F42. **KW** Bayesian Estimation. European Monetary Policy. Gibbs Sampling. Heterogeneity. Transmission Mechanism.

AB This paper investigates the transmission mechanism of monetary policy in the four largest euro area countries by means of Bayesian estimation of dynamic econometric models. Based on pre-Economic and Monetary Union (EMU) evidence from Germany, France, Italy, and Spain, we show that: (i) there are differences in the timing of the effects of monetary policy on economic activity, but their cumulative impact after two years is rather homogeneous; (ii) the transmission mechanism seems to have changed over time in the run-up to EMU, but its degree of heterogeneity has not decreased; (iii) the "European-wide" effects of monetary policy may have become faster in the second half of the 1990s. We interpret this evidence by conjecturing that the transmission mechanism of monetary policy had already become relatively homogenous in the second part of the 1990s.

Ciccone, Antonio

PD November 2000. **TI** Human Capital and Externalities in Cities. **AU** Ciccone, Antonio; Peri, Giovanni. **AA** Ciccone: Universitat Pompeu Fabra and CEPR. **SR** CEPR Discussion Paper: 2599; Centre for Economic Policy Research. Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** J31, O47, R11. **KW** Human Capital. Cities. Decreasing Returns. Human Capital Externalities.

AB We combine growth theory with US Census data on individual schooling and wages to estimate the aggregate return to human capital and human capital externalities in cities. Our estimates imply that a one year increase in average schooling in cities increases their aggregate labor productivity by 8 to 11 percent. We find no evidence for aggregate human capital externalities in cities however, although we use three different approaches. Our main theoretical contribution is to show how human capital externalities can be identified (non-parametrically) even if workers with different levels of human capital are imperfect substitutes in production.

PD November 2000. **TI** Input Chains and Industrialization. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 498; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 34. **PR** Papers available for free on the web; no hardcopies. **JE** O11, O14, O21. **KW** Intermediate Inputs. Input Chains. Industrialization. Aggregate Income.

AB A key-aspect of industrialization is that industrial, increasing-returns-to-scale technologies are adopted throughout intermediate-input chains in the economy. Furthermore, industrial technologies use intermediate inputs intensively relatively to technologies they replace. This paper develops the implications of these aspects of industrial

technologies for industrialization. In particular, it is shown that they imply that minor differences in the productivity of industrial technologies can result in large differences in levels of industrialization, aggregate productivity, and aggregate income.

PD February 2001. **TI** Resistance to Reform: Reconsidering the Role of Individual-Specific Uncertainty. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 537; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 21. **PR** Papers available for free on the web; no hardcopies. **JE** D72, D74, D81. **KW** Status-Quo Bias. Reform. Individual-Specific Uncertainty.

AB Individual-specific uncertainty may increase the chances of reform being enacted and sustained. Reform may be more likely to be enacted because a majority of agents might end up losing little from reform and a minority gaining a lot. Under certainty, reform would therefore be rejected, but it may be enacted with uncertainty because those who end up losing believe that they might be among the winners. Reform may be more likely to be sustained because, in a realistic setting, reform will increase the incentives of agents to move in to those economic activities that benefit. Agents who respond to these incentives will vote to sustain reform in future elections, even if they would have rejected reform under certainty. These points are made using the trade-model of Fernandez and Rodrik (1991).

PD April 2001. **TI** On Payoff Heterogeneity in Games with Strategic Complementarities. **AU** Ciccone, Antonio; Costain, James. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 546; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 20. **PR** Papers available for free on the web; no hardcopies. **JE** C72, E17. **KW** Heterogeneity. Multiplicity. Discrete Choice. Strategic Complementarity. Positive Feedback.

AB Payoff heterogeneity weakens positive feedback in binary choice models in two ways. First, heterogeneity drives individuals to corners where they are unaffected by strategic complementarities. Second, aggregate behavior is smoother than individual behavior when individuals are heterogeneous. However, this smoothing does not necessarily eliminate positive feedback or guarantee a unique equilibrium. In games with an unbounded, continuous choice space, heterogeneity may either weaken or strengthen positive feedback, depending on a simple convexity/concavity condition. We conclude that positive feedback phenomena derived in representative agent models will often be robust to heterogeneity.

PD October 1997. **TI** US Spatial Wage Distribution, Spatial Technology Diffusion, Dynamic Spatial Externalities, Spatial Fixed Effects. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 500; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 25. **PR** Papers available for free on the web; no hardcopies. **JE** O33, O49, R11, R12. **KW** Spatial Wage Distribution. Technology Diffusion. Dynamic Externalities. Spatial Fixed Effects.

AB What explains the spatial distribution of wages across US counties? I find that two of the most important factors are spatial technology diffusion and externalities due to the aggregate scale of production. One empirical finding supporting the importance of spatial technology diffusion is that average wages in a county decrease with the average level of schooling in neighboring counties when employment in the county and average wages in neighboring counties are held constant. All empirical results are obtained using a novel instrument for (endogenous) employment at the county-level and take into account other factors (e.g. productivity-differences across states, climate) that may determine wages.

PD not available. **TI** Agglomeration-Effects in Europe. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 499; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 22. **PR** Papers available for free on the web; no hardcopies. **JE** R12, R19. **KW** Agglomeration. Productivity.

AB The paper estimates agglomeration-effects for France, Germany, Italy, Spain, and the UK. Estimation takes into account endogeneity of the spatial distribution of employment and spatial fixed-effects. Empirical results suggest that agglomeration-effects in these European countries are only slightly smaller than agglomeration-effects in the US: the estimated elasticity of average-labor-productivity with respect to employment-density is 4.5 percent compared to 5 percent in the US.

Cline, Sarah

TI Modeling the Costs and Environmental Benefits of Disposal Options for End-of-Life Electronic Equipment: The Case of Used Computer Monitors. **AU** Macauley, Molly K.; Palmer, Karen; Shih, Jih-Shyang; Cline, Sarah; Holsinger, Heather.

TI Modeling the Costs and Environmental Benefits of Disposal Options for End-of-Life Electronic Equipment: The Case of Used Computer Monitors. **AU** Macauley, Molly K.; Palmer, Karen; Shih, Jih-Shyang; Cline, Sarah; Holsinger, Heather.

Coady, David

PD September 2000. **TI** Commodity Taxation and Social Welfare: The Generalised Ramsey Rule. **AU** Coady, David; Dreze, Jean. **AA** Coady: International Food Policy Research. Dreze: Delhi School of Economics. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/27; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 37. **PR** no charge. **JE** D61, H21, H23, H24. **KW** Commodity Taxation. Efficiency. Redistribution. Shadow Prices. Taxation.

AB Commodity taxes have three distinct roles: (1) revenue collection, (2) interpersonal redistribution, and (3) resource allocation. The paper presents an integrated treatment of these three concerns in a second-best general equilibrium framework, which leads to the "generalized Ramsey rule" for optimum taxation. We show how many standard results on optimum taxation and tax reform have a straightforward counterpart in this general framework. Using this framework, we also try to

clarify the notion of "deadweight loss," as well as the relation between alternative distributional assumptions and the structure of optimum taxes.

Coats, David

TI Labour Law and Social Insurance in the New Economy: A Debate on the Supiot Report. **AU** Auer, Peter; de Calan, Dominique; Coats, David; Deakin, Simon; Freeman, Richard B.; Hoffmann, Reiner; Hornung-Draus, Renate; Lewis, Jane; Marsden, David; Meadows, Pamela; Sarfati, Hedva; Supiot, Alain.

Cohen, Daniel

PD November 1999. **TI** Will the Euro Create a Bonanza for Africa? **AU** Cohen, Daniel; Kristensen, N.; Verner, D. **AA** Cohen: ENS, CEPR, and EMAP. Kristensen and Verner: World Bank. **SR** CEPR Discussion Paper: 2304; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** F21, F31, F33, F34. **KW** Euro. Africa. Foreign Direct Investment.

AB This paper considers the impact of the Euro in Sub-Saharan Africa, looking at the transmission channels through which the Euro could affect the economies in the region and at the risks and opportunities for Sub-Saharan African countries. In particular, the paper looks into effects from the trade channel through changes in European economic activity and the real exchange rate. We also consider effects from other potential channels. Capital flows to Sub-Saharan Africa could be affected via changes in foreign direct investments (FDI) or via portfolio shifts. Financial implications, such as effects on the banking system and debt and reserve management, vary across countries but are in general expected to be of limited magnitude. We assess that at this stage it is difficult to conclude that the Euro will result in an important macroeconomic impact in Sub-Saharan Africa, unless the launch of the Euro becomes a tool of a major policy shift, "Euroization" of the continent, which is itself unlikely at the current stage.

Coile, Courtney

PD April 2000. **TI** Social Security Incentives for Retirement. **AU** Coile, Courtney; Gruber, Jonathan. **AA** Coile: NBER. Gruber: MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7651; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 29. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H31, H55, J14, J26. **KW** Social Security. Retirement.

AB We present a detailed analysis of the incentives that Social Security provides for continued work at older ages. We do this by using information on older males from the Health and Retirement Study over the 1980-1997 period to calculate changes in the present discounted value of Social Security entitlements from additional work at each age. We find that the median male worker faces a small tax on work at ages 55-61, a near zero tax at age 62-64, and a large tax at ages 65-69. However, there is significant heterogeneity in tax rates. We also document significant non-monotonicities in the accrual of Social Security entitlements with additional work, and suggest a more appropriate measure of incentive effects that considers accruals over not just the next year but future years as well.

Coleman, Wilbur John, II

TI The World Technology Frontier. **AU** Caselli, Francesco; Coleman, Wilbur John, II.

Coles, Melvyn G.

PD February 2000. **TI** Heterogeneity as a Coordination Device. **AU** Coles, Melvyn G.; Eeckhout, Jan. **AA** Coles: University of Essex. Eeckhout: Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 510; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 38. **PR** Papers available for free on the web; no hardcopies. **JE** C71, C72, D43. **KW** Matching. Assignment Game. Directed Search. Supermodularity. Truthful Equilibrium.

AB A model of directed search with a finite number of buyers and sellers is considered, where sellers compete in direct mechanisms. Buyer heterogeneity and Nash equilibrium results in perfect sorting. The restriction to complementary inputs, that the match value function Q is supermodular, in addition coordinates the sellers' strategies. In that case, equilibrium implements positive assortative matching, which is efficient and consistent with the stable (cooperative equilibrium) outcome. This provides a non-cooperative and decentralized solution for the Assignment Game. Conversely, if buyers are identical, no such coordination is possible, and there is a continuum of equilibria, one of which exhibits price posting, another yields competition in auctions.

Collyns, Charles

PD January 2002. **TI** Lending Booms, Real Estate Bubbles, and The Asian Crisis. **AU** Collyns, Charles; Senhadji, Abdelhak. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/20; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 45. **PR** not available. **JE** G12, G21. **KW** Lending. Real Estate Bubbles. Asian Crisis. Financial Crises. Bank Lending.

AB This paper examines the link between lending booms, asset price cycles, and financial crises across East Asian countries. Both theoretical arguments and empirical evidence support a strong relationship between bank lending and asset price inflation, especially in the real estate market. While asset price bubbles were present in most Asian countries during the 1990s, their subsequent bust has affected countries quite differently. Some countries underwent severe exchange and financial crises, while others were able to weather the storm with much less damage. This experience underlines the importance of a strong bank regulatory system.

Copeland, Brian R.

PD April 2000. **TI** Free Trade and Global Warming: A Trade Theory View of the Kyoto Protocol. **AU** Copeland, Brian R.; Taylor, M. Scott. **AA** Copeland: University of British Columbia. Taylor: University of Wisconsin-Madison and NBER. **SR** National Bureau of Economic Research Working Paper: 7657; 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** F18, F42, H41, Q28. **KW** Emission Reductions. Environmental Policy. Kyoto Protocol. International Trade. Open Economies.

AB This paper demonstrates how three important results in

environmental economics, true under mild conditions in closed economies, are false or need serious amendment in a world with international trade in goods. Since the three results we highlight have framed much of the ongoing discussion and research on the Kyoto Protocol, our viewpoint from trade theory suggests a re-examination may be in order. Specifically, we demonstrate that in an open trading world, but not in a closed economy setting: (1) unilateral emission reductions by the rich North can create self-interested emission reductions by the unconstrained poor South; (2) simple rules for allocating emission reductions across countries (such as uniform reductions) may well be efficient even if international trade in emission permits is not allowed; and (3) when international emission permit trade does occur it may make both participants in the trade worse off and increase global emissions.

Corbacho, Ana

PD January 2002. **TI** Mexico: Experiences with Pro-Poor Expenditure Policies. **AU** Corbacho, Ana; Schwartz, Gerd. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/12; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 54. **PR** not available. **JE** D31, H50, I38, O15. **KW** Mexico. Income Distribution. Government Expenditures. Poverty.

AB Against the background of Mexico's persistently high degree of inequality, this paper analyzes the country's experience with pro-poor policies over the last decade. A number of important government initiatives, implemented since the mid-1990s, have aimed at improving distributional equity through pro-poor expenditure programs, while at the same time seeking to increase the efficiency of public spending. This paper reviews these initiatives and outlines some additional policy options.

Corsetti, Giancarlo

PD November 2000. **TI** Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. **AU** Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song. **AA** Corsetti: Universita di Roma III, Yale University, and CEPR. Shin: London School of Economics and CEPR. **SR** CEPR Discussion Paper: 2610; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C72, D82, F31. **KW** Currency Crises. Herding. Large Traders. Self-Fulfilling Beliefs. Unique Equilibrium.

AB Do large investors increase the vulnerability of a country to speculative attacks in the foreign exchange markets? To address this issue, we build a model of currency crises where a single large investor and a continuum of small investors independently decide whether to attack a currency based on their private information about fundamentals. Even abstracting from signaling, the presence of the large investor does make all other traders more aggressive in their selling. Relative to the case in which there are no large investors, small investors attack the currency when fundamentals are stronger. Yet, the difference can be small, or null, depending on the relative precision of private information of the small and large investors. Adding signaling makes the influence of the large trader on small traders' behavior much stronger.

Costa, Dora L.

PD April 2000. **TI** American Living Standards, 1888-1994: Evidence From Consumer Expenditures. **AA** MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7650; 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** D12, N11, N12, N31, N32. **KW** Consumer Expenditures. Consumer Price Index. Growth.

AB I use micro data on food and recreation expenditures from 1888 to 1994 to provide the first estimates of overall consumer price index (CPI) bias prior to the 1970s and new estimates of bias since the 1970s; I also reassess long-run growth rates. Among other results, I find that inadequately accounting for the introduction of new consumer goods probably was the biggest source of bias between 1919 and 1935. Revised growth rates suggest that despite the Great Depression, real per capita personal income was not falling but was instead rising by 0.5 percentage points per year between 1919 and 1935. Also, growth rates were not stagnant in the 1970s but were almost as high as in the 1960s (4.0 and 3.2 in the 1960s and 1970s, respectively).

Costa, Joan

PD February 2001. **TI** Demand for Private Health Insurance: Is there a Quality Gap? **AU** Costa, Joan; Garcia, Jaume. **AA** Costa: Universitat de Barcelona. Garcia: Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 531; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 33. **PR** Papers available for free on the web; no hardcopies. **JE** G22, I11, I12. **KW** Private Health Insurance. Health Care Quality. Insurance Premium.

AB Quality of care is qualified as a main determinant of the demand for voluntary private health insurance (PHI) in National Health Systems (NHS). This paper provides new evidence on the influence of the quality gap between public and private health insurance and other demand determinants in the demand for PHI in Catalonia. The demand for PHI is modeled as a demand for health care quality. Unlike previous studies, the database employed allows for the development of a link between the theoretical and the empirical model dealing with unobserved heterogeneity and endogeneity issues. Results suggest that a rise in PHI quality enhances an equivalent influence in the demand for PHI as an equal reduction of NHS quality. Income and price elasticity estimates are consistent with the observed feature that PHI appears to be a luxury good and individuals tend to be relatively insensible to tax relief's and monetary co-payments in insurance contracts.

Costain, James

TI On Payoff Heterogeneity in Games with Strategic Complementarities. **AU** Ciccone, Antonio; Costain, James.

Crawford, Vincent P.

PD September 2001. **TI** Lying for Strategic Advantage: Rational and Boundedly Rational Misrepresentation of Intentions. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/16; Working Paper Coordinator, Department of Economics, 0508, University of

California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 21. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C72, D72, D82. **KW** Lying. Misrepresenting Intentions. Preplay Communication. Noncooperative Games. Conflict. Bounded Rationality.

AB Starting from Hendricks and McAfee's (2000) example of the Allies' decision to feint at Calais and attack at Normandy on D-Day, this paper models misrepresentation of intentions to competitors or enemies. Allowing for the possibility of bounded strategic rationality and rational players' responses to it yields a sensible account of lying via costless, noiseless messages. In many cases the model has generically unique pure-strategy sequential equilibria, in which rational players exploit boundedly rational players, but are not themselves fooled. In others, the model has generically essentially unique mixed-strategy sequential equilibria, in which rational players' strategies protect all players from exploitation.

Crepon, Bruno

TI Employed 40 Hours or Not Employed 39: Lessons from the 1982 Mandatory Reduction of the Workweek. **AU** Kramarz, Francis; Crepon, Bruno.

TI Using Matching Estimators to Evaluate Alternative Youth Employment Programs: Evidence from France, 1986-1988. **AU** Brodaty, Thomas; Crepon, Bruno; Fougere, Denis.

Crosson, Pierre

PD January 2002. **TI** Technologies for Meeting Future Global Demands for Food. **AU** Crosson, Pierre; Anderson, Jock R. **AA** Crosson: Resources for the Future. Anderson: World Bank. **SR** Resources for the Future Discussion Paper: 02/02; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 29. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** O13, O33, Q16, Q24. **KW** Agricultural Technology. Environment. Green Revolution. Technology. Food Production.

AB Food can be produced under a number of technological conditions. Some observers hold that modern crop production technologies, typified by those embodied in the Green Revolution, are so intensive in the use of external inputs that they damage the environment and so are not sustainable. Those observers argue that "alternative" technologies that use fewer, safer external inputs mark the path toward agricultural sustainability. But the question arises: will those alternative technologies permit increases in global food production on the required scale? In this paper, we address this question and the conflicting arguments regarding the answer.

Croux, Christophe

TI A Measure of Comovement for Economic Variables: Theory and Empirics. **AU** Forni, Mario; Reichlin, Lucrezia; Croux, Christophe.

Cuadras-Morato, Xavier

PD September 2000. **TI** Fiat Money, Intrinsic Properties, and Government Transaction Policy. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 504; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-

27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 55. PR Papers available for free on the web; no hardcopies. JE C73, D83, E41. KW Fiat Money. Government Policy. Search Theory.

AB Why do people coordinate on the use of valueless pieces of paper as generally accepted money? A possible answer is that these objects have intrinsic properties that make them better candidates to be used as media of exchange. Another answer stresses the fact that unconvertible fiat money will not easily appear unless there is a centralized institution that favors its use. The main objective of the paper is to analyze these questions. In order to do this, we take a model of commodity money in which fiat money does not play any significant role and modify it to examine under which circumstances fiat money might come to circulate as medium of exchange. Some of the results obtained from the model differ in a rather substantial way from previous related literature.

PD February 2001. TI Productividad, Competencia e Innovación en la Banca Privada Española (1900-1914). AU Cuadras-Morato, Xavier; Fernandez-Castro, Angel S.; Roses, Joan R. AA Cuadras-Morato: Universitat Pompeu Fabra. Fernandez-Castro: Universidade a Coruna, Spain. Roses: Universidad Carlos III, Madrid. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 530; Department of Economics and Business, Universitat Pompeu Fabra. Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 31. PR Papers available for free on the web; no hardcopies. JE G34, L84, N24, N84. KW Banking. Productivity. Economic History. Spain.

AB This study investigates the productivity differences and its sources across a set of banks during the last years of the liberal era of the Spanish banking system (1900-1914). These years were characterized by major qualitative and quantitative changes in the banking industry including a sharp increase in the size of the system, in the number of firms, and in its regional distribution. Employing DEA productivity analysis and the Malmquist index, we discover that these changes were accompanied by a generalized increase in the efficiency of least productive banks. Also, we observe that the crisis of some regional banking groups, like the Catalan, can be linked with its low productivity levels. In consequence, in the light of our productivity evidence, we conclude that the increase in competition was beneficial for the system because helped to the success of the most efficient banks.

Cuevas, Alfredo

TI Pension Reform and the Fiscal Policy Stance. AU Mackenzie, G. A.; Gerson, Philip; Cuevas, Alfredo; Heller, Peter S.

Currie, Janet

PD April 2000. TI Medicaid Expansions and Welfare Contractions: Offsetting Effects on Prenatal Care and Infant Health? AU Currie, Janet; Grogger, Jeffrey. AA University of California, Los Angeles and NBER. SR National Bureau of Economic Research Working Paper: 7667; 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 I18, I38, J13. KW Medicaid. Prenatal Care. Welfare Programs. Infant Health. Health Care.

AB Evaluations of changes to the Medicaid program have focused on increases in the generosity of income cutoffs for

Medicaid eligibility. Previous research shows that despite dramatic increases in the number of births paid for by the Medicaid program, women often enroll in Medicaid at the point of birth rather than before. States have addressed this problem by adopting administrative measures designed to simplify the Medicaid application process and encourage the use of prenatal care. At the same time, recent declines in welfare caseloads may effectively increase administrative barriers to obtaining care. We examine the effects of these three types of policies (changes in income eligibility, administrative reforms, and changes in welfare caseloads) on the use of prenatal care and infant health using data from birth certificates covering all U.S. births between 1990 and 1996. We find that increases in income cutoffs increased the use of prenatal care, while decreases in welfare caseloads reduced the use of prenatal care, especially among blacks. The administrative reforms we consider had little effect.

TI Youths at Nutritional Risk: Malnourished or Misnourished? AU Bhattacharya, Jay; Currie, Janet.

Dabla-Norris, Era

PD December 2001. TI Regional Disparities and Transfer Policies in Russia: Theory and Evidence. AU Dabla-Norris, Era; Weber, Shlomo. AA Dabla-Norris: IMF. Weber: IMF and Southern Methodist University. SR International Monetary Fund Working Paper: WP/01/199; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 21. PR not available. JE H50, H72, H73, O52, O53. KW Russia. Regional Disparities. Horizontal Imbalances. Transfers.

AB In this paper we examine economic disparities across regions in Russia and offer a theoretical treatment of various transfer rules between different regions. We analyze the principle of partial equalization, which implies that the more depressed regions should be subsidized by the more advantaged regions, but the burden on more prosperous regions should not be excessive. Although, contrary to the partial equalization principle, the gaps between the richer and poorer regions have widened since the transition, there are some signs that this trend could be reversed.

Daniel, James A.

PD November 2001. TI Hedging Government Oil Price Risk. AA IMF. SR International Monetary Fund Working Paper: WP/01/185; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 18. PR not available. JE E64, G13, O23, Q48. KW Hedging. Fiscal Policy. Derivative Markets. Oil Price Risk.

AB Many governments are heavily exposed to oil price risk, especially those dependent on revenue derived from oil production. For these governments, dealing with large price movements is difficult and costly. Traditional approaches, such as stabilization funds, are inherently flawed. Oil risk markets could be a solution. These markets have matured greatly in the last decade, and their range and depth could allow even substantial producers and consumers to hedge their oil price risk. Yet governments have held back from using these markets, mainly for fear of the political cost and lack of know how. This suggests that the International Monetary Fund (IMF), together with other development agencies, should consider encouraging governments to explore the scope for hedging their oil price risk.

Danninger, Stephan

PD January 2002. **TI** A New Rule: "The Swiss Debt Brake". **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/18; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** E62, H50, H60. **KW** Fiscal Rules. Fiscal Sustainability. Switzerland.

AB The paper provides an international comparison and a comprehensive analysis of a new fiscal expenditure rule for the federal government in Switzerland. The proposed rule has two innovative features: it aims at a structurally balanced budget in the short-run by annually setting a cyclically adjusted expenditure ceiling, and it arrests the accumulation of public debt via corrections of future expenditure targets for past deviations from projected fiscal balances. The paper finds that the new rule is likely to reduce procyclical tendencies in fiscal policy and that its objectives are adequate in meeting long-run fiscal challenges arising from demographic changes.

Dasgupta, Amil

TI Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. **AU** Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song.

Dasgupta, Partha

PD October 1998. **TI** Decentralization Schemes, Cost-Benefit Analysis, and Net National Product as a Measure of Social Well-Being. **AU** Dasgupta, Partha; Maler, Karl-Goran. **AA** Dasgupta: University of Cambridge, Beijer International Institute of Ecological Economics, and Resources for the Future. Maler: Beijer International Institute of Ecological Economics, Stockholm School of Economics, and Resources for the Future. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/12; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 38. **PR** no charge. **JE** D61, E22, H43. **KW** Allocative Efficiency. Cost-Benefit Analysis. Investment. Project Evaluation. Net National Product.

AB This paper is about net national product (NNP). We are concerned with what NNP means, what it should include, what it offers, and why we may be interested in it. We show that NNP, properly defined, can be used as a gauge for project evaluation, but we also show that it should not be used in any of its more customary roles, such as in making intertemporal and cross-country comparisons of social well-being. We develop such indices as would be appropriate for making such comparisons. Writings on the welfare economics of NNP have mostly addressed economies pursuing optimal policies. Our analysis includes not only such economies, but also those where the government is capable of engaging only in policy reforms. The literature on green NNP has widely interpreted NNP as a "constant-equivalent consumption stream". We show that this interpretation offers no purchase. It is the Hamiltonian that equals a constant-equivalent utility stream, and we argue that, as the Hamiltonian is typically a non-linear function of consumption and leisure, it is of little practical use.

PD November 1999. **TI** Valuation and Evaluation: Measuring the Quality of Life and Evaluating Policy. **AA** University of Cambridge and Beijer International Institute of Ecological Economics. **SR** London School of Economics and Political Science, STICERD Development

Economics Discussion Paper: DEDPS/22; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 65. PR no charge. JE D63, I31, O21, P52, Q28. KW Well-Being. Social Welfare. Ordinal Measures. Policy Evaluation. Quality of Life. AB This paper is concerned with social well-being and addresses appropriate methods of measuring social well-being and evaluating policy. A minimal set of indices for spanning a general conception of social well-being is identified. The analysis is motivated by the frequent need to make welfare comparisons across time and communities. A distinction is drawn between current well-being and sustainable well-being. Concerning current well-being, it is argued that a set of five indices, consisting of private consumption per head, life expectancy at birth, literacy, and indices of civil and political liberties, taken together, are a reasonable approximation for the purpose in hand. Indices of the quality of life currently in use are cardinal measures. Since indices of civil and political liberties are only ordinal, aggregate measures of social well-being should be required to be ordinal. These ideas are applied to data on what were 46 of the poorest countries in the early 1980s. The paper concludes with a discussion on policy evaluation, and calls for the consideration of resource allocations and the environmental resource base in policy evaluation.

Davies, Terry

PD September 2001. **TI** Regulating Government. **AU** Davies, Terry; Probst, Kate. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/29; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 44. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** H77, K23, K32, Q25, Q28. **KW** Pollution. Regulation. Intergovernmental Relations. Government Regulation. Public Sector Regulation.

AB Federal, state, and local governments are major polluters of the environment. They account for more than 7 percent of sulfur dioxide air pollution emissions and more than 5 percent of all nitrogen dioxide air emissions in the United States. Public entities are more likely than private ones to be in violation of the Clean Water Act, and they account for two-thirds of all major facilities in significant noncompliance with the act. Department of Energy nuclear sites are the worst hazardous waste problems in the nation. A lack of adequate data makes it difficult to fully characterize the extent of pollution caused by government agencies and to compare the performance of the public and private sectors. There are many reasons why government pollution is difficult to regulate. The paper discusses political dimensions, legal problems, resource constraints, psychological dimensions, and public opinion. Further research is urgently needed, and the paper delineates areas that require more investigation.

Davila, Julio

PD November 2001. **TI** Local Sunspot Equilibria Reconsidered. **AU** Davila, Julio; Gottardi, Piero; Kajii, Atsushi. **AA** Davila: University of Pennsylvania. Gottardi: Universita di Venezia. Kajii: University of Tsukuba. **SR** University of Pennsylvania, CARESS Working Paper: 01/24; CARESS, University of Pennsylvania, 3718 Locust

Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm.

PG 27. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** D51, D84, D91. **KW** Sunspots. Indeterminacy. Overlapping Generations.

AB This paper re-examines the conditions for the existence of local stationary sunspot equilibria (SSE) in the standard overlapping generations (OLG) model from a broader perspective than before. We say that local SSE exist around a steady state of a given OLG economy if, in any arbitrarily small neighborhood of the steady state, we can find a SSE of a "nearby" economy. We show that when the domain where "nearby" economies may lie is defined by agents' endowments and probabilities, the indeterminacy of the steady state remains both necessary and sufficient for the existence of local SSE. On the other hand, when the domain of economies is defined by agents' preferences and probabilities, local SSE may exist even around determinate steady states. We also show that if a slightly weaker notion of distance is used to identify "nearby" economies, SSE in the vicinity of a steady state equilibrium generically exist.

Davis, James F.

TI An Economic Assessment of Space Solar Power as a Source of Electricity for Space-Based Activities. **AU** Macauley, Molly K.; Davis, James F.

Davis, Steven J.

PD September 2000. **TI** Occupation-Level Income Shocks and Asset Returns: Their Covariance and Implications for Portfolio Choice. **AU** Davis, Steven J.; Willen, Paul. **AA** Davis: University of Chicago and NBER. Willen: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 7905; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** D52, D91, G11, J39. **KW** Portfolio Choice. Asset Returns. Income Shocks. Life-Cycle Portfolios.

AB This paper develops and applies a simple graphical approach to portfolio selection that accounts for covariance between asset returns and an investor's labor income. Our graphical approach easily handles income shocks that are partly hedgable, multiple risky assets, multiple periods, and life cycle considerations. We apply the approach to occupation-level components of individual income innovations, estimated from repeated cross sections of the Current Population Survey. We characterize several properties of these innovations, including their covariance with aggregate equity returns, long-term bond returns, and returns on several other assets. Aggregate equity returns are uncorrelated with the occupation-level income innovations, but a portfolio formed on firm size is significantly correlated with income innovations for several occupations, and so are selected industry-level equity portfolios. An application of the theory to the empirical results shows: (a) large predicted levels of risky asset holdings compared to observed levels, (b) considerable variation in optimal portfolio allocations over the life cycle, and (c) large departures from the two-fund separation principle.

de Abreu Pessoa, Samuel

PD May 2000. **TI** Welfare Characterization of Monetary-Applied Models and Three Implications.

AA Fundacao Getulio Vargas, Brazil. **SR** University of Pennsylvania, CARESS Working Paper: 01/14; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 39. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** E31, E41, O42. **KW** Money. Inflation. Welfare Cost. Financial Services. **AB** This paper demonstrates that the applied monetary models -- the Sidrauski-type models and the cash-in-advance models, augmented with a banking sector that supplies money substitutes services -- imply trajectories which are Pareto-Optimum restricted to a given path of the real quantity of money. As a consequence, three results follow: First, Bailey's formula to evaluate the welfare cost of inflation is indeed accurate, if the long-run capital stock does not depend on the inflation rate and if the compensated demand is considered. Second, the relevant money demand concept for this issue -- the impact of inflation on welfare -- is the monetary base. Third, if the long-run capital stock depends on the inflation rate, then this dependence has a second-order impact on welfare, and conceptually it is not a distortion from the social point of view. These three implications moderate some evaluations of the welfare cost of the perfect predicted inflation.

de Calan, Dominique

TI Labour Law and Social Insurance in the New Economy: A Debate on the Supiot Report. **AU** Auer, Peter; de Calan, Dominique; Coats, David; Deakin, Simon; Freeman, Richard B.; Hoffmann, Reiner; Hornung-Draus, Renate; Lewis, Jane; Marsden, David; Meadows, Pamela; Sarfati, Hedva; Supiot, Alain.

De Gregorio, Jose

PD April 2000. **TI** Controls on Capital Inflows: Do They Work? **AU** De Gregorio, Jose; Valdes, Rodrigo O.; Edwards, Sebastian. **AA** Gregorio: Universidad de Chile. Valdes: Banco Central de Chile. Edwards: UCLA and NBER. **SR** National Bureau of Economic Research Working Paper: 7645; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 18. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** F21, F31, F32, F41. **KW** Exchange Rates. Capital Controls. Interest Rates. Capital Inflows.

AB This paper analyzes the effectiveness of capital controls. In particular, we analyze the Chilean experience with the use of the unremunerated reserve requirement. We examine the effects on interest rates, the real exchange rate, and the volume and composition of capital inflows. The effects are elusive and it is difficult to pin down long-run effects. Although after the unremunerated reserve requirement was introduced there was an increase in the interest rate differential, the econometric evidence does not show that it has a significant long-run effect on interest rate differentials. There are also no effects on the real exchange rate. However, the more persistent and significant effect is on the composition of capital inflows, tilting composition toward longer maturity.

de Haan, Jakob

PD January 2000. **TI** Central Bank Independence: An Update of Theory and Evidence. **AU** de Haan, Jakob; Eijffinger, Sylvester; Berger, Helge. **AA** de Haan: University

of Groningen. Eijffinger: Tilburg University, College of Europe, Humboldt University of Berlin, and CEPR. Berger: CES, University of Munich; CESifo. **SR** CEPR Discussion Paper: 2353; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 64. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, E31, E58. **KW** Central Bank Independence. Optimal Inflation Contracts. Inflation Targeting. **AB** This paper reviews recent research on central bank independence (CBI). After we have distinguished between independence and conservativeness, the literature on optimal inflation contracts is discussed, followed by research in which the inflationary bias is endogenized. Finally, the various challenges that have been raised against previous empirical findings on CBI are reviewed. We conclude that the negative relationship between CBI and inflation is quite robust.

de Jong, Franck

PD November 1999. **TI** Price Discovery on Foreign Exchange Markets. **AU** de Jong, Franck; van Leeuwen, I.; Schotman, Peter C.; Mahieu, Ronald J. **AA** de Jong: University of Amsterdam. van Leeuwen: Limburg Institute of Financial Economics. Schotman: Maastricht University. Mahieu: Erasmus Universiteit Rotterdam. **SR** CEPR Discussion Paper: 2296; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** C32, F31, G14, G15, G21. **KW** Exchange Rates. Moment Estimators. High Frequency Data. Microstructure. Price Discovery.

AB This paper uses Reuters exchange rate data to investigate the contributions to the price discovery process by individual banks in the foreign exchange market. We propose multivariate time series models as well as models in tick time to study the dynamic relations between the quotes of individual banks. We investigate the hypothesis that German banks are price leaders in the deutschmark/dollar market. Our empirical results suggest an important but not exclusive role for German banks in the price discovery process. There is also a group of banks, German and non-German, which lags behind the market and does not contribute to the price discovery process. We do not find evidence for stronger price leadership of Deutsche Bank on days with suspected Bundesbank interventions in the foreign exchange market.

de Mello, Luiz

TI Financial Crises, Poverty, and Income Distribution. **AU** Baldacci, Emanuele; de Mello, Luiz; Inchauste, Gabriela.

de Melo, Jaime

TI The Protectionist Bias of Duty Drawbacks and the New Regionalism. **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo.

TI Asymmetric Regionalism in Sub-Saharan Africa: Where Do We Stand? **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo.

De Nicolo, Gianni

PD March 2002. **TI** Systemic Risk and Financial Consolidation: Are They Related? **AU** De Nicolo, Gianni; Kwast, Myron L. **AA** De Nicolo: IMF. Kwast: Federal Reserve System. **SR** International Monetary Fund Policy

Working Paper: WP/02/55; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 25. **PR** not available. **JE** G12, G21, G29. **KW** Systemic Risk. Bank Consolidation. Financial Sector. Stock Returns.

AB We argue that firm interdependencies, as measured by correlations of stock returns, provide an indicator of systemic risk potential. We find a positive trend in stock return correlations net of diversification effects for a sample of U.S. large and complex banking organizations over 1988-99. This finding suggests that the systemic risk potential in the financial sector may have increased. In addition, we find a positive consolidation elasticity of correlations. However, such elasticity exhibits substantial time variation and likely declined in the latter part of the decade. Thus, factors other than consolidation have also been responsible for the upward trend in return correlations.

Deakin, Simon

TI Labour Law and Social Insurance in the New Economy: A Debate on the Supiot Report. **AU** Auer, Peter; de Calan, Dominique; Coats, David; Deakin, Simon; Freeman, Richard B.; Hoffmann, Reiner; Hornung-Draus, Renate; Lewis, Jane; Marsden, David; Meadows, Pamela; Sarfati, Hedva; Supiot, Alain.

TI Labour Law and Social Insurance in the New Economy: A Debate on the Supiot Report. **AU** Auer, Peter; de Calan, Dominique; Coats, David; Deakin, Simon; Freeman, Richard B.; Hoffmann, Reiner; Hornung-Draus, Renate; Lewis, Jane; Marsden, David; Meadows, Pamela; Sarfati, Hedva; Supiot, Alain.

Debrun, Xavier

TI Is Fiscal Policy Coordination in EMU Desirable? **AU** Beetsma, Roel M.; Debrun, Xavier; Klaassen, Franc.

TI Central Bank Independence and the Design of Fiscal Institutions. **AU** Castellani, Francesca; Debrun, Xavier.

Degeorge, Francois

PD May 2000. **TI** Selling Company Shares to Reluctant Employees: France Telecom's Experience. **AU** Degeorge, Francois; Jenter, Dirk; Moel, Alberto; Tufano, Peter. **AA** Degeorge: HEC School of Management, France and CEPR. Jenter, Moel, and Tufano: Harvard Business School. **SR** National Bureau of Economic Research Working Paper: 7683; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 29. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D12, G11, G32. **KW** Portfolio Choice. Privatization. Behavioral Finance. Employee Shareholders.

AB In 1997, France Telecom, the state-owned French telephone company, went through a partial privatization. The government offered current and prior France Telecom employees the opportunity to buy portfolios of shares with various combinations of discounts, required holding periods, leverage, tax treatment, and levels of downside protection. We adapt a neoclassical model of investment decision-making that takes into account firm-specific human capital and holding period restrictions to predict how employees might respond to the share offers. Using a database that tracks over 200,000 eligible participants, we analyze the employees' characteristics

and their decisions whether to participate, how much to invest, and what form of stock alternatives they selected.

Dell'Ariccia, Giovanni

PD September 2000. **TI** Gross Credit Flows. **AU** Dell'Ariccia, Giovanni; Garibaldi, Pietro. **AA** Dell'Ariccia: International Monetary Fund. Garibaldi: Universita Commerciale Luigi Bocconi and CEPR. **SR** CEPR Discussion Paper: 2569; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** E44, E51, G21. **KW** Credit Flows. Matching Models. Banking.

AB This paper contributes to the empirical and theoretical knowledge of gross credit flows: the simultaneous process of credit expansion and contraction associated with a net change in the aggregate quantity of credit. Empirically, the paper summarizes heterogeneity in the banking industry by estimating gross credit flows for the entire U.S. banking system between 1979 and 1999. The empirical exercise shows that sizeable gross flows coexist at any phase of the cycle, even within narrowly defined regional units and bank size categories. Furthermore, the paper finds that aggregate credit contraction is a concentrated series, which implies that a burst in credit contraction is followed by prolonged periods of low contraction. Theoretically, the paper proposes a matching model in which financiers have to spend time and resources to expand credit to heterogeneous entrepreneurs. The outcome of the model resulting from the combination of idiosyncratic shocks and asymmetric adjustment to positive and negative aggregate shocks appears consistent with the empirical properties of aggregate credit flows.

Demirguc-Kunt, A.

TI Market Discipline and Financial Safety Net Design. **AU** Huizinga, H.; Demirguc-Kunt, A.

den Haan, Wouter J.

PD August 2001. **TI** Shocks and Institutions in a Job Matching Model. **AU** den Haan, Wouter J.; Haefke, Christian; Ramey, Garey. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/14; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 37. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** E24, J64. **KW** Job Matching Model. Unemployment. Unemployment Benefits. Turbulence. TFP Slowdown.

AB This paper explains the divergent behavior of European and US unemployment rates using a job market model of the labor market with an interaction between shocks and institutions. It shows that a reduction in total factor productivity growth rates, an increase in real interest rates, and an increase in tax rates leads to a permanent increase in unemployment rates when the replacement rates or initial tax rates are high, while no increase in unemployment occurs when institutions are "employment friendly." The paper also shows that an increase in turbulence, modeled as an increased probability of skill loss, is not a robust explanation for the European unemployment puzzle in the context of a matching model with

both endogenous job creation and job destruction.

Devereux, Michael B.

PD April 2000. **TI** Monetary Policy in the Open Economy Revisited: Price Setting and Exchange Rate Flexibility. **AU** Devereux, Michael B.; Engel, Charles. **AA** Devereux: University of British Columbia and CEPR. Engel: University of Washington and NBER. **SR** National Bureau of Economic Research Working Paper: 7665; 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** E52, F31, F41. **KW** Monetary Policy. Open Economies. Exchange Rates. Nominal Prices.

AB This paper develops a welfare-based model of monetary policy in an open economy. We focus on the extent to which monetary policy should be employed in maintaining the exchange rate. The traditional approach maintains that exchange rate flexibility is desirable in the presence of real country-specific shocks that require adjustment in relative prices. However, in the light of empirical evidence on nominal price response to exchange-rate changes -- specifically, that there appears to be a large degree of local-currency pricing in industrialized countries -- the expenditure-switching role played by nominal exchange rates may be exaggerated in the traditional literature. In the presence of local-currency pricing, we find that optimal monetary policy in response to real shocks pricing is fully consistent with fixed exchange rates. On the other hand, when real country-specific shocks are not important, and when a country's monetary sector is stable, the case for freely floating rates (a monetary policy in which exchange rates are not a consideration) is strengthened in the presence of local-currency pricing.

Devroye, Luc

PD August 2000. **TI** A Note on Robust Detection. **AU** Devroye, Luc; Györfi, Laszlo; Lugosi, Gabor. **AA** Devroye: McGill University. Györfi: Technical University of Budapest. Lugosi: Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 505; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 9. **PR** Papers available for free on the web; no hardcopies. **JE** C13, C14. **KW** Robust Detection. Hypotheses Testing. **AB** We introduce a simple new hypothesis testing procedure, which, based on an independent sample drawn from a certain density, detects which of k nominal densities the true density is closest to, under the total variation (L_1) distance. We obtain a density-free uniform exponential bound for the probability of false detection.

Dharmapala, Dhammika

PD July 2001. **TI** A Neglected Interdependency in Liability Theory: Bilateral Accidents Where One Party's Precaution Shifts the Other's Cost of Care. **AU** Dharmapala, Dhammika; Hoffmann, Sandra A.; Schwartz, Warren F. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/13; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 29. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** K13, K32, K41. **KW** Law. Tort Law. Liability. Negligence.

Precaution.

AB The standard economic model of bilateral precaution concludes that, in the absence of uncertainty, misperception, or error, all negligence-based liability rules induce socially optimal behavior by both injurers and victims. This paper generalizes the standard model to consider situations in which one party's precaution affects not only expected accident loss, but also directly affects the other party's effort -- or cost -- of taking precaution. If the injurer's care affects the victim's precaution costs (but not vice versa), most of the standard results continue to hold (except for strict liability with a defense of contributory negligence). If the victim's precaution affects the injurer's costs of care (but not vice versa), only strict liability with a defense of contributory negligence leads to the social optimum, while the other negligence-based rules lead to suboptimal outcomes. In the general case (where each party's costs depend on both parties' levels of precaution), none of the standard liability rules induce socially optimal behavior in both parties. The paper's other main result concerns the possibility of self-interested, negligent behavior in equilibrium. The paper concludes by considering the implications of these results for the design of liability rules.

Di Giorgio, Giorgio

PD November 2000. **TI** Designing Institutions for Financial Stability: Regulation and Supervision by Objective for the Euro Area. **AU** Di Giorgio, Giorgio; Di Noia, Carmine. **AA** Di Giorgio: Universitat Pompeu Fabra and Universita LUISS, Roma. Di Noia: Universita LUISS, Roma. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 517; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 27. **PR** Papers available for free on the web; no hardcopies. **JE** G21, G28. **KW** Financial Regulation. Supervisory Authorities. European Financial Integration.

AB In this paper, we discuss pros and cons of different models for financial market regulation and we present a proposal for the re-organization of regulatory and supervisory agencies in the Euro Area, which is based on the assignment of different objectives or "finalities" to different authorities, both at the domestic and the European level. The three objectives of supervision -- microeconomic stability, investor protection and proper behavior, efficiency and competition -- should be assigned to three distinct European authorities, each one at the center of a European system of financial regulators and supervisors, specialized in overseeing the entire financial market with respect to a single regulatory objective and regardless of the subjective nature of the intermediaries. Each system should be structured and organized similarly to the European System of Central Banks and work in connection with the central bank which would remain the institution responsible for price and macroeconomic stability.

Di Liberto, Adriana

PD June 2001. **TI** Education and Italian Regional Development. **AU** Di Liberto, Adriana; Symons, James. **AA** Di Liberto: University College London and Universita di Sassari and Crenos. Symons: University College London. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 496; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE,

England. Website: cep.lse.ac.uk. **PG** 22. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I21, O11, O15, O18, O41. **KW** Education Returns. Regional Development. Growth. Italy.

AB Given recent emphasis on externalities to education, macroeconomic studies have a role to play in the analysis of returns to schooling. In this paper we study the connection between growth and human capital in a convergence regression for the panel of Italian regions. We include measures of average, primary, secondary, and tertiary education. We find that increased education seems to contribute to growth only in the South. Decomposing total schooling into its three constituent parts, we find that only primary education in the South seems to be important. The results thus suggest that Italian growth benefited from the elimination of illiteracy in the South, mainly in the 1960s, but not from the substantial increases in education at the other levels.

Di Noia, Carmine

TI Designing Institutions for Financial Stability: Regulation and Supervision by Objective for the Euro Area. **AU** Di Giorgio, Giorgio; Di Noia, Carmine.

Diamond, Jack

PD February 2002. **TI** The New Russian Budget System: A Critical Assessment and Future Reform Agenda. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/21; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 29. **PR** not available. **JE** D78, E62, H61, P29, P35. **KW** Budget System. Budget Reform. Russia.

AB This paper documents the main elements of the new budget system established in the Russian Federation through its revised budget system law, or the Budget Code, of 2000. It critically examines the budget preparation, budget approval, and budget execution processes, as well as the financial management and planning procedures that underlie the Budget Code. Based on this analysis, recent developments are discussed and a future reform agenda is indicated.

PD February 2002. **TI** Budget System Reform in Transitional Economies: The Experience of Russia. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/22; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 25. **PR** not available. **JE** D78, E62, H61, P29, P35. **KW** Budget System. Budget Reform. Russia. Transition Economies.

AB This paper stresses the role of budget system reform in economies in transition as an essential basis for the implementation of effective fiscal policies. However, introducing such structural reforms in often unstable economic environments has not proved easy. Using Russia as a case study, the magnitude of the problems faced is documented, and the strategy of reform eventually adopted is critically reviewed. In conclusion, some lessons are drawn for other transitional countries undertaking similar reforms, and the future agenda for completing these reforms in Russia is indicated.

Diaz-Moreno, Carlos

PD July 2000. **TI** Collective Bargaining under Complete Information. **AU** Diaz-Moreno, Carlos; Galdon-Sanchez, Jose E. **AA** Diaz-Moreno: University of Minnesota. Galdon-Sanchez: London School of Economics and Political Science.

SR London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/00/401; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 36. **PR** no charge. **JE** C73, C78, J52, J53, J59. **KW** Delays. Sequential Bargaining. Structural Estimation. Bargaining. Collective Bargaining.

AB In this paper, we build and structurally estimate a complete information bargaining model of collective negotiation for Spain. For large firms, the assumption of complete information seems a sensible one, and it matches the collective bargaining environment better than private information models. The specification of the model with players having different discount factors allows us to measure their relative bargaining power, a recurrent question in the theory of bargaining. We find that both entrepreneurs and workers have high discount factors, and no evidence that entrepreneurs have more bargaining power, as is usually assumed.

Dickson, Joel M.

PD April 2000. **TI** Tax Externalities of Equity Mutual Funds. **AU** Dickson, Joel M.; Shoven, John B.; Sialm, Clemens. **AA** Dickson: The Vanguard Group. Shoven: NBER. Sialm: Stanford University. **SR** National Bureau of Economic Research Working Paper: 7669; 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** G23, H23. **KW** Mutual Funds. Tax Externalities. Capital Gains.

AB Investors holding mutual funds in taxable accounts face a classic externality: the after-tax return of their investment depends on the behavior of others. In particular, redemptions may force the mutual fund to sell more of its equity positions in order to pay off the liquidating investors. As a result, it may be forced to distribute taxable capital gains to its shareholders. On the other hand, new investors convey a positive externality upon existing investors by diluting the unrealized capital gain position of the fund. This paper's simulations show that these externalities are important determinants of the after-tax performance of equity mutual funds.

Diebold, Francis X.

TI The Distribution of Stock Return Volatility. **AU** Andersen, Torben G.; Bollerslev, Tim; Diebold, Francis X.; Ebens, Heiko.

Djankov, Simeon

PD September 2000. **TI** The Regulation of Entry. **AU** Djankov, Simeon; La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei. **AA** Djankov: World Bank. La Porta, Lopez-de-Silanes, and Shleifer: Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7892; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** D73, K23, L51. **KW** Entry Regulation. Regulation. Corruption.

AB We present new data on the regulation of entry of start-up firms in 75 countries. The data set contains information on the number of procedures, official time, and official cost that a start-up must bear before it can operate legally. The official

costs of entry are extremely high in most countries. Countries with heavier regulation of entry have higher corruption and large unofficial economies, but not better quality of public or private goods. Countries with more democratic and limited governments have fewer entry regulations. The evidence is inconsistent with Pigouvian (helping hand) theories of benevolent regulation, but support the (grabbing hand) view that entry regulation benefits politicians and bureaucrats.

Dranove, D.

TI Network Effects, Standardization, and the Internet: What Have We Learned From The DVD vs. DIVX Battle? **AU** Gandal, Neil; Dranove, D.

Dreze, Jean

PD January 2000. **TI** Fertility, Education and Development: Further Evidence from India. **AU** Dreze, Jean; Murthi, Mamta. **AA** Dreze: Delhi School of Economics. Murthi: King's College. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/20; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 35. **PR** no charge. **JE** I12, J13, J16, O15. **KW** Fertility. Demographic Transition. Female Literacy. India.

AB There has been a significant decline in fertility in many parts of India since the early 1980s. This paper reexamines the determinants of fertility levels and fertility decline, using panel data on Indian districts for 1981 and 1991. We find that women's education is the most important factor explaining fertility differences across the country and over time. Low levels of child mortality and son preferences also contribute to lower fertility. By contrast, general indicators of modernization and development such as urbanization, poverty reduction, and male literacy bear no significant association with fertility. In passing, we probe a subject of much confusion -- the relation between fertility decline and gender bias.

TI Commodity Taxation and Social Welfare: The Generalised Ramsey Rule. **AU** Coady, David; Dreze, Jean.

PD August 1999. **TI** School Participation in Rural India. **AU** Dreze, Jean; Kingdon, Geeta Gandhi. **AA** Dreze: Delhi School of Economics. Kingdon: University of Oxford. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/18; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 39. **PR** no charge. **JE** H52, I20, J13, O15. **KW** Education. India. Child Labor. School Quality. School Participation.

AB This paper presents an analysis of the determinants of school participation in rural north India, based on a recent household survey that includes detailed information on school characteristics. School participation, especially among girls, responds to a wide range of variables, including parental education and motivation, social background, dependency ratios, work opportunities, village development, teacher posting, teacher regularity, and mid-day meals. The remarkable lead achieved by the state of Himachal Pradesh is fully accounted for by these variables. School quality matters, but it is not related in a simple way to specific inputs.

Dueker, Michael J.

TI Aggregate Price Shocks and Financial Instability: An Historical Analysis. **AU** Bordo, Michael D.; Wheelock, David C.; Dueker, Michael J.

Duflo, Esther

PD November 2001. **TI** The Medium Run Effects of Educational Expansion: Evidence from a Large School Construction Program in Indonesia. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 01/46; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 38. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** I21, J24, J31, O15. **KW** Indonesia. Human Capital. Education. School Construction. Developing Countries.

AB This paper studies the medium-run consequences of an increase in the rate of accumulation of human capital in a developing country. From 1974 to 1978, the Indonesian government built over 61,000 primary schools. The school construction program led to an increase in education among individuals who were young enough to attend primary school after 1974, but not among the older cohorts. Two-stage least squares estimates suggest that an increase of 10 percentage points in the proportion of primary school graduates in the labor force reduced the wages of the older cohorts by 3.8% to 10% and increased their formal labor force participation by 4% to 7%. I propose a two-sector model as a framework to interpret these findings. The results suggest that physical capital did not adjust to the faster increase in human capital.

PD March 2002. **TI** The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment. **AU** Duflo, Esther; Saez, Emmanuel. **AA** Duflo: MIT and NBER. Saez: Harvard University and NBER. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/23; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 31. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** C93, D83, I22, J32. **KW** Tax Deferred Account. Social Network Effects. Retirement Plan. Information.

AB This paper analyzes a randomized experiment to shed light on the role of information and social interactions in employees' decisions to enroll in a Tax Deferred Account (TDA) retirement plan within a large university. The experiment encouraged a random sample of employees in a subset of departments to attend a benefits information fair organized by the university, by promising a monetary reward for attendance. The experiment more than tripled the attendance rate of these treated individuals (relative to controls), and doubled that of untreated individuals within departments where some individuals were treated. TDA enrollment 5 and 11 months after the fair was significantly higher in departments where some individuals were treated than in departments where nobody was treated. However, the effect on TDA enrollment is almost as large for individuals in treated departments who did not receive the encouragement as for those who did. We provide three interpretations, differential treatment effects, social network effects, and motivational reward effects, to account for these results.

Duranton, Gilles

PD December 2000. **TI** Mind the Gaps: The Evolution of Regional Inequalities in the UK 1982-1997. **AU** Duranton, Gilles; Monastiriotis, Vassilis. **AA** Duranton: LSE, CEP and CEPR. Monastiriotis: London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 485; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 33. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J31, R23. **KW** Wage Determinants. Regional Inequalities. Education Returns. Earnings Inequality.

AB In this paper we apply earnings equations for UK regions over 1982-1997. We find strong evidence of rapid convergence across regions regarding the determinants of individual wages (i.e., regional fixed-effects, gender gaps, and returns to education and experience). Data on average regional earnings, by contrast, point at a worsening of UK regional inequalities and a rise in the North-South gap. Education accounts for most of the discrepancy between aggregate divergence and disaggregated convergence: first, London gained because its workforce became relatively more educated over the period; second, returns to education increased nation-wide, which favored the most educated regions, such as London; third, returns to education were initially lower in London but then (partially) caught up with the rest of the country. Had returns to education and their distribution across UK regions remained stable over the period, the UK North-South divide would have decreased.

Eaton, Jonathan

TI Plants and Productivity in International Trade. **AU** Bernard, Andrew B.; Eaton, Jonathan; Jensen, J. Bradford; Kortum, Samuel.

Ebens, Heiko

TI The Distribution of Stock Return Volatility. **AU** Andersen, Torben G.; Bollerslev, Tim; Diebold, Francis X.; Ebens, Heiko.

Edison, Hali J.

PD November 2001. **TI** A Simple Measure of the Intensity of Capital Controls. **AU** Edison, Hali J.; Warnock, Francis E. **AA** Edison: Federal Reserve Board and IMF. Warnock: Federal Reserve Board. **SR** International Monetary Fund Working Paper: WP/01/180; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** not available. **JE** F32, F36, G15. **KW** Emerging Markets. International Finance. Financial Liberalization. Openness. Capital Controls.

AB We present a readily available monthly measure of the intensity of capital controls across 29 emerging market countries that is based on the degree of restrictions on foreign ownership of equities. The initial opening of a market as given by our measure corresponds well with the liberalization dates of Bekaert and Harvey (2000). In addition, our measure provides information on the extent of the initial opening as well as the evolution of the liberalization over time. After presenting the measure, we compare it to other existing measures of capital controls and briefly describe empirical applications concerning home bias, capital flows to emerging markets, and the effects of financial liberalization on the cost of capital.

TI Exchange Rates and Capital Flows. AU Brooks, Robin; Edison, Hali J.; Kumar, Manmohan S.; Slok, Torsten.

Edwards, Alejandra Cox

TI Economic Reforms and Labor Markets: Policy Issues and Lessons from Chile. AU Edwards, Sebastian; Edwards, Alejandra Cox.

Edwards, Sebastian

TI Controls on Capital Inflows: Do They Work? AU De Gregorio, Jose; Valdes, Rodrigo O.; Edwards, Sebastian.

PD April 2000. **TI** Economic Reforms and Labor Markets: Policy Issues and Lessons from Chile. AU Edwards, Sebastian; Edwards, Alejandra Cox. AA Edwards, S: UCLA and NBER. Edwards, A: California State University. **SR** National Bureau of Economic Research Working Paper: 7646; 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** H24, H25, J51, J53, J64. **KW** Chile. Labor Market Reform. Unemployment.

AB This paper deals with the reforms to labor market regulation implemented by Chile during the last twenty years. We concentrate on the reform to job security, on the decentralization of the wage bargaining process, and on the reduction in payroll taxes. Our interest is to understand to what extent these reforms helped reduce Chile's rate of unemployment from "European" to "U.S." levels. We argue that the reduction of payroll taxes (within the context of the social security reform), and the decentralization of bargaining increased labor market flexibility and contributed to the reduction of unemployment. Our analysis suggests that the reform on job security had no significant effect on the aggregate rate of unemployment.

Eeckhout, Jan

TI Heterogeneity as a Coordination Device. AU Coles, Melvyn G.; Eeckhout, Jan.

Ehrenberg, Ronald G.

PD September 2000. **TI** Paying our Presidents: What do Trustees Value? AU Ehrenberg, Ronald G.; Cheslock, John J.; Epifantseva, Julia. AA Ehrenberg: Cornell University and NBER. Cheslock and Epifantseva: Cornell University. **SR** National Bureau of Economic Research Working Paper: 7886; 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** I22, J44, L31. **KW** University Priorities. Trustee Priorities.

AB We use panel data on the salaries and benefits of private university and college presidents for the 1992-93 to 1996-97 period to try to infer the factors that the trustees of these institutions value. Salary level equations suggest that the salary and compensation of the presidents are positively associated with the enrollment and endowment levels of their institutions and the test scores of their entering students. Salary and compensation change equations estimated for the presidents who remained in their positions for four years provide only weak evidence that presidents' pay increases are related to their fund raising success, and no evidence that they get rewarded for their institutions' freshmen test scores increasing.

Ehrmann, Michael

TI The Exchange Rate -- A Shock-Absorber or Source of Shocks? A Study of Four Open Economies. AU Artis, Michael J.; Ehrmann, Michael.

Eichenbaum, Martin

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

Eichengreen, Barry

PD April 2000. **TI** The Bail-In Problem: Systematic Goals, Ad Hoc Means. AU Eichengreen, Barry; Ruehl, Christof. AA Eichengreen: UC Berkeley and NBER. Ruehl: World Bank. **SR** National Bureau of Economic Research Working Paper: 7653; 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** F34, F35, O19. **KW** Moral Hazard. Crisis Countries. International Monetary Fund. Debt Bailout. Default.

AB In this paper we analyze the recent efforts of the international financial institutions (IFIs) to limit the moral hazard created by their assistance to crisis countries. We question the case-by-case approach taken in Pakistan, Ecuador, Romania, and Ukraine. We show that because default and restructuring are so painful and costly, it is simply not time consistent for the IFIs to plan to stand aside if the markets refuse to roll over maturing claims, restructure problem debts, or provide new money. Because these realities create an incentive to disburse even if investors fail to comply, the IFIs are then placed in the position of having to back down on their previous conditionality, which undermines their credibility. And since investors are aware of these facts, their behavior is unlikely to be modified by the IFIs' less-than-credible statements of intent. Hence, this approach to "bailing in the private sector" will not work. Fortunately, there is an alternative: introducing collective-action clauses into loan agreements. This, and not ad hoc efforts to bail in the private sector, is a forward-looking solution to the moral hazard problem.

PD December 1999. **TI** Would Collective Action Clauses Raise Borrowing Costs? AU Eichengreen, Barry; Mody, Ashoka. AA Eichengreen: University of California, Berkeley. Mody: World Bank. **SR** CEPR Discussion Paper: 2343; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** F33, F34, F36, G15. **KW** Debt. Restructuring. International Monetary Fund. Collective Action. Borrowing Costs.

AB We examine the implications for borrowing costs of including collective-action clauses in loan contracts. For a sample of some 2,000 international bonds, we compare the spreads on bonds subject to UK governing law, which typically include collective-action clauses, with spreads on bonds subject to US law, which do not. Contrary to the assertions of some market participants, we find that collective-action clauses in fact reduce the cost of borrowing for more credit-worthy issuers, who appear to benefit from the ability to avail themselves of an orderly restructuring process. In contrast, less credit-worthy issuers pay, if anything, higher spreads. We conjecture that for less credit-worthy borrowers the advantages

of orderly restructuring are offset by the moral hazard and default risk associated with the presence of renegotiation-friendly loan provisions.

Eijffinger, Sylvester

TI Central Bank Independence: An Update of Theory and Evidence. **AU** de Haan, Jakob; Eijffinger, Sylvester; Berger, Helge.

PD January 2000. **TI** A Theory of Central Bank Accountability. **AU** Eijffinger, Sylvester; Schaling, Eric; Hoeberichts, Marco. **AA** Eijffinger: Tilburg University, College of Europe, Humboldt University of Berlin, and CEPR. Schaling: RAU. Hoeberichts: Tilburg University. **SR** CEPR Discussion Paper: 2354; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 24. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E52, E58. **KW** Monetary Policy. Central Banks. Transparency. Accountability. Inflation.

AB In this paper we investigate central bank accountability by looking at the effect of transparency in a simple monetary policy game with an overriding mechanism. Monetary policy is transparent if there is little uncertainty about the central banker's preferences for inflation stabilization relative to output stabilization. Transparency enhances the central bank's accountability. The paper shows that transparency leads to a lower expected rate of inflation and less stabilization of supply shocks.

Ekholm, Karolina

PD December 1999. **TI** Swedish Multinationals and Competition from High- and Low-Wage Locations. **AU** Ekholm, Karolina; Braconnier, Henrik. **AA** Ekholm: Lund University. Braconnier: Research Institute of Industrial Economics. **SR** CEPR Discussion Paper: 2323; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** F23, J23, L22. **KW** Labor Demand. Multinational Firms. Vertical Integration.

AB This study uses data on Swedish multinationals to estimate cross elasticities of labor demand in different locations. With a vertical decomposition of the firm's activities, whether there is substitution or complementarity between employment in different parts of the firm will depend on whether wage changes lead to a relocation of activities, or simply to changes in marginal costs and/or demand for inputs in other parts of the firms. We find that there is some evidence of a substitutionary relationship between employment in the Swedish parts of the firms and employment in other high-income locations, but we do not find any evidence of substitution stemming from employment in low-income locations. We find mainly a relationship of complementarity between employment in different affiliates.

Elliott, Graham

TI Tests for Unit Roots and the Initial Observation. **AU** Muller, Ulrich K.; Elliott, Graham.

PD April 2002. **TI** Optimal Forecast Combinations Under General Loss Functions and Forecast Error Distributions. **AU** Elliott, Graham; Timmermann, Allan. **AA** University of California, San Diego. **SR** University of California, San

Diego, Department of Economics Working Paper: 2002/08; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 34. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C13, C51, C53. **KW** Forecast Combination. Asymmetric Loss. Inflation Forecasting. Loss Function.

AB Existing results on the properties and performance of forecast combinations have been derived in the context of mean squared error loss. Under this loss function empirical studies have generally found that estimates of optimal forecast combination weights lead to higher losses than equally-weighted combined forecasts which in turn outperform the best individual predictions. We show that this and other results can be overturned when asymmetries are introduced in the loss function and the forecast error distribution is skewed. We characterize the optimal combination weights for the most commonly used alternatives to mean squared error loss and demonstrate how the degree of asymmetry in the loss function and skews in the underlying forecast error distribution can significantly change the optimal combination weights. We also propose estimation methods and investigate their small sample properties in simulations and in an inflation forecasting exercise.

Engel, Charles

TI Monetary Policy in the Open Economy Revisited: Price Setting and Exchange Rate Flexibility. **AU** Devereux, Michael B.; Engel, Charles.

Engle, Robert F.

PD September 2001. **TI** Theoretical and Empirical Properties of Dynamic Conditional Correlation Multivariate GARCH. **AU** Engle, Robert F.; Sheppard, Kevin. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/15; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 22. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C32, G12, G15. **KW** Dynamic Correlation. Multivariate GARCH. Volatility.

AB In this paper, we develop the theoretical and empirical properties of a new class of multivariate GARCH models capable of estimating large time-varying covariance matrices, Dynamic Conditional Correlation Multivariate GARCH. We show that the problem of multivariate conditional variance estimation can be simplified by estimating univariate GARCH models for each asset, and then, using transformed residuals resulting from the first stage, estimating a conditional correlation estimator. The standard errors for the first stage parameters remain consistent, and only the standard errors for the correlation parameters need be modified. We use the model to estimate the conditional covariance of up to 100 assets using S&P 500 Sector Indices and Dow Jones Industrial Average stocks, and conduct specification tests of the estimator using an industry standard benchmark for volatility models. This new estimator demonstrates very strong performance, especially considering ease of implementation of the estimator.

Enoch, Charles

PD March 2002. **TI** Banking Crises and Bank Resolution: Experiences in Some Transition Economies. **AU** Enoch, Charles; Gulde, Anne-Marie; Hardy, Daniel. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/56; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 69. **PR** not available. **JE** G21, G28, P26, P34. **KW** Bulgaria. Lithuania. Mongolia. Transition Economies. Banking Crises.

AB Like most transition economies, Bulgaria, Lithuania, and Mongolia suffered severe banking crises, which had to be resolved before growth could resume. The macroeconomic and institutional failings that led to these crises are described, and parallels are drawn with the causes of banking crises in industrial and developing countries. Resolving the crises proved technically and politically difficult, and setbacks occurred. Successful resolution required the implementation of a comprehensive and decisive strategy, involving thoroughgoing bank restructuring, heavy fiscal costs, and institutional and legal reforms.

Epifantseva, Julia

TI Paying our Presidents: What do Trustees Value? **AU** Ehrenberg, Ronald G.; Cheslock, John J.; Epifantseva, Julia.

Epple, Dennis

PD October 2000. **TI** Competition Between Private and Public Schools: Testing Stratification and Pricing Predictions. **AU** Epple, Dennis; Figlio, David; Romano, Richard. **AA** Epple: Carnegie Mellon University and NBER. Figlio: University of Florida and NBER. Romano: University of Florida. **SR** National Bureau of Economic Research Working Paper: 7956; 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** H72, I21, I22. **KW** Stratification. Tuition. Student Ability.

AB The predictions of the Epple and Romano (1998) model are tested in this paper using a unique data set assembled by Figlio and Stone (1999). Tests of equilibrium predictions of the model reveal that: The propensity to attend private school increases with both income and ability, and, among private schools, the propensity to attend the highest-tuition school rises with both income and ability. Within private schools, tuition declines with student ability, with a substantial of even high-income households paying little or no tuition. The correlation between income and ability is greater in public than private schools. Tests of comparative static predictions of the model reveal that: Both income and ability become stronger predictors of private school attendance as public school expenditure falls. Income becomes increasingly important in determining placement in the private school hierarchy as public school expenditure falls. Discounts to ability in the lowest-quality private school decline as public school expenditure rises while discounts to ability in the highest-quality private school are little affected by changes in public school expenditure. Expenditure in private schools rises as expenditure in public school increases. These empirical results are consistent with the predictions of the theoretical model.

Epstein, Gil S.

PD November 2000. **TI** Labor Market Interactions Between Legal and Illegal Immigrants. **AA** Bar-Ilan University, Ramat-Gan, and CEPR. **SR** CEPR Discussion Paper: 2602; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F22, K42, P16. **KW** Guest Workers. Illegal Migration. Legal Migration.

AB This paper looks at the situation of legal immigrants who employ illegal immigrants to provide them with various services. This enables the legal immigrants to allocate more time to other work, thereby increasing their earnings. Illegal immigrants employed by legal immigrants may specialize in certain professions and may themselves employ other illegal immigrants. An economy is evolving whose sole purpose is the provision of services by illegal immigrants for legal immigrants.

PD December 1999. **TI** The Endogenous Determination of Minimum Wage. **AU** Epstein, Gil S.; Nitzan, S. **AA** Bar-Ilan University. **SR** CEPR Discussion Paper: 2319; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 28. **PR** 5 pounds, \$8 or 8 euros. **JE** J31, J38, J51. **KW** Minimum Wage. Political Culture. Public Welfare. Unions.

AB In this paper we study the endogenous determination of minimum wage employing a political-economic game-theoretic approach. A major objective of the paper is to clarify the crucial role of the strength of the workers' union and of political culture on the determination of the minimum wage. In general, the equilibrium minimum wage differs from that postulated in the literature. In our uncertain environment, the optimal minimum wage from the workers' union point of view is lower than the level that maximizes its objective function in a certain environment where there is no opposition to the proposed minimum wage. We establish that a political culture that assigns a positive weight to the public well-being can give rise to a wage that equals or exceeds these levels.

Erbas, S. Nuri

PD January 2002. **TI** The Role of Affordable Mortgages in Improving Living Standards and Stimulating Growth: A Survey of Selected MENA Countries. **AU** Erbas, S. Nuri; Nothaft, Frank E. **AA** Erbas: IMF. Nothaft: Freddie Mac. **SR** International Monetary Fund Policy Working Paper: WP/02/17; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 40. **PR** not available. **JE** G21, O16, R31, R51, R52. **KW** Housing Supply. Mortgage Financing. Growth. Poverty.

AB This paper argues that making affordable home mortgage loans available to a large cross section of the population will serve both the redistributive and growth-enhancing objectives of poverty reduction policies. The current state of housing and mortgage markets in selected Middle East and North Africa (MENA) countries (Algeria, Egypt, Jordan, Morocco, and Tunisia) is examined. The study evaluates Turkey and Mexico as middle-income comparator countries. Historical experience of the United States is also described. Simulations based on U.S. parameters provide some guide to the effects on economic growth of alleviating housing shortages by improving access to mortgage financing.

PD March 2002. **TI** Primer on Reforms in a Second-Best Ambiguous Environment: A Case for Gradualism. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/50; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 55. **PR** not available. **JE** D71, D78, D81, D83. **KW** Reforms. Sequencing. Gradualism. Uncertainty. Ambiguity.

AB Ambiguity, as opposed to uncertainty, reflects lack of sufficient information about distribution and payoffs of infrequent events. Reforms are infrequent events, undertaken in ambiguous second-best environments, where bad reform outcomes are feasible. A general case for the gradualist reform strategy is that it may pay to defer some reforms until relevant information about possible reform outcomes and associated probabilities is revealed, and ambiguity is reduced over time. Gradualism may dominate the big bang strategy if some of the reforms in a reform sequence are not sure bets and waiting costs do not dominate reversal costs under some information sets forthcoming over time. The relation to Ellsberg's Paradox is discussed. Some cases for and against gradualism are reviewed.

Evans, George W.

PD May 2001. **TI** Adaptive Expectations, Underparameterization and the Lucas Critique. **AU** Evans, George W.; Ramey, Garey. **AA** Evans: University of Oregon. Ramey: University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/11; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 13. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D83, D84, E52. **KW** Bounded Rationality. Adaptive Expectations. Lucas Critique.

AB A striking implication of the replacement of adaptive expectations by Rational Expectations was the "Lucas Critique," which showed that expectation parameters, and endogenous variable dynamics, depend on policy parameters. We reconsider this issue from the vantage point of bounded rationality. Adaptive expectations, with an optimally tuned parameter, can provide a reasonable, if not fully rational, forecast method when the true process is unknown. We show that for a range of processes, monetary policy remains subject to the Lucas critique. However, there are also regimes in which the expectation parameter is locally invariant and the Lucas critique does not apply.

Faruqee, Hamid

PD January 2002. **TI** Population Aging and Its Macroeconomic Implications: A Framework for Analysis. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/16; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 31. **PR** not available. **JE** E21, E27, E62, J11, J14. **KW** Aging. Saving. Current Account.

AB This paper develops a model to examine the macroeconomic implications of population aging. Using a general equilibrium framework, the analysis examines the various channels through which changes in demographics affect the economy. Age-earnings profiles are taken to summarize differences in effective labor supply across age groups and to

help determine changes in consumption and saving behavior that occur over an agent's lifetime. Aggregating these supply- and demand-side effects, the implications of aging on economic activity and fiscal policy are then examined.

PD January 2002. **TI** Debt, Deficits, and Age-Specific Mortality. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/19; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** not available. **JE** D91, E21, E27, E62, H31. **KW** Ricardian Equivalence. Government Debt. Saving. Overlapping Generations.

AB This paper develops an overlapping agents model with age-specific mortality rates. The analytical framework also nests Blanchard's (1985) "perpetual youth" model as a special, though perhaps not realistic, case. With age specific mortality rates, youth is "fleeting." Using standard hyperbolic functions, the model with fleeting youth is able to closely replicate the empirical relation between age and mortality. The comparative implications for deficit finance are also examined and age-specific mortality is shown to alter the non-Ricardian properties of the model.

Fasano, Ugo

PD December 2001. **TI** Fiscal Expenditure Policy and Non-Oil Economic Growth: Evidence from GCC Countries. **AU** Fasano, Ugo; Wang, Qing. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/195; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 14. **PR** not available. **JE** E62, H54, N15, O53. **KW** Fiscal Policy. Non-Oil Growth. GCC Countries. Growth.

AB Through the use of a multivariate cointegration and error-correction model, this study investigates the short- and long-run relationship over the past two decades between fiscal expenditure policy and non-oil real gross domestic product (GDP) growth in member countries of the Gulf Cooperation Council (GCC). Despite the important role of the government, the empirical results do not strongly support that increases in fiscal expenditures tend to slow or accelerate non-oil real growth in these countries. However, the breakdown into current and capital expenditures is useful for assessing the effects of each spending category on short- and long-run non-oil real GDP growth.

Favero, Carlo A.

PD November 1999. **TI** The Transmission Mechanism of Monetary Policy in Europe: Evidence from Banks' Balance Sheets. **AU** Favero, Carlo A.; Giavazzi, Francesco; Flabbi, Luca. **AA** Universita Bocconi. **SR** CEPR Discussion Paper: 2303; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 28. **PR** 5 pounds, \$8 or 8 euros. **JE** E51, E52, G21. **KW** Monetary Policy. EMU. Banking. Transmission Mechanism.

AB Available studies on asymmetries in the monetary transmission mechanism within Europe are invariably based on macro-economic evidence, but while such evidence is abundant, it is often contradictory. This paper takes a different route by using micro-economic data. We use information contained in the balance sheets of individual banks from France, Germany, Italy, and Spain to study their response to a monetary tightening during 1992. Evidence on such tightening is provided by the uniform squeeze in liquidity, which affected

all banks in our sample. We study the first link in the transmission chain by analyzing the response of bank loans to the monetary tightening. Our experiment provides evidence on the importance of the "credit" channel in Europe, and thus on one possibly important source of asymmetries in the monetary transmission mechanism. We do not find evidence of a significant response of bank loans to the monetary tightening in any of the four European countries. However, we find significant differences both across countries and across banks in the factors that allow them to shield the supply of loans from the squeeze in liquidity.

Feenberg, Daniel

TI The Significance of Federal Taxes as Automatic Stabilizers. **AU** Auerbach, Alan J.; Feenberg, Daniel.

Fehr, Ernst

PD September 2000. **TI** Does Money Illusion Matter? An Experimental Approach. **AU** Fehr, Ernst; Tyran, Jean-Robert. **AA** Fehr: Universitat Zurich and CEPR. **SR** CEPR Discussion Paper: 2561; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C92, E31, E32, E52. **KW** Money Illusion. Nominal Inertia. Sticky Prices.

AB Money illusion means that people behave differently when the same objective situation is represented in nominal terms rather than in real terms. This paper shows that seemingly innocuous differences in payoff representation cause pronounced differences in nominal price inertia, indicating the behavioral importance of money illusion. In particular, if the payoff information is presented to subjects in nominal terms, price expectations and actual price choices after a fully anticipated negative nominal shock are much stickier than when payoff information is presented in real terms. In addition we show that money illusion causes asymmetric effects of negative and positive nominal shocks. While nominal inertia is quite substantial and long-lasting after a negative shock, it is rather small after a positive shock.

Feldstein, Martin

PD September 2000. **TI** Aspects of Global Economic Integration: Outlook for the Future. **AA** NBER and Harvard University. **SR** National Bureau of Economic Research Working Paper: 7899; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 12. **PR** \$5.00. **JE** F02, F15, F20, F30. **KW** Globalization. Foreign Direct Investment. Currency Crises. Integration. International Monetary Fund.

AB This paper comments on five aspects of globalization: (1) the gains from international flows of goods and capital; (2) the role of foreign direct investment and reasons for its increase; (3) the preventions and management of currency crises; (4) the fluctuation of relative currency values; and (5) the segmentation of global capital markets.

Felli, Leonardo

TI Bounded Rationality and Incomplete Contracts. **AU** Anderlini, Luca; Felli, Leonardo.

TI Transaction Costs and the Robustness of the Coase Theorem. **AU** Anderlini, Luca; Felli, Leonardo.

PD May 2001. **TI** Does Competition Solve the Hold-up

Problem? **AU** Felli, Leonardo; Roberts, Kevin. **AA** Felli: London School of Economics and Political Science. Roberts: Nuffield College. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/01/414; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 64. **PR** no charge. **JE** C78, D41, D43, D83. **KW** Competition. Hold-up Problem. Matching. Specific Investments. Coordination Failures.

AB In an environment in which both buyers and sellers can undertake match-specific investments, the presence of market competition for matches may solve hold-up and coordination problems generated by the absence of complete contingent contracts. In particular, this paper shows that when matching is assortative and sellers' investments precede market competition, then investments are constrained efficient. One equilibrium is efficient with efficient matches, but there can also be equilibria with coordination failures. Different types of inefficiency arise when buyers undertake investment before market competition. These inefficiencies lead to buyers' underinvestment due to a hold-up problem; but when competition is at its peak, there is a unique equilibrium of the competition game with efficient matches -- no coordination failures -- and the aggregate hold-up inefficiency is small in a well-defined sense, independent of market size.

Fernald, John

TI Why is Productivity Procyclical? Why do we Care? **AU** Basu, Susanto; Fernald, John.

Fernandez, Raquel

PD January 2000. **TI** Sorting and Long-Run Inequality. **AU** Fernandez, Raquel; Rogerson, R. **AA** Fernandez: New York University, CEPR, and NBER. Rogerson: University of Pennsylvania. **SR** CEPR Discussion Paper: 2352; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** D31, I21, J11, J12, J13. **KW** Sorting. Inequality. Marriage. Fertility. Education.

AB Many social commentators have raised concerns over the possibility that increased sorting in a society can lead to greater inequality. To investigate this, we construct a dynamic model of intergenerational education acquisition, fertility, and marital sorting, and parameterize the steady state to match several basic empirical findings. Contrary to Kremer's (1997) finding of a basically insignificant effect of marital sorting on inequality, we find that increased marital sorting will significantly increase income inequality. Three factors are central to our findings: a negative correlation between fertility and education, a decreasing marginal effect of parental education on children's years of education, and wages that are sensitive to the relative supply of skilled workers.

PD September 2001. **TI** Love and Money: A Theoretical and Empirical Analysis of Household Sorting and Inequality. **AU** Fernandez, Raquel; Guner, Nezih; Knowles, John. **AA** Fernandez: NYU, CEPR and NBER. Guner: Pennsylvania State University. Knowles: University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/22; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-

wp.htm. **PG** 51. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** D31, J12, J13, O11, O15. **KW** Income Distribution. Marital Sorting. Fertility. Household Matching. Inequality.

AB This paper examines the interactions between household matching, inequality, and per capita income. We develop a model in which agents decide whether to become skilled or unskilled, form households, consume, and have children. We show that the equilibrium sorting of spouses by skill type (i.e., their correlation in education) is increasing as a function of the skill premium. In the absence of perfect capital markets, the economy can converge to different steady states, depending upon initial conditions. The degree of marital sorting, wage inequality, per capita income, and fertility differentials are positively correlated across steady states. We use household surveys from 34 countries to construct several measures of the skill premium and of the degree of correlation of spouses' education (marital sorting). For all our measures, we find a positive and significant relationship between the two variables.

Fernandez-Castro, Angel S.

TI Productividad, Competencia e Innovacion en la Banca Privada Espanola (1900-1914). **AU** Cuadras-Morato, Xavier; Fernandez-Castro, Angel S.; Roses, Joan R.

Fersterer, J.

TI Are Austrian Returns to Education Falling Over Time? **AU** Winter-Ebmer, R.; Fersterer, J.

Figlio, David

TI Competition Between Private and Public Schools: Testing Stratification and Pricing Predictions. **AU** Epple, Dennis; Figlio, David; Romano, Richard.

Fischer, Carolyn

PD April 2001. **TI** Multinational Taxation and International Emissions Trading. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/18; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 22. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** F23, H21, H25, Q28. **KW** Emissions Trading. Transfer Pricing. Taxation. Multinational Firms. Environmental Policy.

AB Many studies have shown that the activities of multinational corporations are quite sensitive to differences in income tax rates across countries. In this paper I explore the interaction between multinational taxation and abatement activities under an international emissions permit trading scheme. Limits on trading across countries restrict efficiency gains from abatement, as is well known. But I show furthermore that if available offset opportunities are limited to actual abatement activities, those activities are more susceptible to distortions from incentives to shift taxable income. In a system of unlimited international trading, abatement is efficiently allocated across countries, but tax shifting can still be achieved through intra-firm transfer pricing. From the basis of efficiency for both environmental and tax policies, the best design is an international permit trading system with transparent, enforceable transfer pricing rules.

PD July 2001. **TI** Rebating Environmental Policy Revenues: Output-Based Allocations and Tradable

Performance Standards. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/22; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 24. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** H21, H23, Q28. **KW** Emissions Tax. Permit Allocation. Tradable Standards. Environmental Taxation. Output Subsidies.

AB Political pressure often exists to earmark environmental tax revenues or permit rents to the industry affected by the regulation. This paper analyzes schemes that rebate revenues based on output shares: tradable performance standards, an emissions tax with market-share rebates, and tradable permits with output-based allocation. All three policies effectively combine a tax on emissions with a subsidy to output. The result is a shifting of emissions control efforts toward greater emissions rate reduction and less output contraction, with higher marginal costs of control and lower output prices compared to the social optimum, given any targeted level of abatement. These welfare costs depend on the degree of output substitutability and are likely to be much larger in the long run. While some political and market-failure justifications may exist, policy makers should carefully consider industry characteristics before engaging in output-based rebating.

TI Is There a Rationale for Rebating Environmental Levies? **AU** Bernard, Alain L.; Fischer, Carolyn; Vielle, Marc.

Fischer, Stanley

PD April 2000. **TI** The Transition Economies After Ten Years. **AU** Fischer, Stanley; Sahay, Ratna. **AA** Fischer: International Monetary Fund and NBER. Sahay: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 7664; 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** O57, P24, P27, P31, P35. **KW** Transition Economies. Growth. Stabilization.

AB While output declined in virtually all transition economies in the initial years, the speed and extent of the recovery that followed has varied widely across these countries. The contrast between the more and less successful transitions, the latter largely in the former Soviet Union, raises many questions about the relative roles played by adverse initial conditions, external factors, and reform strategies. This paper summarizes the macroeconomic performance of the transition economies. We first review the initial conditions confronting these economies, the reform strategy that was proposed, and the associated controversies that arose a decade ago. We then account for the widely different outcomes, highlighting the role of exogenous factors and the macroeconomic and structural policies adopted by the countries. We find that both stabilization policies and structural reforms, particularly privatization, contributed to the growth recovery. We also conclude that the faster is the speed of reforms, the quicker is the recovery and the higher is growth.

Fisher, Jonas D. M.

TI Idiosyncratic Risk and Aggregate Employment Dynamics. **AU** Campbell, Jeffrey R.; Fisher, Jonas D. M.

Fishman, Arthur

PD April 2001. **TI** Product Durability and Innovations: The Duopoly Case. **AU** Fishman, Arthur; Rob, Rafael.

AA Fishman: Bar Ilan University. **Rob**: University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/15; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 15. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** C73, D43, L11, M31, O31. **KW** Product Durability. Innovation. Rentals. Sales. Rent Dissipation.

AB We compare the rates of product innovation under rentals versus sales when the product is durable and the market structure is duopoly. Our main conclusion is that sales induce a slower and more efficient rate of product introductions than rentals. The basic reason for this is that under rentals, sellers are able to extract a higher surplus from buyers, and this higher surplus is dissipated away through an excessive rate of product innovation. The exact opposite is true under a monopoly market structure, which highlights the role of market structure in determining the rate of product innovations when the product is durable.

PD February 2002. **TI** Product Innovations and Quality-Adjusted Prices. **AU** Fishman, Arthur; Rob, Rafael. **AA** Fishman: Bar Ilan University. **Rob**: University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 02/01; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 8. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** C73, L11, L12, L63, O31. **KW** Quality-Adjusted Prices. Innovation Frequency. Durable Goods. Obsolescence.

AB A striking characteristic of high-tech products is the rapid decrease of their quality-adjusted prices (QAPs). Empirical studies show that the rate of decrease of QAPs is typically not constant over time; QAPs decrease rapidly at early stages of the product and then the rate of decrease tapers off. Studies also suggest that the QAP is positively correlated with the rate of product introductions: the faster new products are introduced, the faster is the rate of decrease in their QAPs. This paper presents a dynamic model of product innovations consistent with these empirical regularities.

PD March 2002. **TI** Is Bigger Better? Investing in Reputation. **AU** Fishman, Arthur; Rob, Rafael. **AA** Fishman: Bar Ilan University. **Rob**: University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 02/03; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 19. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** D82, L14, L15. **KW** Reputation. Moral Hazard. Firm Size. Product Quality. Quality Investment.

AB We develop a model in which the value of a firm's reputation for quality increases gradually over time. In our model, a firm's ability to deliver high quality in any given period depends on how much it invests in quality. This investment is the firm's private information. Also, a firm's current quality is unobservable. The only observable is a firm's past performance -- the realized quality of the products it has delivered. We assume that information about a firm's past performance diffuses only gradually in the market. Thus, the longer a firm has been delivering high-quality products, the larger the number of potential customers that are aware of it,

(i.e., the firm's reputation increases). We show that in equilibrium, the firm's investment in quality increases over time, as its reputation increases. This is because the greater its reputation, the more it has to lose from tarnishing it by under-investing, and, conversely, the more it has to gain from maintaining it; this is recognized by rational consumers. Therefore, older -- and hence larger -- firms command higher prices as quality premia, which in turn increases the value of their reputation.

Fitzgerald, Terry J.

TI Understanding the Fiscal Theory of the Price Level. **AU** Christiano, Lawrence J.; Fitzgerald, Terry J.

Flabbi, Luca

TI The Transmission Mechanism of Monetary Policy in Europe: Evidence from Banks' Balance Sheets. **AU** Favero, Carlo A.; Giavazzi, Francesco; Flabbi, Luca.

Flood, Robert P.

PD December 2001. **TI** Uncovered Interest Parity in Crisis: The Interest Rate Defense in the 1990s. **AU** Flood, Robert P.; Rose, Andrew K. **AA** Flood: International Monetary Fund. Rose: University of California, Berkeley, NBER, and CEPR. **SR** International Monetary Fund Working Paper: WP/01/207; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 14. **PR** not available. **JE** F31, F32, G15. **KW** Exchange Rates. Fixed Exchange Rate. Developing Countries. Interest Parity. Crisis Countries.

AB This paper tests for uncovered interest parity (UIP) using daily data for 23 developing and developed countries through the crisis-strewn 1990s. We find that UIP works better on average in the 1990s than in previous eras in the sense that the slope coefficient from a regression of exchange rate changes on interest differentials yields a positive coefficient (which is sometimes insignificantly different from unity). UIP works systematically worse for fixed and flexible exchange rate countries than for crisis countries, but we find no significant differences between rich and poor countries.

PD December 2001. **TI** A Model of the Joint Distribution of Banking and Exchange-Rate Crises. **AU** Flood, Robert P.; Marion, Nancy. **AA** Flood: International Monetary Fund. Marion: Dartmouth College. **SR** International Monetary Fund Working Paper: WP/01/213; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 29. **PR** not available. **JE** F31, F34, G21. **KW** Currency Crises. Bank Crises.

AB We develop a simple framework for studying the joint distribution of banking and currency crises triggered by real shocks. Our framework illustrates the fact that bank and currency collapses are related but are not the same thing. Studying currency and bank collapses either in isolation or in perfect correlation with each other is inappropriate, producing biased estimates of the likelihood of crises.

Forni, Mario

PD December 1999. **TI** The Generalized Dynamic Factor Model: Identification and Estimation. **AU** Forni, Mario; Lippi, Marc; Reichlin, Lucrezia; Hallin, Marc. **AA** Forni: Universita di Modena. Lippi: Universita di Roma. Reichlin and Hallin: Universite Libres de Bruxelles. **SR** CEPR Discussion

Paper: 2338; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 32. PR 5 pounds, \$8 or 8 euros. JE C13, C33, C43, F41. KW Dynamic Factor Models. Principal Components. Coincident Indicators. European Currency Area.

AB This paper analyzes identification conditions and proposes an estimator for a dynamic factor model where the idiosyncratic components are allowed to be mutually non-orthogonal. This model, which we call the generalized dynamic factor model, is novel to the literature and generalizes the static approximate factor model of Chamberlain and Rothschild (1983), as well as the exact factor model of la Sargent and Sims (1977). We propose an estimator of the common components and prove convergence as both time and cross-sectional size go to infinity at appropriate rates. Simulations yield encouraging results in small samples. We use our model to construct an index of the state of the economy for the European currency area. Such an index is defined as the common component of real gross domestic product within a model including several macroeconomic variables for each European country.

PD December 1999. **TI** A Measure of Comovement for Economic Variables: Theory and Empirics. **AU** Forni, Mario; Reichlin, Lucrezia; Croux, Christophe. **AA** Forni: Universita di Modena. Reichlin and Croux: Universite Libres de Bruxelles. **SR** CEPR Discussion Paper: 2339; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 32. PR 5 pounds, \$8 or 8 euros. **JE** C22, C32, E32. **KW** Business Cycles. Comovements. Coherence. Geography.

AB This paper proposes a measure of dynamic comovement between (possibly many) time series and names it cohesion. The measure is defined in the frequency domain and is appropriate for processes that are costationary, possibly after suitable transformations. In the bivariate case, the measure reduces to dynamic correlation and is related, but not equal, to the well-known quantities coherence and coherency. Dynamic correlation on a frequency band equals (static) correlation of band-pass filtered series. Moreover, long run correlation and cohesion relate in a simple way to cointegration. Cohesion is useful to study problems of business cycle synchronization, to investigate short-run and long-run dynamic properties of multiple time series, and to identify dynamic clusters. We use state income data for the US and gross domestic product data for European nations to provide an empirical illustration focused on the geographical aspects of business cycle fluctuations.

Fortin, Nicole M.

TI Does Comparable Worth Work in a Decentralized Labor Market? **AU** Baker, Michael; Fortin, Nicole M.

Fosfuri, Andrea

PD November 1999. **TI** Licensing the Market for Technology. **AU** Fosfuri, Andrea; Arora, Ashish. **AA** Fosfuri: Universidad Carlos III. Arora: Carnegie Mellon University. **SR** CEPR Discussion Paper: 2284; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 56. PR 5 pounds, \$8 or 8 euros. **JE** D23, D43, D45, L13, O32. **KW** Licensing. Market Structure. Oligopoly. Technology Licensing.

AB In technology-based industries, incumbent firms often license their technology to other firms that will potentially compete with them. Such a strategy is difficult to explain within traditional models of licensing. This paper extends the literature on licensing by relaxing the assumption of a monopolist technology holder. We develop a model with many technological trajectories for the production of a differentiated good. We find that competition in the market for technology induces licensing of innovations, and that the number of licenses can be inefficiently large. A strong testable implication of our theory is that the number of licenses per patent holder decreases with the degree of product differentiation.

Fougere, Denis

TI Using Matching Estimators to Evaluate Alternative Youth Employment Programs: Evidence from France, 1986-1988. **AU** Brodaty, Thomas; Crepon, Bruno; Fougere, Denis.

Fournel, Jerome

TI How Do Treasury Systems Operate in Sub-Saharan Francophone Africa? **AU** Bouley, Dominique; Fournel, Jerome; Leruth, Luc E.

Francis, Neville

PD December 2001. **TI** Is the Technology-Driven Real Business Cycle Hypothesis Dead? Shocks and Aggregate Fluctuations Revisited. **AU** Francis, Neville; Ramey, Valerie A. **AA** Francis: Lehigh University. Ramey: University of California, San Diego and NBER. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/03; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. PG 34. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** E32, E37. **KW** Business Cycles. Technology Shocks.

AB In this paper, we re-examine the recent evidence that technology shocks do not produce business cycle patterns in the data. We first extend Gali's (1999) work, which uses long-run restrictions to identify technology shocks, by examining whether the identified shocks can be plausibly interpreted as technology shocks. We do this in three ways. First, we derive additional long-run restrictions and use them as tests of overidentification. Second, we compare the qualitative implications from the model with the impulse responses of variables such as wages and consumption. Third, we test whether some standard "exogenous" variables predict the shock variables. We find that oil shocks, military build-ups, and Romer dates do not predict the shock labeled "technology." We then show ways in which a standard DGE (dynamic general equilibrium) model can be modified to fit Gali's finding that a positive technology shock leads to lower labor input. Finally, we re-examine the properties of the other key shock to the system.

Francois, Patrick

PD November 2000. **TI** Gender Wage Differentials in a Competitive Labor Market: The Household Interaction Effect. **AU** Francois, Patrick; van Ours, Jan C. **AA** Francois: Tilburg University. van Ours: CentER, Tilburg University, and CEPR. **SR** CEPR Discussion Paper: 2603; Centre for Economic Policy Research, Discussion Paper Orders, 90-98

Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG not available. PR 5 pounds, \$8 or 8 euros. JE J16, J41, J71. KW Gender Discrimination. Household Models. Wage Gap.

AB We present a theoretical explanation of the gender wage gap that turns on the interaction between men and women in households. In equilibria where men are over-represented in full-time work, we show that firms rationally choose to hire women only at strictly lower wages to men. The model developed predicts a gap even controlling for education, occupation and industry of workers and does so in a competitive labor market where there exist no inherent gender differences. We test our theory using CPS data over the period 1979-98 and find it is strongly supported by the data.

Frankel, Jeffrey

PD September 2000. TI Verifiability and the Vanishing Intermediate Exchange Rate Regime. AU Frankel, Jeffrey; Schmukler, Sergio; Serven, Luis. AA Frankel: Harvard University and NBER. Schmukler and Serven: World Bank. SR National Bureau of Economic Research Working Paper: 7901; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 26. PR \$5.00. JE E52, F31, F32, F33, F36. KW Exchange Rates. Intermediate Targets. Verifiability. Monetary Policy.

AB The corners hypothesis holds that intermediate exchange rate regimes are vanishing, or should be. Surprisingly for a new conventional wisdom, this hypothesis so far lacks analytic foundations. In part, the generalization is overdone. We nevertheless offer one possible theoretical rationale against intermediate regimes: they lack verifiability, needed for credibility. Central banks announce intermediate targets such as exchange rates, so that the public can judge from observed data whether they are following the policy announced. Our general point is that simple regimes are more verifiable by market participants than complicated ones. Of the various intermediate regimes, we focus on basket pegs with bands. Statistically, it takes a surprisingly long span of data to distinguish such a regime from a floating exchange rate. We apply the econometrics, first, to the case of Chile, and second, by performing Monte Carlo simulations. The amount of data required to verify the declared regime may exceed the length of time during which the regime is maintained. The amount of information necessary increases with the complexity of the regime, including the width of the band and the number of currencies in the basket.

Fredriksson, Per G.

PD March 2002. TI The Rule of Law and the Pattern of Environmental Protection. AU Fredriksson, Per G.; Mani, Muthukumara. AA Fredriksson: Southern Methodist University. Mani: IMF. SR International Monetary Fund Policy Working Paper: WP/02/49; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 26. PR not available. JE D72, D78, K40, Q28. KW Property Rights. Corruption. Rule of Law. Environmental Policy.

AB We develop and test a theory of the rule of law and environmental policy formation. In our model an increase in the degree of rule of law has two opposing partial effects on environmental policy: first, a greater share of policy decisions are implemented according to law; second, industry bribery

efforts increase because more is at stake. Moreover, we find that an increase in corruptibility of policymakers lowers the stringency of environmental policy. The empirical findings suggest that a greater degree of rule of law raises environmental policy stringency, but the effect is lower where corruptibility is high.

Freixas, Xavier

TI Corporate Finance and the Monetary Transmission Mechanism. AU Bolton, Patrick; Freixas, Xavier.

TI Systemic Risk, Interbank Relations and Liquidity Provision by the Central Bank. AU Parigi, Bruno; Rochet, Jean-Charles; Freixas, Xavier.

French, Stephen

TI Does Performance Pay De-Motivate, and Does it Matter? AU Marsden, David; French, Stephen; Kubo, Katsuyuki.

Frenkel, Michael

PD November 2001. TI The Effects of Capital Controls on Exchange Rate Volatility and Output. AU Frenkel, Michael; Nickel, Christiane; Schmidt, Gunter; Stadtmann, Georg. AA Nickel: IMF. Frenkel, Schmidt and Stadtmann: WHU. SR International Monetary Fund Working Paper: WP/01/187; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 22. PR not available. JE F31, F32, F41. KW Capital Controls. Exchange Rates. Capital Flows.

AB This paper extends the Dornbusch model of overshooting exchange rates to discuss both exchange rate and output effects of capital controls that involve additional costs for international asset transactions. We show that, on the one hand, such capital controls have the merit of reducing the volatility of exchange rates following a monetary shock. On the other hand, the implementation increases exchange rate volatility in the short run and induces costs for the real sector in the form of lower equilibrium output levels.

Fridolfsson, Stenек J.

PD January 2000. TI Why Mergers Reduce Profits, and Raise Share-Prices. AA Research Institute for Industrial Economics. SR CEPR Discussion Paper: 2357; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 52. PR 5 pounds, \$8 or 8 euros. JE C78, G34, L13, L41. KW Mergers. Acquisitions. Coalitions. Share Prices.

AB We explain the empirical puzzle that mergers reduce profits and raise share prices. If being an "insider" is better than being an "outsider," firms may merge to preempt their partner merging with a rival. The stock-value is increased, since the risk of becoming an outsider is eliminated. We also show that mergers increasing consumers' prices, while increasing competitors' profits, may reduce the competitors' share-prices. Thus, event-studies may not detect anti-competitive mergers. These results are derived in an endogenous-merger model, predicting the conditions under which mergers occur, the time of merger, and the split of surplus.

Friedman, Benjamin M.

PD April 2000. TI What Have We Learned from the Reagan Deficits and Their Disappearance? AA Harvard

University and NBER. **SR** National Bureau of Economic Research Working Paper: 7647; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 15. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H62. **KW** Deficit. Capital Formation. Unemployment.

AB This paper looks again at the U.S. deficit debate of the 1980s, this time with the benefit of the Commerce Department's newly revised data for that period, and also in light of the experience of the 1990s when sizeable budget surpluses replaced chronic large deficits. The familiar conclusion that sustained government deficits at full employment depress private capital formation has stood up well in regards to both these considerations. By contrast, the more recent experience in particular has sharply contradicted any simple notion that the government balance and the current account balance move in parallel. Other relevant issues include the equilibrium (that is, noninflationary) unemployment rate, the response of private saving to government dissaving, and the role of debt and equity in financing private capital formation.

PD October 2000. **TI** Decoupling at the Margin: The Threat to Monetary Policy from the Electronic Revolution in Banking. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7955; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 16. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E51, E52, E58. **KW** Electronic Banking. Monetary Policy. Money Use.

AB The threat to monetary policy from the electronic revolution in banking is the possibility of a "decoupling" of the operations of the central bank from markets in which financial claims are created and transacted in ways that, at some operative margin, affect the decisions of households and firms on such matters as how much to spend (and on what), how much (and what) to produce, and what to pay or charge for ordinary goods and services. The object of this paper is to discuss how this possibility arises and what it implies, to dismiss as inessential to the argument various extreme characterizations that have arisen in the recent debate on this issue (for example, that no one will use money for ordinary economic transactions), and to address the specific arguments on the issue offered by Charles Goodhart, Charles Freedman, and Michael Woodford.

Fuchs-Schundeln, Nicola

PD December 2001. **TI** Stock Market Liberalizations: Financial and Macroeconomic Implications. **AU** Fuchs-Schundeln, Nicola; Funke, Norbert. **AA** Fuchs-Schundeln: Yale University. Funke: IMF. **SR** International Monetary Fund Working Paper: WP/01/193; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** F36, G15, G18, O16, O17. **KW** Stock Markets. Financial Liberalization. Regulation. Growth. Development.

AB Using a panel of 27 countries, we analyze the effects of stock market liberalization on financial and macroeconomic development. We find that liberalization is associated with a short-term increase in real private investment growth of about 14 percentage points cumulatively in the four years following liberalization and a cumulative 4 percentage point increase in real gross domestic product per capita growth. Growth tends to be higher if institutional reforms precede liberalization. In

contrast to other studies, we also find evidence for a permanent growth effect of about 0.4 percent a year in an extended sample of 72 countries.

Fuentes, Andres

PD February 2002. **TI** On-the-Job Search and the Beveridge Curve. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/37; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 18. **PR** not available. **JE** J63, J64. **KW** Matching Model. Job Search. Vacancies. Beveridge Curve.

AB This paper presents a theoretical and empirical investigation of the role on-the-job search plays in explaining shifts of the unemployment-vacancies relationship (the Beveridge curve). We show that the direction of the shift depends on the parameters of the matching model, regardless of the assumptions made on the relative search effectiveness of employed and unemployed searchers. We estimate a Beveridge Curve equation with a panel of British regions controlling for unobserved aggregate unemployment effects. We find evidence that the rise in on-the-job search in the 1980s has shifted the Beveridge Curve outwards.

Fujii, Eiji

PD September 2000. **TI** Fin de Siecle Real Interest Parity. **AU** Fujii, Eiji; Chinn, Menzie D. **AA** Fujii: Otaru University of Commerce; Japan. Chinn: University of California, Santa Cruz and NBER. **SR** National Bureau of Economic Research Working Paper: 7880; 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** F21, F31, F39, F42. **KW** Interest Parity. Capital Mobility. International Finance.

AB We evaluate the recent evidence for real interest parity, focusing on long-term yields. Examining the data on financial instruments of various maturities across the G7 countries, we find substantial differences in the degree of real interest equalization measured at different horizons. In general, real interest parity holds better at long horizons than at short. This empirical result is robust to alternative ways of modeling expected inflation rates. Considering the relevance of long-term yields for the investment decisions of firms, our findings imply that the degree of capital mobility among the G7 economies may be greater than previously thought.

Fullenkamp, Connel

TI Trust as a Means of Improving Corporate Governance and Efficiency. **AU** Chami, Ralph; Fullenkamp, Connel.

Funke, Michael

PD February 2002. **TI** Growth and Convergence in a Two-Region Model: The Hypothetical Case of Korean Unification. **AU** Funke, Michael; Strulik, Holger. **AA** Funke: IMF. Strulik: Hamburg University. **SR** International Monetary Fund Policy Working Paper: WP/02/26; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 21. **PR** not available. **JE** H31, H59, O41, O53, R11. **KW** Korean Unification. Regional Convergence. Growth.

AB The paper discusses the impact and implications of Korean unification by setting up a two-region endogenous

growth model. The numerical solutions are based on the formal analytical model, and have been calibrated so that they reflect the observed features of the North and South Korean economies. The numerical solutions provide evidence about the speed of convergence and the large amount of interregional transfers that are required to make the North Korean economy economically viable.

Funke, Norbert

TI Stock Market Liberalizations: Financial and Macroeconomic Implications. AU Fuchs-Schundeln, Nicola; Funke, Norbert.

Furman, Jeffrey L.

TI The Determinants of National Innovative Capacity. AU Stern, Scott; Porter, Michael E.; Furman, Jeffrey L.

Gabaix, Xavier

PD June 2001. TI The 6D Bias and the Equity Premium Puzzle. AU Gabaix, Xavier; Laibson, David. AA Gabaix: MIT. Laibson: Harvard University and NBER. SR Massachusetts Institute of Technology, Department of Economics Working Paper: 02/01; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. PG 36. PR \$7.00 U.S., Canada, Mexico; \$10.00 other international. JE D11, E44, G12. KW Consumption Adjustment. Bounded Rationality. Decision Costs. Delayed Adjustment. Equity Premium Puzzle.

AB If decision costs lead agents to update consumption every D periods, then econometricians will find an anomalously low correlation between equity returns and consumption growth (Lynch 1996). We analytically characterize the dynamic properties of an economy composed of consumers who have such delayed updating. In our setting, an econometrician using an Euler equation procedure would infer a coefficient of relative risk aversion biased up by a factor of $6D$. Hence with quarterly data, if agents adjust their consumption every $D = 4$ quarters, the imputed coefficient of relative risk aversion will be 24 times greater than the true value. High levels of risk aversion implied by the equity premium and violations of the Hansen-Jagannathan bounds cease to be puzzles. The neoclassical model with delayed adjustment explains the consumption behavior of shareholders. Once limited participation is taken into account, the model matches most properties of aggregate consumption and equity returns, including new evidence that the covariance between $\ln C(t+h)/\ln C(t)$ and $R(t+1)$ slowly rises with h .

Galdon-Sanchez, Jose E.

TI Financial Intermediation, Variability and the Development Process. AU Carranza, Luis; Galdon-Sanchez, Jose E.

TI Collective Bargaining under Complete Information. AU Diaz-Moreno, Carlos; Galdon-Sanchez, Jose E.

Galor, Oded

PD December 1999. TI From Physical to Human Capital Accumulation: Inequality in the Process of Development. AU Galor, Oded; Moav, Omer. AA Galor: Brown University. Moav: MIT. SR CEPR Discussion Paper: 2307; Centre for Economic Policy Research, Discussion Paper

Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 48. PR 5 pounds, \$8 or 8 euros. JE O11, O15, O41, O42. KW Income Distribution. Growth. Credit Constraints. Human Capital. Inequality.

AB This paper presents a unified theory that provides an intertemporal reconciliation between conflicting viewpoints about the effect of inequality on economic growth. It argues that the replacement of physical capital accumulation by human capital accumulation as a prime engine of economic growth has changed the qualitative impact of inequality on the process of development. In early stages of industrialization, as physical capital accumulation is a prime source of economic growth, inequality enhances the process of development by channeling resources towards individuals whose marginal propensity to save is higher. In later stages of development, however, as the return to human capital increases due to capital-skill complementarity, human capital becomes the prime engine of growth, and equality, given credit constraints, stimulates investment in human capital and economic growth. As wages increase, however, credit constraints become less binding and the overall effect of inequality becomes insignificant.

Gandal, Neil

PD December 1999. TI Network Effects, Standardization, and the Internet: What Have We Learned From The DVD vs. DIVX Battle? AU Gandal, Neil; Dranove, D. AA Gandal: Tel Aviv University. Dranove: Northwestern University. SR CEPR Discussion Paper: 2335; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 28. PR 5 pounds, \$8 or 8 euros. JE K21, L41, L51, L82. KW Network Effects. Standardization. Product Preannouncements. Vaporware. Internet.

AB Two important welfare implications of network effects are that: (1) market forces often result in suboptimal standardization, that is, left alone the market may fail to achieve standardization when it is socially desirable; and (2) even if the market settles on a standard, the chosen standard may be inferior. Some policy makers have interpreted these results to mean that when there are strong network effects, regulators should play an active role in setting standards. Others have urged regulators not to intervene despite the presence of network effects, unless owners of proprietary standards take strategic actions to influence the adoption decisions of consumers. One action that has raised regulatory (antitrust) concerns is strategic product preannouncements or "vaporware." In this paper, we empirically test for network effects and vaporware effects in the digital video disc (DVD) market and examine the role played by the Internet.

Ganuzza, Juanjo

TI Organized vs. Competitive Corruption. AU Celentani, Marco; Ganuzza, Juanjo.

Garcia, Jaume

TI Demand for Private Health Insurance: Is there a Quality Gap? AU Costa, Joan; Garcia, Jaume.

PD March 2001. TI Efectos de la Reforma del IRPF sobre la Oferta Laboral de las Mujeres. AA Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics

and Business Working Paper: 541; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 35. **PR** Papers available for free on the web; no hardcopies. **JE** J12, J16, J22. **KW** Labor Supply. Direct Taxation. Simulation.

AB (Paper in Spanish) The aim of this paper is to simulate the effects of the Spanish 1999 tax reform on the married women's labor behavior and welfare in a partial equilibrium context. We estimate by maximum likelihood two models of labor supply which take into account of the characteristics of the budget constraint. The simulation exercises suggest that the new tax can have significant effects on female's labor supply decisions and seems to increase the individual's welfare.

PD March 2001. **TI** Female Labor Supply in Spain: The Importance of Behavioral Assumptions and Unobserved Heterogeneity Specification. **AU** Garcia, Jaume; Suarez, Maria Jose. **AA** Garcia: Universitat Pompeu Fabra. Suarez: Universidad de Oviedo. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 542; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 38. **PR** Papers available for free on the web; no hardcopies. **JE** J16, J22. **KW** Labor Supply. Taxes. Unobserved Heterogeneity.

AB We estimate four models of female labor supply using a Spanish sample of married women from 1994, taking into account the complete form of the individual's budget set. The models differ in the hypotheses relating to the presence of optimization errors and/or the way non-workers contribute to the likelihood function. According to the results, the effects of wages and non-labor income on the labor supply of Spanish married women depend on the specification used. The model which has both preference and optimization errors and allows for both voluntarily and involuntarily unemployed females desiring to participate seems to better fit the evidence for Spanish married women.

Garcia-Blandon, Josep

PD October 2000. **TI** Cross-Border Banking in Europe: An Empirical Investigation. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 509; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 17. **PR** Papers available for free on the web; no hardcopies. **JE** F23, G21. **KW** Cross-Border Banking. Barriers to Entry. Representation.

AB This paper investigates bilateral trade in banking services within the European Union. Attention is drawn toward two main issues. First, a test of the bank's motivations for setting up different forms of overseas offices, and secondly, to assess the importance of barriers to entry across national European banking systems. Empirical results confirm the existence of different motivations for establishing representative offices, branches and subsidiaries in foreign locations. In addition, evidence has been obtained about the importance of non-regulatory barriers that could make difficult the existence of a single European market for banking services.

Garcia-Diaz, Anton

PD September 2000. **TI** Strategic Bidding in Electricity Pools with Short-Lived Bids: An Application to the Spanish

Market. **AU** Garcia-Diaz, Anton; Marin, Pedro L. **AA** Universidad Carlos III de Madrid. **SR** CEPR Discussion Paper: 2567; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** K23, L13, L94. **KW** Bidding. Electricity Pools. Market Power.

AB We generalize von der Fehr and Harbord's (1993) multi-unit auction model for the case of a deterministic demand allowing for any technology mix and elastic demand in order to account for demand side bidding. We obtain a general characterization of the equilibrium and show that the Cournot model overestimates market power in pool markets. We simulate the Spanish electricity pool and show that price-cost margins substantially increased with the 1996 merger that took the industry from a six firm structure to its current four firm structure. This is almost equivalent to a nearly symmetric duopoly. The introduction of demand-side bidding is not likely to change this situation.

Garcia-Fontes, Walter

TI Estimating Learning Models from Experimental Data. **AU** Cabrales, Antonio; Garcia-Fontes, Walter.

Garcia-Mila, Teresa

PD July 2001. **TI** Fiscal Decentralization Policies and Sub-National Government Debt in Evolving Federations. **AU** Garcia-Mila, Teresa; Goodspeed, Timothy J.; McGuire, Therese J. **AA** Garcia-Mila: Universitat Pompeu Fabra. Goodspeed: Hunter College. McGuire: University of Illinois at Chicago. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 549; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 38. **PR** Papers available for free on the web; no hardcopies. **JE** H31, H71, H77. **KW** Fiscal Decentralization. Borrowing Incentives.

AB As part of a process of democratization, many countries spanning Europe, Latin America, Africa, and Asia are reorganizing their governments by developing fiscal responsibility and authority to newly empowered regional and local governments. Although decentralization in each country proceeds differently, a common element tends to be an initially heavy reliance on central government grants to fund regional spending. We develop a theoretical model regional borrowing decisions in which the incentives for regional borrowing depend crucially on how the regions expect the federal system of finance to evolve. We examine the implications of the model using data on Spanish regions for the period 1984-1995 and find evidence that regions may be borrowing inefficiently in response to incentives imbedded in the Spanish system of fiscal decentralization.

Garibaldi, Pietro

TI Cross Credit Flows. **AU** Dell'Ariccia, Giovanni; Garibaldi, Pietro.

Garoupa, Nuno

PD November 2000. **TI** Corporate Criminal Law and Organization Incentives: A Managerial Perspective. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 529; Department of Economics and Business, Universitat Pompeu

Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 20. PR Papers available for free on the web; no hardcopies. JE K22, K41. KW Law Enforcement. Corporation.

AB Corporate criminal liability puts a serious challenge to the economic theory of enforcement. Are corporate crimes different from other crimes? Are these crimes best deterred by punishing individuals, punishing corporations, or both? What is optimal structure of sanctions? Should corporate liability be criminal or civil? This paper has two major contributions to the literature. First, it provides a common analytical framework to most results presented and largely discussed in the field. In second place, by making use of the framework, we provide new insights into how corporations should be punished for the offenses committed by their employees.

Gentry, William M.

PD September 2000. TI Entrepreneurship and Household Saving. AU Gentry, William M.; Hubbard, R. Glenn. AA Columbia University. SR National Bureau of Economic Research Working Paper: 7894; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 41. PR \$5.00. JE D31, E21, E22, G11, M13. KW Entrepreneurship. Household Saving. Savings. Income Distribution. Wealth Accumulation.

AB We argue that costly external financing for entrepreneurial investments has important implications for the saving, investment, and entry decisions of entrepreneurs. Using data from the 1983 and 1989 Federal Reserve Board Surveys of Consumer Finances, we quantify three findings about entrepreneurial saving decisions and their role in household wealth accumulation. First, entrepreneurial households own a substantial share of household wealth and income, and this share increases throughout the wealth and income distributions. Second, the portfolios of even wealthy entrepreneurial households are very undiversified, with the bulk of assets held within active businesses. Third, wealth-income ratios and saving rates are higher for entrepreneurial households even after controlling for age and other demographic variables. These findings suggest that studies of household saving decisions in general and of the savings decisions of wealthy or high-income households in particular have paid insufficient attention to the role of entrepreneurial decisions and their role in wealth accumulation. Our conclusion that entrepreneurial saving and investment decisions are interdependent raises three areas for future research: (1) measuring the role of entrepreneurs in aggregate wealth accumulation; (2) studying implications for portfolio allocation and asset pricing; and (3) analyzing consequences for tax policy toward entrepreneurial saving and investment.

George, Lisa

PD October 2000. TI Who Benefits Whom in Daily Newspaper Markets? AU George, Lisa; Waldfogel, Joel. AA George: University of Pennsylvania. Waldfogel: University of Pennsylvania and NBER. SR National Bureau of Economic Research Working Paper: 7944; 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 L13, L82. KW Markets. Newspapers. Differentiated Products. Constituencies.

AB Markets are generally thought to avoid problems, such as tyranny of the majority, that arise when allocation is accomplished through collective processes. Yet, with fixed costs, differentiated product markets deliver only products desired by substantial constituencies. When consumers share similar preferences, then additional consumers will bring forth additional products -- or improve the attributes or position of existing products -- and the consumers confer positive pecuniary "preference externalities" on each other. However, if distinct groups of consumers have substantially different preferences, the groups can hurt each other through product markets. We document the pattern of preference externalities among black and white consumers of daily newspapers in the US. We find that, in their capacity as newspaper consumers, members of each group benefits themselves and either harm, or fail to benefit, each other through the product market. We document that product positioning provides the mechanism underlying our results. While Friedman (1962) argues that "the use of political channels... tends to strain the social cohesion essential for a stable society," while, by contrast, "widespread use of the market reduces the strain on the social fabric by rendering conformity unnecessary," mounting evidence on media markets suggests otherwise.

Gerdemesier, Dieter

TI Euro Area Money Demand: Measuring the Opportunity Costs Appropriately. AU Calza, Alessandro; Gerdemesier, Dieter; Levy, Joaquim.

Gerson, Philip

TI Pension Reform and the Fiscal Policy Stance. AU Mackenzie, G. A.; Gerson, Philip; Cuevas, Alfredo; Heller, Peter S.

Ghatak, Maitreesh

TI Public-Private Partnerships for the Provisions of Public Goods: Theory and an Application to NGOs. AU Besley, Timothy; Ghatak, Maitreesh.

Gherzi, Frederic

TI The Economics of a Lost Deal. AU Hourcade, Jean-Charles; Gherzi, Frederic.

Ghironi, Fabio

PD February 2002. TI Monetary Rules for Emerging Market Economies. AU Ghironi, Fabio; Rebucci, Alessandro. AA Ghironi: Boston College. Rebucci: IMF. SR International Monetary Fund Policy Working Paper: WP/02/34; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 40. PR not available. JE C52, E52, F41, O54. KW Argentina. Business Cycles. Emerging Markets. Monetary Rules. Risk Premia.

AB We compare the performance of a currency board, inflation targeting, and dollarization in a small, open developing economy with a liberalized capital account. We focus on the transmission of shocks to currency and country risk premia and on the role of fluctuations in premia in the propagation of other shocks. We calibrate our model on Argentina. The framework matches the second moments of key variables well. Welfare analysis suggests that dollarization is preferable to alternative regimes because it removes currency premium volatility. However, a currency board can match

dollarization on welfare grounds if the central bank holds a sufficiently large stock of foreign reserves.

Ghosh, Atish

TI Structural Vulnerabilities and Currency Crises.
AU Ghosh, Swati; Ghosh, Atish.

Ghosh, Swati

PD January 2002. **TI** Structural Vulnerabilities and Currency Crises. **AU** Ghosh, Swati; Ghosh, Atish. **AA** Ghosh, S.: World Bank. Ghosh, A.: IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/09; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 30. **PR** not available. **JE** C45, F31, F41, F47, G30. **KW** Currency Crises. Structural Indicators. Corporate Governance. Binary Recursive Trees.

AB This paper examines the role of structural factors -- governance and rule of law, corporate sector governance (creditor rights and shareholder rights), corporate financing structure -- as well as macroeconomic variables in currency crises. Using a technique known as a binary recursive tree allows for interactions between the various explanatory variables. It is found that structural vulnerabilities play an important role in the occurrence of "deep" currency crises (those with a real gross domestic product growth decline of at least 3 percentage points) and that there are complex interactions between these structural vulnerabilities and macroeconomic imbalances.

Giacomini, Raffaella

PD June 2002. **TI** Evaluation and Combination of Conditional Quantile Forecasts. **AU** Giacomini, Raffaella; Komunjer, Ivana. **AA** Giacomini: University of California, San Diego. Komunjer: Groupe HEC, France. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/11; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 20. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C12, C22, C52, C53. **KW** Encompassing. Forecast Combination. Loss Function. GMM. Value at Risk.

AB This paper proposes a method for comparing and combining conditional quantile forecasts based on the principle of "encompassing". Our test for conditional quantile forecast encompassing (CQFE) is a test of superior predictive ability, constructed as a Wald-type test on the coefficients of an optimal combination of alternative forecasts. The CQFE test is a "model free" test that can be used to compare any given number of alternative forecasts, and is relatively easy to implement by generalized method of moments techniques appropriately modified to accommodate non-differentiable criterion functions. Further, our theoretical framework provides a basis for combining quantile forecasts, when neither forecast has superior predictive ability. A central feature of our method is the focus on conditional, rather than unconditional expected loss in the formulation of the encompassing test, which links our approach to Christoffersen's (1998) "conditional coverage" test for evaluation of quantile forecasts. An empirical application to the problem of Value at Risk evaluation illustrates the usefulness of the proposed techniques.

PD July 2002. **TI** Comparing Density Forecasts via

Weighted Likelihood Ratio Tests: Asymptotic and Bootstrap Methods. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/12; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 21. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C12, C22, C52, C53. **KW** Density Forecasting. Scoring Rules. Predictive Ability. Forecast Comparison.

AB This paper proposes and analyzes tests that can be used to compare the accuracy of alternative conditional density forecasts of a variable. The tests are also valid in the broader context of model selection based on out-of-sample predictive ability. We restrict attention to the case of density forecasts derived from non-nested parametric models, with known or estimated parameters. The evaluation makes use of scoring rules, which are loss functions defined over the density forecast and the realizations of the variable. In particular, we consider the logarithmic scoring rule, which leads to the development of asymptotic and bootstrap "weighted likelihood ratio" tests. The name comes from the fact that the tests compare weighted averages of the scores over the available sample, as a way to focus attention on different regions of the distribution of the variable. For a uniform weight function, the asymptotic test can be interpreted as an extension of Vuong (1989)'s likelihood ratio test for non-nested hypotheses to time series data and to an out-of-sample testing framework. A Monte Carlo simulation explores the size and power properties of this last test in finite samples.

Giavazzi, Francesco

TI The Transmission Mechanism of Monetary Policy in Europe: Evidence from Banks' Balance Sheets. **AU** Favero, Carlo A.; Giavazzi, Francesco; Flabbi, Luca.

Gilleskie, Donna B.

PD October 2000. **TI** Estimating the Effects of Covariates on Health Expenditures. **AU** Gilleskie, Donna B.; Mroz, Thomas A. **AA** Gilleskie: University of North Carolina, Chapel Hill and NBER. Mroz: University of North Carolina, Chapel Hill. **SR** National Bureau of Economic Research Working Paper: 7942; 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** C51, I11, I12. **KW** Conditional Density Estimators. Health Expenditures. Smearing.

AB We demonstrate the features and precision of the conditional density estimation method through Monte Carlo experiments and an application to health expenditures using the RNAD Health Insurance Experiment data. Our estimation strategy uses sequences of conditional probability functions, similar to those used in discrete time hazard rate analyses, to construct a discrete approximation to the density function of the outcome of interest conditional on exogenous explanatory variables. Once the conditional density function has been constructed, we can examine expectations of arbitrary functions of the outcome of interest and evaluate how these expectations vary with observed exogenous covariates. Overall, we find that the approximate conditional density estimator that we propose provides accurate and precise estimates of derivatives of

expected outcomes for a wide range of types of explanatory variables. Our results indicate that simple one-part OLS models of level health expenditures can provide more accurate estimates than commonly used two-part models with smearing, provided one uses enough expansion terms in the one-part model to fit the data well.

Glaeser, Edward L.

PD April 2000. **TI** The Determinants of Punishment: Deterrence, Incapacitation and Vengeance. **AU** Glaeser, Edward L.; Sacerdote, Bruce. **AA** Glaeser: Harvard University and NBER. Sacerdote: Dartmouth College and NBER. **SR** National Bureau of Economic Research Working Paper: 7676; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 16. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D63, J17, K14, K42. **KW** Murder Sentencing. Punishment. Deterrence. Criminal Sentencing.

AB Does the economic model of optimal punishment explain the variation in the sentencing of murderers? As the model predicts, we find that murderers with a high expected probability of recidivism receive longer sentences. Sentences are longest in murder types where apprehension rates are low, and where deterrence elasticities appear to be high. However, sentences respond to victim characteristics in a way that is hard to reconcile with optimal punishment. In particular, victim characteristics are important determinants of sentencing among vehicular homicides, where victims are basically random and where the optimal punishment model predicts that victim characteristics should be ignored. Among vehicular homicides, drivers who kill women get 56 percent longer sentences. Drivers who kill blacks get 53 percent shorter sentences.

Globerman, Steve

TI The Determinants of Host Country Spillovers from Foreign Direct Investment. **AU** Blomstrom, Magnus; Kokko, Ari; Globerman, Steve.

Gomes, Armando

PD March 2001. **TI** Multilateral Negotiations and Formation of Coalitions. **AA** University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/13; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 53. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** C71, C72, C78, D62. **KW** Contracts. Externalities. Renegotiation. Coalition Formation.

AB This paper studies multilateral negotiations among n players in an environment where there are externalities and where contracts forming coalitions can be written and renegotiated. The negotiation process is modeled as a sequential game of offers and counteroffers, and we focus on the stationary subgame perfect equilibria, which jointly determine both the expected value of players and the Markov state transition probability that encodes the path of coalition formation. The existence of equilibria is established, and Pareto efficiency is guaranteed if the grand coalition is efficient, despite the existence of externalities. Also, for almost all games, (except in a set of measure zero), the equilibrium is locally unique and stable, and the number of equilibria is finite

and odd. Global uniqueness does not hold in general, but a sufficient condition for global uniqueness is derived. Using this sufficient condition, we show that there is a globally unique equilibrium in three-player superadditive games. Comparative statics analysis can be easily carried out using standard calculus tools, and some new insights emerge from the investigation of the classic apex and quota games.

PD July 2001. **TI** Dynamic Processes of Social and Economic Interactions: On the Persistence of Inefficiencies. **AU** Gomes, Armando; Jehiel, Philippe. **AA** Gomes: University of Pennsylvania. Jehiel: CERAS and UCLA. **SR** University of Pennsylvania, CARESS Working Paper: 01/19; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 55. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** C73, D59, D62, D71. **KW** Dynamic Games. Multilateral Interactions. Externalities. Efficiency. Social Interactions.

AB This paper considers the efficiency and convergence properties of dynamic processes of social and economic interactions. The key general feature of the economy is that agents can implement any move from one state to another as long as a pre-specified subset of agents approve of it. We show that inefficiencies may occur even in the long run. When agents are sufficiently patient, we show that the initial state from which the process starts plays no role in the long run properties of equilibria. Also, when there exists an efficient state that is externality free (in the sense that a move away from that state does not hurt the agents whose consent is not required for the move), then the system must converge to this efficient state in the long run. Conversely, long-run efficiency can only be attained in a robust way if there exists an efficient externality-free state.

Gomez, Rafael

PD April 2001. **TI** Frustrated Demand for Unionisation: The Case of the United States and Canada Revisited. **AU** Gomez, Rafael; Lipset, Seymour Martin; Meltz, Noah. **AA** Gomez: LSE. Lipset: George Mason University. Meltz: Netanya Academic College and University of Toronto. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 492; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 10. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J51. **KW** Union Density Rates. Canada.

AB In this paper we demonstrate that there is a substantial union representation gap in the United States. We arrive at this conclusion by comparing Canadian and American worker responses to questions relating to desired union representation. We find that a majority of the gap in union density between Canada and the US is a function of greater frustrated demand on the part of American workers. We then estimate potential union density rates for the US and Canada and find that, given current levels of union membership in both countries, if effective demand for unionization among non-union workers were realized, then this would imply equivalently higher rates of unionization (37 and 36 percent in the US and Canada respectively). These results cast some doubt on the view that even minor reforms to labor legislations in the US, to bring

them in line with those in most Canadian jurisdictions, would do nothing to improve the rate of organizing success in the United States. The results also have implications for countries such as Britain who have recently moved closer to a Wagner-Act model of statutory recognition.

Goncalves, Silvia

PD March 2002. **TI** Maximum Likelihood and the Bootstrap for Nonlinear Dynamic Models. **AU** Goncalves, Silvia; White, Halbert. **AA** Goncalves: C.R.D.E, CIRANO and Universite de Montreal. White: University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/32R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. **Website:** econ.ucsd.edu/papers. **PG** 12. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C12, C15. **KW** Block Bootstrap. Quasi-Maximum Likelihood. Nonlinear Dynamic Model. Near Epoch Dependence. Wald Test.

AB We provide a unified framework for analyzing bootstrapped extremum estimators of nonlinear dynamic models for heterogeneous dependent stochastic processes. We apply our results to the moving blocks bootstrap of Kunsch (1989) and Liu and Singh (1992) and prove the first order asymptotic validity of the bootstrap approximation to the true distribution of quasi-maximum likelihood estimators. We also consider bootstrap testing. In particular, we prove the first order asymptotic validity of the bootstrap distribution of suitable bootstrap analogs of Wald and Lagrange Multiplier statistics for testing hypotheses.

Goodspeed, Timothy J.

TI Fiscal Decentralization Policies and Sub-National Government Debt in Evolving Federations. **AU** Garcia-Mila, Teresa; Goodspeed, Timothy J.; McGuire, Therese J.

Gordon, Robert J.

PD November 2000. **TI** Does the "New Economy" Measure up to the Great Inventions of the Past? **AA** Northwestern University and CEPR. **SR** CEPR Discussion Paper: 2607; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. **Website:** www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** L86, O31, O33, O49. **KW** Computers. Economic Growth. Internet. New Economy. Productivity.

AB Many observers have declared the "New Economy" to be an Industrial Revolution even more important than the Second Industrial Revolution of 1860-1900, and this Paper raises doubts about this comparison. It shows that the recent acceleration in productivity growth in the US economy can be attributed to a technological acceleration within durable manufacturing and to increased investment in computers in the rest of the economy. But there has been no acceleration of trend growth in US multi-factor productivity in the 88 percent of the economy outside of durable manufacturing. The Internet fails as a Great Invention because much of its use involves substitution of existing activities from one medium to another, because much Internet investment involves defense of market share rather than creation of something of social value, because much Internet activity duplicates existing activity like mail order catalogues, while the latter have not faded away, and

finally because much Internet activity, like daytime e-trading, involves an increase in the fraction of work time involving consumption on the job.

PD November 2000. **TI** Interpreting the "One Big Wave" in US Long-Term Productivity Growth. **AA** Northwestern University and CEPR. **SR** CEPR Discussion Paper: 2608; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. **Website:** www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** O40, O47. **KW** Capital-Input. Economic Growth. Inventions. Labor Input. Measurement.

AB This paper assesses the "one big wave" in multi-factor productivity (MFP) growth for the United States since 1870. The wave-like pattern starts with slow MFP growth in the late 19th century, then acceleration peaking in 1928-50, and then a deceleration to a slow rate after 1972 that returns to the poor performance of 1870-1891. A counterpart of the standard data is a mysterious doubling in the ratio of output to capital input when the postwar era is compared with 1870-1929. Measurement adjustments are applied to the standard input data for changes in the composition of labor and capital and for previous errors in the measurement of capital. A new MFP series taking account of all these adjustments grows more slowly throughout, and the "big wave" phenomenon is both flatter and extends back further in time to 1891. MFP growth during the 'big wave' period benefited from the diffusion of four great clusters of inventions that dwarf today's information technology revolution in their combined importance.

Gorter, Cornelis N.

TI The Treatment of Nonperforming Loans in Macroeconomic Statistics. **AU** Bloem, Adriaan M.; Gorter, Cornelis N.

Gottardi, Piero

TI Local Sunspot Equilibria Reconsidered. **AU** Davila, Julio; Gottardi, Piero; Kajii, Atsushi.

Goulder, Lawrence H.

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

Gourinchas, Pierre-Olivier

TI Consumption Over the Life-Cycle. **AU** Parker, Jonathan; Gourinchas, Pierre-Olivier.

Granger, Clive W. J.

PD January 2002. **TI** Hidden Cointegration. **AU** Granger, Clive W. J.; Yoon, Gwon. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/02; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. **Website:** econ.ucsd.edu/papers. **PG** 29. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C32, E24, E43. **KW** Hidden Cointegration. Crouching ECM. Shocks. Interest Rates. Hysteresis. Unemployment.

AB Possibly hitherto unnoticed cointegrating relationships among integrated components of data series are identified. If

the components are cointegrated, the data are said to have hidden cointegration. The implication of hidden cointegration on modeling data series themselves is discussed through what we call crouching error correction models. We show that hidden cointegration is a simple example of nonlinear cointegration. Economic examples are provided with U.S. short-term and long-term interest rates and output and unemployment, for which no evidence of standard cointegration is found.

Greenacre, Michael

PD March 2001. TI Analysis of Matched Matrices. AA Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 539; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 19. PR Papers available for free on the web; no hardcopies. JE C19, C88. KW Correspondence Analysis. ISSP. Matched Matrices. Principal Components. Singular-Value Decomposition.

AB We consider the joint visualization of two matrices which have common rows and columns, for example multivariate data observed at two time points or split according to a dichotomous variable. Methods of interest include principal components analysis for interval-scaled data, or correspondence analysis for frequency data or ratio-scaled variables on commensurate scales. A simple result in matrix algebra shows that by setting up the matrices in a particular block format, matrix sum and difference components can be visualized. The case when we have more than two matrices is also discussed and the methodology is applied to data from the International Social Survey Program.

Greene, Joshua E.

PD February 2002. TI The Output Decline in Asian Crisis Countries: Investment Aspects. AA IMF. SR International Monetary Fund Policy Working Paper: WP/02/25; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 23. PR not available. JE E22, E23, E44, F32, F41. KW Output Decline. Asian Crisis. Investment. Balance Sheet. Capital Flows.

AB This paper examines whether capital outflows may have contributed to output declines during the Asian Crisis by reducing the financing available for domestic investment. Panel data regressions suggest a positive short-term relationship between net capital inflows and investment during the period before 1997 in five Asian countries once real net capital flows are netted out from real flows of private bank credit. In addition, net real private inflows and real private investment appear to have been cointegrated in at least three of these countries, suggesting a long-term relationship as well.

TI The Impact of Cyclical Factors on the U.S. Balance of Payments. AU Kandil, Magda; Greene, Joshua E.

Greenstein, Shane

PD May 2000. TI Building and Delivering the Virtual World: Commercializing Services for Internet Access. AA Northwestern University and NBER. SR National Bureau of Economic Research Working Paper: 7690; 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 C81, L33, L86. KW Internet Industry. Service Provision.

AB This study analyzes the service offerings of Internet Service Providers (ISPs), the commercial suppliers of Internet access in the United States. It presents data on the services of 2089 ISPs in the summer of 1998. By this time, the Internet access industry had undergone its first wave of entry and many ISPs had begun to offer services other than basic access. This paper develops an Internet access industry product code that classifies these services. Significant heterogeneity across ISPs is found in the propensity to offer these services, a pattern with an unconditional urban/rural difference. Most of the explained variance in behavior arises from firm-specific factors, with only weak evidence of location-specific factors for some services. These findings provide a window to the variety of approaches taken to build viable businesses organizations, a vital structural feature of this young market.

Griffith, Rachel

PD September 2001. TI Measuring the Cost Effectiveness of an R&D Tax Credit for the UK. AU Griffith, Rachel; Redding, Stephen; Van Reenen, John. AA Griffith and Van Reenen: Institute for Fiscal Studies. Redding: LSE. SR London School of Economics, Centre for Economic Performance Discussion Paper: 509; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 34. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE H25, O32, O38, O47. KW Growth. Innovation. Research and Development. Tax Credit. Productivity.

AB This paper investigates the economic impact of the UK government's proposed new research and development (R&D) tax credit. We measure the benefit of the credit by the effect on value added in the short and long run. This is simulated from existing econometric estimates of the tax-price elasticity of R&D and the effect of R&D on productivity. For the latter we allow R&D to have an effect on technology transfer (catching up with the technological frontier) as well as innovation (pushing the frontier forward). We then compare the increase in value added to the likely exchequer costs of the program under a number of scenarios. In the long run, the increase in gross domestic product far outweighs the costs of the tax credit. The short run effect is far smaller, with value added only exceeding cost if R&D grows at or below the rate of inflation.

Grogger, Jeffrey

TI Medicaid Expansions and Welfare Contractions: Offsetting Effects on Prenatal Care and Infant Health? AU Currie, Janet; Grogger, Jeffrey.

TI The Impact of Grading Standards on Student Achievement, Educational Attainment, and Entry-Level Earnings. AU Betts, Julian R.; Grogger, Jeffrey.

Grossman, Herschel I.

PD September 2000. TI The Creation of Effective Property Rights. AA Brown University and NBER. SR National Bureau of Economic Research Working Paper: 7897; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 14. PR \$5.00. JE D23, D51, D74. KW Property Rights. Resource Allocation. Common Resources.

AB Traditionally, general equilibrium models have taken effective property rights to be given, and have been concerned only with analyzing the allocation of resources among productive uses and the distribution of the resulting product. But this formation of the economic problem is incomplete, because it neglects that the appropriative activities by which people create the effective property rights that inform allocation and distribution are themselves an alternative use of scarce resources. This paper develops two canonical general equilibrium models of resource allocation and income distribution that allow for the allocation of time and effort to the creation of effective property rights to valuable resources. In one model the valuable resources are initially in a common pool. In the other model agents initially have nonoverlapping claims to the valuable resources. For both models the analysis reveals how the amount of time and effort that agents allocate to the creation of effective property rights, rather than to production, depends on the environment for creating effective property rights, on the technology of production, and on the scale of the economy. The paper also analyzes the security of initial claims to valuable resources and speculates about why initial claims sometimes are perfectly secure.

PD September 2000. **TI** Inventors and Pirates: Creative Activity and Intellectual Property Rights. **AA** Brown University and NBER. **SR** National Bureau of Economic Research Working Paper: 7898; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** O31, O34. **KW** Intellectual Property. Property Rights. Creative Activity.

AB This paper analyzes how both the value of ideas created as well as the security of intellectual property rights result from the choices of potentially creative people either to engage in creative activity or to be pirates, and from decisions of people who are engaged in creative activity to allocate time and effort to the guarding of ideas from pirating. An important result is that, although the existence of a small number of geniuses causes a larger fraction of potentially creative people to choose to be pirates and, consequently, makes intellectual property rights less secure, the existence of a small number of geniuses, holding fixed the average level of talent, can result in a larger value of ideas being created. The paper also recognizes the difference between the private value and the social value of the security of intellectual property rights.

Gruber, Jonathan

TI Social Security Incentives for Retirement. **AU** Coile, Courtney; Gruber, Jonathan.

Gual, Jordi

PD November 1999. **TI** Deregulation, Integration and Market Structure in European Banking. **AA** Universidad de Navarra. **SR** CEPR Discussion Paper: 2288; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F36, G21, L51, L52. **KW** Banking. European Banking. Deregulation. Market Integration.

AB This paper analyzes the impact of deregulation and market integration policies on the structure of European banking markets. It argues that whether European integration will lead to large increases in European Union (EU)-wide concentration will depend on the extent to which competition

in banking is based on endogenous sunk costs or, alternatively, on variable costs and exogenous sunk costs. The paper also highlights the role of own funds as a source of endogenous increasing returns. Finally, it proposes an empirical test of the dominant form of competition. This procedure is applied to data for eleven EU countries during the period 1981-1995.

Guell, Maia

PD August 2001. **TI** Fixed-Term Contracts and the Duration Distribution of Unemployment. **AA** University of Pompeu Fabra. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 505; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 30. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C41, J63, J64. **KW** Cross-Sectional Data. Duration Models. Turnover. Unemployment.

AB In the mid-1980s, many European countries introduced fixed-term contracts. Since then their labor markets have become more dynamic. This paper studies the implications of such reforms for the duration distribution of unemployment, with particular emphasis on the changes in the duration dependence. I estimate a parametric duration model using cross-sectional data drawn from the Spanish Labor Force Survey from 1980 to 1994 to analyze the chances of leaving unemployment before and after the introduction of fixed-term contracts. I find that duration dependence has increased since such reform. Semi-parametric estimation of the model also shows that for long spells, the probability of leaving unemployment has decreased since such reform.

Gugerty, Mary Kay

PD September 2000. **TI** Outside Funding of Community Organizations: Benefiting or Displacing the Poor? **AU** Gugerty, Mary Kay; Kremer, Michael. **AA** Gugerty: Harvard University. Kremer: Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7896; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 10. **PR** \$5.00. **JE** J16, O12, O15, O19, Z13. **KW** Social Capital. Community Organizations. Kenya. Development Assistance.

AB In response to the widespread consensus on the importance of social capital, and to concerns about the scarcity of institutions giving voice to disadvantaged groups, some donors have begun programs designed to strengthen indigenous community organizations. We use a prospective, randomized evaluation to examine a development program explicitly targeted at building social capital among rural women's groups in western Kenya. The program increased turnover among group members. It increased entry into group membership and leadership by younger, more educated women, by women employed in the formal sector, and by men. The analysis suggests that providing development assistance to indigenous community organizations of the disadvantaged may change the very characteristics of these organizations that made them attractive to outside funders.

Guiso, Luigi

PD September 2000. **TI** Household Portfolios in Italy. **AU** Guiso, Luigi; Jappelli, Tullio. **AA** Guiso: Ente Luigi Einaudi, Roma and CEPR. Jappelli: Università di Salerno.

SR CEPR Discussion Paper: 2549; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D82, D83, E21, G11. **KW** Diversification. Information. Portfolio Choice. Portfolio Mobility.

AB We provide a detailed account of the portfolio of Italian households and its evolution, using repeated cross-sectional and panel data drawn from the 1989-95 Bank of Italy Survey of Household Income and Wealth. We offer an in-depth description of the lifetime pattern of asset holdings and their composition, the degree of asset diversification, and the propensity to invest in risky assets. The data also allow us to address some more fundamental issues on the determinants of household portfolios. We look at portfolio mobility and elaborate on the relevance of entry and exit costs. We also provide new evidence on the effect of income risk and information acquisition on portfolio choice.

PD November 1999. **TI** Information Spillover and Factor Adjustment. **AU** Guiso, Luigi; Schivardi, Fabiano. **AA** Guiso: Ente Einaudi and Universita di Sassari. Schivardi: Banca D'Italia. **SR** CEPR Discussion Paper: 2289; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** D21, D83, E32, L15, L60. **KW** Information Spillovers. Factor Adjustment. Business Cycle. Social Learning.

AB We investigate the role of information spillovers (IS) in determining firms' labor adjustments. We test the proposition that information on relevant state variables spills over through one firm's decision, to affect those of other firms. Our test is based on the assumption that spillovers matter only among firms that are both similar and geographically close. Using a large panel of manufacturing firms, we identify those that are located in a given industrial district and produce the same goods as satisfying both criteria. We propose a solution to the identification problem typical of the empirical analysis of social effects. Our results show that firms' decisions are indeed affected by those of similar, neighboring firms, while the actions of firms not satisfying either of the criteria have no impact. We test other implications of the theory and find further supporting evidence of the relevance of IS. Finally, given that firms exposed to IS tend to adjust simultaneously, we find that spillovers amplify the effect of aggregate shocks and constitute a powerful mechanism of amplification of the business cycle.

Gulde, Anne-Marie

TI Banking Crises and Bank Resolution: Experiences in Some Transition Economies. **AU** Enoch, Charles; Gulde, Anne-Marie; Hardy, Daniel.

Guner, Nezih

PD May 2000. **TI** Marriage, Fertility and Divorce: A Dynamic Equilibrium Analysis of Social Policy in Canada. **AU** Guner, Nezih; Knowles, John. **AA** Guner: Pennsylvania State University. Knowles: University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/21; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 27. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** D31, I32, J12, J13, J16. **KW** Income Distribution.

Marriage. Family Structure. Fertility. Canada.

AB In this paper, we propose an answer to the following question: if Canada had adopted a social policy similar to that which prevailed until recently in the U.S., would Canada's income distribution and rate of single-parenthood have looked more like those of the U.S.? Our answer is based on simulations of the Canadian economy under the two alternate social policies, and thus rules out noise from other variations between the two policy regimes. We find that U.S.-style transfer policies can indeed account for most of the higher rate of single-parenthood in the U.S. The Canadian policy is also more effective in alleviating poverty: the poorest 20 percent of the population are significantly worse off under the U.S. policy.

TI Love and Money: A Theoretical and Empirical Analysis of Household Sorting and Inequality. **AU** Fernandez, Raquel; Guner, Nezih; Knowles, John.

TI The Timing of Births: A Marriage Market Analysis. **AU** Caucutt, Elizabeth M.; Guner, Nezih; Knowles, John.

Gyorfi, Laszlo

TI A Note on Robust Detection. **AU** Devroye, Luc; Gyorfi, Laszlo; Lugosi, Gabor.

PD September 2000. **TI** Strategies for Sequential Prediction of Stationary Time Series. **AU** Gyorfi, Laszlo; Lugosi, Gabor. **AA** Gyorfi: Technical University of Budapest. Lugosi: Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 507; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 27. **PR** Papers available for free on the web; no hardcopies. **JE** C13, C14. **KW** Sequential Prediction. Ergodic Process. Individual Sequence. Gaussian Process.

AB We present simple procedures for the prediction of a real valued sequence. The algorithms are based on a combination of several simple predictors. We show that if the sequence is a realization of a bounded stationary and ergodic random process then the average of squared errors converges, almost surely, to that of the optimum, given by the Bayes predictor. We offer an analog result for the prediction of stationary Gaussian processes.

Gyourko, Joseph

TI The Asset Price Incidence of Capital Gains Taxes: Evidence from the Taxpayer Relief Act of 1997 and Publicly-Traded Real Estate Firms. **AU** Sinai, Todd; Gyourko, Joseph.

Haacker, Markus

PD February 2002. **TI** The Economic Consequences of HIV/AIDS in Southern Africa. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/38; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 40. **PR** not available. **JE** H51, H55, I10, I21, O55. **KW** HIV. AIDS. Health. Growth. Africa.

AB The paper provides an analysis of the impact of HIV/AIDS on the health sector, public education, supply of labor, and the returns to training in nine Southern African countries. Drawing on the preceding sections, it assesses the impact of HIV/AIDS on per capita income in a neoclassical growth framework. HIV/AIDS affects per capita income mainly through its impact on human capital, as measured by the supply

of experienced workers. Other factors include the impact on capital accumulation, on education, and on total factor productivity.

Habib, Michel

PD September 2000. **TI** Firm Value and Managerial Incentives: A Stochastic Frontier Approach. **AU** Habib, Michel; Ljungqvist, Alexander P. **AA** Habib: London Business School. Ljungqvist: New York University and CEPR. **SR** CEPR Discussion Paper: 2564; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** G32. **KW** Equity Incentives. Principal-Agent Problem. Firm Control. Managerial Incentives. Firm Value.

AB We examine the relation between firm value and managerial incentives in a sample of 1487 U.S. firms in 1992-1997, for which the separation of ownership and control is complete. We employ a measure of relative performance which compares a firm's actual Tobin's Q to the Q* of a hypothetical fully efficient firm having the same inputs and characteristics as the original firm. We find that the Q of the average firm in our sample is around 10% lower than its Q*, equivalent to a \$1340 million reduction in its potential market value. We investigate what causes firms to fail to reach their Q* and find that the higher the stock holdings and option holdings of the Chief Executive Officer (CEO), and the more sensitive CEO options are to firm risk, the more efficient the firm. We also show that boards respond to inefficiency by subsequently strengthening incentives or replacing inefficient CEOs.

Haefke, Christian

TI Shocks and Institutions in a Job Matching Model. **AU** den Haan, Wouter J.; Haefke, Christian; Ramey, Garey.

Hahn, Robert W.

TI National Environmental Policy During the Clinton Years. **AU** Cavanagh, Sheila M.; Hahn, Robert W.; Stavins, Robert N.

Hakura, Dalia S.

TI Exchange Rate Pass-Through to Domestic Prices: Does the Inflationary Environment Matter? **AU** Choudhri, Ehsan U.; Hakura, Dalia S.

Haldane, Andrew

TI UK Phillips Curves and Monetary Policy. **AU** Quah, Danny T.; Haldane, Andrew.

Hall, Bronwyn H.

PD April 2000. **TI** Universities as Research Partners. **AU** Hall, Bronwyn H.; Scott, John T.; Link, Albert N. **AA** Hall: UC Berkeley and NBER. Scott: Dartmouth College. Link: University of North Carolina at Greensboro. **SR** National Bureau of Economic Research Working Paper: 7643; 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** O32, O38. **KW** Universities. Innovation. Research Partners.

AB Universities are a key institution in the U.S. innovation system, and an important aspect of their involvement is the role they play in private-public partnering activities. This study

seeks to gain a better understanding of the performance of university-industry research partnerships using a sample survey of pre-commercial research projects funded by the U.S. government's Advanced Technology Program (ATP). Although results must be interpreted cautiously due to the small size of the sample, the study finds that projects with university involvement tend to be in areas involving "new" science and therefore experience more difficulty and delay, but also are more likely not to be aborted prematurely. We interpret this finding to imply that universities are contributing to basic research awareness and insight among the partners in ATP-funded projects.

Hallin, Marc

TI The Generalized Dynamic Factor Model: Identification and Estimation. **AU** Forni, Mario; Lippi, Marc; Reichlin, Lucrezia; Hallin, Marc.

Hamilton, James D.

PD October 2000. **TI** A Re-Examination of the Predictability of Economic Activity Using the Yield Spread. **AU** Hamilton, James D.; Kim, Dong Heon. **AA** Hamilton: University of California, San Diego and NBER. Kim: University of Manchester. **SR** National Bureau of Economic Research Working Paper: 7954; 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** E32, E37, E43. **KW** Yield Spread. Term Premium. Interest Rate Volatility.

AB This paper revisits the yield spread's usefulness for predicting future real GDP growth. We show that the contribution of the spread can be decomposed into the effect of expected future changes in short rates and the effect of the term premium. We find that both factors are relevant for predicting real GDP growth but the respective contributions differ. We investigate whether the cyclical behavior of interest rate volatility could account for either or both effects. We find that while volatility displays important correlations with both the term structure of interest rates and GDP, it does not appear to account for the yield spread's usefulness for predicting GDP growth.

PD July 2001. **TI** Oil Shocks and Aggregate Macroeconomic Behavior: The Role of Monetary Policy. **AU** Hamilton, James D.; Herrera, Ana Maria. **AA** Hamilton: University of California, San Diego. Herrera: Michigan State University. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/10; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 17. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** E32, E52. **KW** Oil Shocks. Monetary Policy.

AB A recent paper by Bernanke, Gertler and Watson (1997) suggests that monetary policy could be used to eliminate any recessionary consequences of an oil price shock. This paper challenges that conclusion on two grounds. First, we question whether the Federal Reserve actually has the power to implement such a policy; for example, we consider it unlikely that additional money creation would have succeeded in reducing the Fed funds rate by 900 basis points relative to the values seen in 1974. Second, we point out that the size of the effect that Bernanke, Gertler and Watson attribute to oil shocks

is substantially smaller than that reported by other researchers, primarily due to their choice of a shorter lag length than used by other researchers. We offer evidence in favor of the longer lag length employed by previous research, and show that, under this specification, even the aggressive Federal Reserve policies proposed would not have succeeded in averting a downturn.

Hammour, Mohamad L.

TI The Cost of Recessions Revisited: A Reverse-Liquidationist View. **AU** Caballero, Ricardo J.; Hammour, Mohamad L.

Han, Song

PD April 2000. **TI** Human Capital, Heterogeneity, and Estimated Degrees of Intergenerational Mobility. **AU** Han, Song; Mulligan, Casey B. **AA** Han: University of Mississippi. Mulligan: University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7678; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 39. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E21, J24, J62. **KW** Intergenerational Mobility. Human Capital Inheritance. Inheritance. Parental Investment. Ability.

AB Some of the important implications of the parental investment model of intergenerational mobility have been derived under the assumption that parental income is the main source of heterogeneity. We explicitly model the variability and inheritability of "innate" earnings ability and the variability of tastes, showing how they affect observed degrees of intergenerational consumption and earnings mobility. Heterogeneity increases the difficulty of detecting the existence of borrowing constrained families. Conversely, the presence of heterogeneity means that economic and linear statistic models of inheritance generate similar intergenerational data on consumption and earnings. In this sense, our findings offer some support for Goldberger's (1989) criticism of human capital models of inheritance. Finally, we suggest that any cross-country differences in intergenerational earnings mobility are more readily interpreted according to the heterogeneity of inherited ability, rather than optimal family responses to country-specific institutions for accumulating human capital.

Hansen, Christian

TI An IV Model of Quantile Treatment Effects. **AU** Chernozhukov, Victor; Hansen, Christian.

TI Inference for Distributional Effects Using Instrumental Quantile Regression. **AU** Chernozhukov, Victor; Hansen, Christian.

Hao, Lingxin

PD April 2000. **TI** Games Daughters and Parents Play: Teenage Childbearing, Parental Reputation, and Strategic Transfers. **AU** Hao, Lingxin; Hotz, V. Joseph; Jin, Ginger Zhe. **AA** Hao: Johns Hopkins University. Hotz: University of California, Los Angeles and NBER. Jin: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 7670; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 39. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** C73, J13. **KW** Reputation. Teenage Childbearing. Parental Transfers.

AB In this paper, we examine the empirical implications of reputation formation using a game-theoretic model of intra-familial interactions. We consider parental reputation in repeated two-stage games which model daughters' decisions to have a child as a teenager and the willingness of parents to continue to house and support their daughters given their decisions. Drawing upon previous work on reputation in repeated games, we show that parents have, under certain conditions, the incentive to penalize teenage childbearing of older daughters in order to get younger daughters to avoid teenage childbearing. The two key empirical implications of this model are that both the likelihood of teenage childbearing and parental transfers to a daughter who had a teen birth will decrease with the number of the daughter's sisters at risk. We test these implications using data from the National Longitudinal Survey of Youth, 1979 Cohort. Controlling for daughter- and family- specific fixed effects, we find evidence of differential parental financial transfer responses to teenage childbearing by the number of the daughter's sisters and brothers at risk.

Hardy, Daniel

TI Banking Crises and Bank Resolution: Experiences in Some Transition Economies. **AU** Enoch, Charles; Gulde, Anne-Marie; Hardy, Daniel.

Hart, Oliver

PD October 1999. **TI** On the Design of Hierarchies: Coordination Versus Specialization. **AU** Hart, Oliver; Moore, John. **AA** Hart: Harvard University and London School of Economics and Political Science. Moore: London School of Economics and Political Science and University of St. Andrews. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/99/375; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 56. **PR** no charge. **JE** D23, L22. **KW** Firm Organization. Hierarchies. Coordination. Specialization. Authority Allocation.

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.

Hau, Harald

PD January 2000. **TI** Real Exchange Rate Volatility and Economic Openness: Theory and Evidence. **AA** ESSEC. **SR** CEPR Discussion Paper: 2356; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F31, F36, F41. **KW** Real Exchange Rates. Volatility. Nontradeables. Exchange Rates. Openness.

AB This paper relates the volatility of the (trade-weighted) effective real exchange rate to the degree of trade openness of

an economy. The theoretical part presents an intertemporal monetary model with nominal labor (factor) market rigidities. Both monetary and aggregate supply shocks are shown to imply a (non-linear) inverse relationship between the import share of an economy and the volatility of its real exchange rate. Empirical evidence on a cross-section of 54 countries confirms this relationship: Difference in trade openness explains a large part of the cross-country variation in the volatility of the effective real exchange rate.

PD November 1999. **TI** Information and Geography: Evidence from the German Stock Market. **AA** ESSEC. **SR** CEPR Discussion Paper: 2297; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** F21, F36, G14, G15. **KW** Trading Profits. Financial Markets. Home Bias. German Stock Market. Information Advantage.

AB The electronic trading system Xetra of the German Security Exchange provides a unique data source on the equity trades of 451 large traders located in 23 different cities in 8 European countries. We explore informational asymmetries across the trader population. We find that traders located outside Germany in non-German speaking cities show lower proprietary trading profits. Their underperformance is not only statistically significant, it is also of economically significant magnitude and occurs for large blue chip stocks. We also examine if a trader location in Frankfurt as the financial center, or local proximity of the trader to the corporate headquarter of the traded stock, or affiliation with a large financial institution results in superior trading performance. The data provides no evidence for a "financial center advantage." But the data show decreasing "institutional scale economies" and an information advantage due to corporate headquarter proximity for high frequency (intra-day) trading.

Heady, Christopher

TI Child Farm Labour: Theory and Evidence. **AU** Bhalotra, Sonia; Heady, Christopher.

Heckman, James

PD October 2000. **TI** Simple Estimators for Treatment Parameters in a Latent Variable Framework with an Application to Estimating the Returns to Schooling. **AU** Heckman, James; Tobias, Justin L.; Vytlacil, Edward. **AA** Heckman: University of Chicago. Tobias: University of California, Irvine. Vytlacil: Stanford University. **SR** National Bureau of Economic Research Working Paper: 7950; 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** C13, C34, I21. **KW** Latent Variables. Treatment Parameters.

AB This paper derives simply computed closed-form expressions for the Average Treatment Effect (ATE), the effect of Treatment on the Treated (TT), Local Average Treatment Effect (LATE) and Marginal Treatment Effect (MTE) in a latent variable framework for both normal and non-normal models. The techniques presented in the paper are applied to estimating a variety of treatment parameters capturing the returns to a college education for various populations using data from the National Longitudinal Survey of Youth (NLSY).

Hefeker, Carsten

TI Optimal Central Bank Conservatism and Monopoly Trade Unions. **AU** Berger, Helge; Hefeker, Carsten; Schob, Ronnie.

Heller, Peter S.

TI Pension Reform and the Fiscal Policy Stance. **AU** Mackenzie, G. A.; Gerson, Philip; Cuevas, Alfredo; Heller, Peter S.

Herrera, Ana Maria

TI Oil Shocks and Aggregate Macroeconomic Behavior: The Role of Monetary Policy. **AU** Hamilton, James D.; Herrera, Ana Maria.

Hersh, Robert

PD September 2001. **TI** Gauging the Vulnerability of Local Water Utilities to Extreme Weather Events. **AU** Hersh, Robert; Wernstedt, Kris. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/33; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 23. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** L95, Q25. **KW** Water Utilities. Extreme Events. Environmental Planning. Climate Variability. Adaptation.

AB Water utilities that rely on surface water may be vulnerable to future droughts and floods; this vulnerability may be magnified by climate perturbations as well as by shorter-term and, in some cases, ongoing changes in the political and regulatory environment in which utilities operate. Unfortunately, day-to-day responsibilities currently occupy most utility operators, leaving little time to plan for inherently uncertain effects. The record of actual responses to past droughts and floods can be illuminating, however, particularly when placed in the context of plausible hydrologic and institutional disruptions. This paper draws on interviews of water utility operators in the northwestern U.S. to highlight opportunities and constraints that water utilities may face vis-a-vis such disruptions. Key considerations affecting vulnerabilities include water rights, institutional barriers to efficient utility operations, hazards management policy, and the fiscal status of utilities.

TI When ENSO Reigns, it Pours: Climate Forecasts in Flood Planning. **AU** Wernstedt, Kris; Hersh, Robert.

Heytens, Paul

PD November 2001. **TI** An Attempt to Profile the Finances of China's Enterprise Sector. **AU** Heytens, Paul; Karacadag, Cem. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/182; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 18. **PR** not available. **JE** G14, G21, G32. **KW** China. Banking.

AB This paper examines the leverage, efficiency, and debt-repayment capacity of the Chinese enterprise sector using aggregate and firm level data. The cash coverage of interest expense, in particular, is used as a bridge between enterprise finances and banks' asset quality in order to develop insights on banking soundness. The interest coverage analysis corroborates the high level of nonperforming loans in the financial system. This underscores the urgency of hardening budget constraints

on state-owned enterprises and stemming the flow of new bad loans by accelerating ongoing structural reforms.

Hobijn, Bart

PD May 2000. **TI** The Information Technology Revolution and the Stock Market: Evidence. **AU** Hobijn, Bart; Jovanovic, Boyan. **AA** Hobijn: New York University. Jovanovic: New York University and NBER. **SR** National Bureau of Economic Research Working Paper: 7684; 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** G12, G19, O33. **KW** Information Technology. Capitalization. Stock Market Capitalization.

AB Since 1968, the ratio of stock market capitalization to gross domestic product (GDP) has varied by a factor of 5. In 1972 the ratio stood at above unity, but by 1974 it had fallen to 0.45, where it stayed for the next decade. It then began a steady climb, and today it stands above 2. We argue that the information technology (IT) revolution was behind this and, moreover, that the capitalization/GDP ratio is likely to decline and then rise after any major technological shift. The three assumptions that deliver these results are: 1. The IT revolution was anticipated by early 1973; 2. IT was resisted by incumbents, which caused their value to fall; and 3. Takeovers are an imperfect policing device that allowed many firms to remain inefficient until the mid-1980's. We lay out some facts that the IT hypothesis explains, but that some alternative hypotheses -- oil-price shocks, increased market volatility, and bubbles -- do not.

Hodrick, Robert J.

PD April 2000. **TI** Evaluating the Specification Errors of Asset Pricing Models. **AU** Hodrick, Robert J.; Zhang, Xiaoyan. **AA** Hodrick: Columbia Business School and NBER. Zhang: Columbia Business School. **SR** National Bureau of Economic Research Working Paper: 7661; 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** E21, E32, G11, G12. **KW** CAPM. Asset Pricing.

AB This paper examines the specification errors of several asset pricing models using the methodology of Hansen and Jagannathan (1997) and a common data set. The models are the capital asset pricing model (CAPM), the Consumption CAPM, the Jagannathan and Wang (1996) conditional CAPM, the Campbell (1996) dynamic asset pricing model, the Cochrane (1996) production-based model, and the Fama-French (1993) three-factor and five-factor models. We use returns on the Fama-French twenty-five portfolios sorted by size and book-to-market ratio and the risk-free rate as our test assets. We allow the parameters of the models' pricing kernels to fluctuate with the business cycle, which we measure in two ways. While we cannot reject correct pricing for Campbell's model, a stability test indicates that the parameters may not be stable. None of the models correctly prices returns that are scaled by the term premium.

Hoerberichts, Marco

TI A Theory of Central Bank Accountability. **AU** Eijffinger, Sylvester; Schaling, Eric; Hoerberichts, Marco.

Hoffmaister, Alexander W.

TI The Credit Crunch in East Asia: What Can Bank Excess Liquid Assets Tell Us? **AU** Agenor, Pierre-Richard; Aizenman, Joshua; Hoffmaister, Alexander W.

Hoffmann, Sandra A.

TI Redesigning Food Safety: Using Risk Analysis to Build a Better Food Safety System. **AU** Taylor, Michael R.; Hoffmann, Sandra A.

TI A Neglected Interdependency in Liability Theory: Bilateral Accidents Where One Party's Precaution Shifts the Other's Cost of Care. **AU** Dharmapala, Dhammika; Hoffmann, Sandra A.; Schwartz, Warren F.

Hong, Han

TI Likelihood Inference in a Class of Non-Regular Econometric Models. **AU** Chernozhukov, Victor; Hong, Han.

Hong, Harrison

TI Forecasting Crashes: Trading Volume, Past Returns and Conditional Skewness in Stock Prices. **AU** Chen, Joseph; Hong, Harrison; Stein, Jeremy C.

Hopkins, R.

TI The Economics of Non-Governmental Organisations. **AU** Scott, C. D.; Hopkins, R.

Horn, Henrik

PD November 1999. **TI** The Equilibrium Ownership of an International Oligopoly. **AU** Horn, Henrik; Persson, Lars. **AA** Horn: World Trade Organization. Persson: Research Institute of Industrial Economics. **SR** CEPR Discussion Paper: 2302; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** F23, G34, L13. **KW** International Mergers. Tariff Jumping. Foreign Direct Investment. Trade Costs. Mergers.

AB Mergers and acquisitions (M&A) is the dominant form of Foreign Direct Investment (FDI), but has received only scarce attention in the theory literature on trade and investment. This paper highlights how the international pattern of ownership of productive assets may depend on features of trade and production costs. It suggests how high trade costs may be conducive to national ownership of assets, while international firms may arise at lower trade costs, contrary to what the "tariff jumping" argument would suggest. It also shows how private and social incentives for M&A may differ for weak merger synergies, but converge when synergies are stronger.

TI Is the Use of the WTO Dispute Settlement System Biased? **AU** Mavroidis, Petros C.; Nordstrom, H.; Horn, Henrik.

Horsley, Anthony

PD June 2000. **TI** The Short-Run Approach to LRMC Pricing for Multiple Outputs with Nondifferentiable Costs. **AU** Horsley, Anthony; Wrobel, Andrew J. **AA** London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/00/393;

STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 18. **PR** no charge. **JE** D24, D46, D58, L94. **KW** Wong-Viner Theorem. Multiple Outputs. Pricing. Energy Storage. Storage.

AB Using convex calculus, we extend the Wong-Viner Theorem to nondifferentiable costs by equating the capital inputs' rental prices to their profit-imputed marginal values. Thus extended, the short-run approach to long-run marginal cost (LRMC) pricing is applied to peak-load pricing with storage.

PD November 2000. **TI** Efficiency Rents of Pumped-Storage Plants and their Uses for Operation and Investment Decisions. **AU** Horsley, Anthony; Wrobel, Andrew J. **AA** London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/00/405; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 36. **PR** no charge. **JE** C61, D24, D46, L94, L95. **KW** Storage. Peak-Load Pricing. Rental Valuation. Linear Programming. Shadow Price.

AB We apply duality methods of linear and convex programming to the problems of operation and rental valuation of facilities for conversion and storage of cyclically priced goods, e.g., energy. Both problems are approached by shadow-pricing the stock (which is a purely intermediate commodity); if the given market price p for the final good is a continuous function of time, then the stock's shadow price function is shown to be unique and continuous. Therefore, despite being perfect Allen-Hicks complements, the plant's capacities have definite and separate marginal values, which are expressed in terms of the shadow price function (and p). In particular, the unit reservoir rent equals the total positive variation of the shadow price function over the cycle. The optimal storage policy is also given in terms of the shadow price function (and p). The marginal capacity values are used to determine the optimum investment. The framework can accommodate related storage problems, such as hydroelectric generation.

PD May 2001. **TI** Continuity of the Equilibrium Price Density and its Uses in Peak-Load Pricing. **AU** Horsley, Anthony; Wrobel, Andrew J. **AA** London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/01/417; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 51. **PR** no charge. **JE** D51, D58, L94. **KW** Price Density. Peak-Load Pricing. Pumped Storage.

AB With L -infinity as the commodity space, the equilibrium price density is shown to be a continuous function of the commodity characteristics. The result is based on symmetry ideas from the Hardy-Littlewood-Polya theory of rearrangements, and it includes, but is not limited to, the case of symmetric (rearrangement-invariant) production costs and additively separable consumer utility. For continuous-time peak-load pricing of, for example, electricity, this allows the inclusion of storage and of cross-price dependent demands. In this context a continuously varying price has two uses. First, it excludes the demand jumps that arise from discontinuous

switches from one price rate to another. Second, in the operation and valuation of hydroelectric and pumped-storage plants (studied elsewhere), price continuity guarantees that their capacities (viz., the reservoir and the converter), the energy stocks, and, in the case of hydro also the river flows, have well-defined marginal values.

PD October 1999. **TI** The Density Form of Equilibrium Prices in Continuous Time and Boiteux's Solution to the Shifting-Peak Problem. **AU** Horsley, Anthony; Wrobel, Andrew J. **AA** London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/99/371; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 28. **PR** no charge. **JE** C62, D51. **KW** Price Density. Peak-Loading Pricing.

AB Bewley's condition on production sets, imposed to ensure the existence of an equilibrium price density when L -infinity is the commodity space, is weakened to allow applications to continuous-time problems, and especially to peak-load pricing when the users' utility and production function are Mackey continuous. A general form of the production sets with the required property is identified, and examples are given of technologies that meet the weakened but not the original condition -- these include industrial use and storage of cyclically priced goods. General equilibrium results are supplemented by results for prices supporting individual consumer or producer optima. Also, to make clear the restriction implicit in Mackey continuity, we interpret it as interruptibility of demand, and we point out that without this assumption the equilibrium can feature pointed peaks with singular, instantaneous capacity charges.

PD October 1999. **TI** Efficiency Rents of Storage Plants in Peak-Load Pricing, II: Hydroelectricity. **AU** Horsley, Anthony; Wrobel, Andrew J. **AA** London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/99/372; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 86. **PR** no charge. **JE** C61, D24, D46, L94, L95. **KW** Storage. Rental Valuation. Peak-Loading Pricing. Linear Programming. Hydroelectricity.

AB We apply duality methods of linear and convex programming to impute definite marginal values to the fixed inputs of a hydroelectric plant from the operating profit. In this paper, our earlier analysis of pumped storage is extended to valuation of an external inflow to the reservoir. Given a continuous time-of-use price for electricity, the profit-imputed hydro values are uniquely determined. Evaluation of profit-imputed rents is shown to be useful not only to a profit-maximizing industry, but also to a public utility aiming to price its outputs at long-run marginal cost and to optimize its capital stock on the basis of purely short-run calculations. In addition we verify the production set properties that are needed to incorporate such a storage problem into a continuous-time model of general competitive equilibrium, with the space of bounded functions of time as the commodity space.

Hotz, V. Joseph

TI Games Daughters and Parents Play: Teenage Childbearing, Parental Reputation, and Strategic Transfers. **AU** Hao, Lingxin; Hotz, V. Joseph; Jin, Ginger Zhe.

Hourcade, Jean-Charles

PD December 2001. **TI** The Economics of a Lost Deal. **AU** Hourcade, Jean-Charles; Gherzi, Frederic. **AA** CIRED and Resources for the Future. Gherzi: Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/48; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 24. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D74, D78, D81, Q25, Q28. **KW** Climate Negotiations. Carbon Markets. Abatement Costs. Kyoto Protocol. Environmental Policy.

AB This paper examines compromise spaces between competing perspectives on four key climate change issues: costs, level of domestic action, environmental integrity, and developing world involvement. Based on extensive simulations of a model integration tool, SAP12 (Stochastic Assessment of Climate Policies, 12 models), the analysis considers options for fine-tuning the Kyoto Protocol, such as concrete ceilings or levies on carbon imports, restoration payments to be made on excess emissions, credits for sequestration activities in Annex B countries, and others. It shows the critical importance of the baseline against which the performance of each tool has to be assessed in the absence of direct economic penalties for noncompliance. The restoration payment option (also known as a safety valve) emerges as a superior means of addressing the core policy issues, including environmental integrity, and provides a large compromise space between payments of \$35 to \$100 per ton of carbon.

Hubbard, R. Glenn

TI Entrepreneurship and Household Saving. **AU** Gentry, William M.; Hubbard, R. Glenn.

TI The Effect of the Tax Reform Act of 1986 on the Location of Assets in Financial Services Firms. **AU** Altshuler, Rosanne; Hubbard, R. Glenn.

Huizinga, H.

PD December 1999. **TI** Market Discipline and Financial Safety Net Design. **AU** Huizinga, H.; Demirguc-Kunt, A. **AA** Huizinga: CentER and Tilburg University. Demirguc-Kunt: World Bank. **SR** CEPR Discussion Paper: 2311; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** E43, G21, G28. **KW** Market Discipline. Deposit Insurance. Bank Risk.

AB We investigate whether the financial safety net reduces market discipline on bank risk taking. For countries with varying deposit insurance schemes, we find that deposit rates continue to reflect bank riskiness. Cross-country evidence suggests that explicit deposit insurance reduces required deposit interest rates at a cost of reduced market discipline. Internationally, deposit insurance schemes vary widely in their coverage, funding, and management. Hence, there are widely differing views on how deposit insurance should optimally be structured. To inform this debate, we use a newly constructed data set of deposit insurance design features to examine how

different design features affect deposit interest rates and market discipline.

Hunt, Benjamin

PD November 2001. **TI** The Zero Interest Rate Floor (ZIF) and its Implications for Monetary Policy in Japan. **AU** Hunt, Benjamin; Laxton, Douglas. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/186; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 32. **PR** not available. **JE** E31, E52, E58, E61. **KW** Monetary Policy. Liquidity Trap. Potential Output. Uncertainty. Japan.

AB This paper uses the International Monetary Fund's macroeconomic model MULTIMOD to examine the implications of the zero-interest-rate floor (ZIF) for the design of monetary policy in Japan. Similar to findings in other studies, targeting rates of inflation lower than 2.0 percent significantly increases the likelihood of the ZIF becoming binding. Systematic monetary policy strategies that respond strongly to stabilize output and inflation, or that incorporate some explicit price-level component, can help to mitigate the implications of the ZIF.

Inchauste, Gabriela

TI Financial Crises, Poverty, and Income Distribution. **AU** Baldacci, Emanuele; de Mello, Luiz; Inchauste, Gabriela.

Ioannides, Yannis

PD November 2000. **TI** Spatial Evolution of the US Urban System. **AU** Ioannides, Yannis; Overman, Henry G. **AA** Ioannides: Tufts University. Overman: CEP and CEPR. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 482; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 34. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C14, J11, R11, R15, R23. **KW** Urban Growth. Wage Distribution. Spatial Evolution.

AB We test implications of economic geography models for location, size, and growth of cities with US Census data for 1900-1990. Our tests involve non-parametric estimations of stochastic kernels for the distributions of city sizes and growth rates, conditional on various measures of market potential and on features of neighbors. We show that while these relationships change during the twentieth century, by 1990 they stabilize such that the size distribution of cities conditional on a range of spatial variables are all roughly independent of these conditioning variables. In contrast, similar results suggest that there is a spatial element to the city wage distribution. We give parametric estimations for the effects of market potential, entry of neighbors, and own lagged population on growth rates. Cities grow faster when they are small relative to their market potential. In total, our results support some theoretical predictions, but also provide a number of interesting puzzles.

TI Cross Sectional Evolution of the US City Size Distribution. **AU** Overman, Henry G.; Ioannides, Yannis.

TI Zipfs Law for Cities: An Empirical Examination. **AU** Overman, Henry G.; Ioannides, Yannis.

Ivaschenko, Iryna V.

TI The Corporate Spread Curve and Industrial Production in the United States. **AU** Chan-Lau, Jorge A.; Ivaschenko, Iryna V.

Iwata, Shigeru

PD January 2002. **TI** Sources of Economic Growth in East Asia: A Nonparametric Assessment. **AU** Iwata, Shigeru; Khan, Mohsin S.; Murao, Hiroshi. **AA** Iwata: University of Kansas. Khan: IMF. Murao: Aomori Public College. **SR** International Monetary Fund Policy Working Paper: WP/02/13; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** not available. **JE** C14, D24, O47, O53. **KW** East Asia. Factor Productivity. Growth. Nonparametric Regression. **AB** The conventional growth-accounting approach to estimating the sources of economic growth requires unrealistically strong assumptions about the competitiveness of factor markets and the form of the underlying aggregate production function. This paper outlines a new approach utilizing nonparametric derivative estimation techniques that does not require imposing these restrictive assumptions. The results for East Asian countries show that output elasticities of capital and labor are different from the income shares of these factors, and that the growth of total factor productivity over the period 1960-95 has been an important factor in the overall growth performance of these countries.

Jackson, Matthew O.

TI La Crema: A Case Study of Mutual Fire Insurance. **AU** Cabrales, Antonio; Calvo-Armengol, Antoni; Jackson, Matthew O.

Jacome H., Luis I.

PD December 2001. **TI** Legal Central Bank Independence and Inflation in Latin America During the 1990s. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/212; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 40. **PR** not available. **JE** E31, E58. **KW** Central Bank Independence. Inflation. Latin America. **AB** This paper reviews central banks' legal reform in Latin American during the 1990s and discusses the status of central bank independence in the region. Based on this information, it builds a simplified index of central bank independence that, in addition to the commonly used criteria of political and economic independence, incorporates provisions of central banks' financial autonomy, accountability, and lender-of-last-resort. The paper finds a moderate negative correlation between increased central bank independence and inflation during 1999-2001 in 14 Latin American countries. Disaggregating the index, the same analysis suggests that economic independence is the key component driving the observed negative correlation between legal central bank independence and inflation.

Jahjah, Samir

PD December 2001. **TI** Financial Stability and Fiscal Crises in a Monetary Union. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/201; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 21. **PR** not available. **JE** E43, E52, E58, E63, F33.

KW Public Debt. Monetary Policy. Inflation. Monetary Union. Default. Financial Stability.

AB The main tasks of central banks are to secure price and financial stability. These objectives can, in times of crises, conflict with one another, and the central bank may have to renounce one of them in order to secure the other. In a monetary union, this trade-off can be exacerbated by the presence of highly indebted countries or by the risk of loose fiscal policies. This paper offers a simple theoretical model that captures the trade-off. Different fiscal institutions are compared in order to evaluate their impact on the conduct of monetary policy. More specifically, the fiscal criteria of the Maastricht Treaty and the Pact for Stability and Growth in Europe are analyzed in light of this model. Fiscal mechanisms exist to help prevent or minimize the risk of physical crisis and the corresponding risks of central bank financing and inflation.

Jappelli, Tullio

TI Household Portfolios in Italy. **AU** Guiso, Luigi; Jappelli, Tullio.

Jehiel, Philippe

TI Dynamic Processes of Social and Economic Interactions: On the Persistence of Inefficiencies. **AU** Gomes, Armando; Jehiel, Philippe.

Jensen, H.

PD December 1999. **TI** Targeting Nominal Income Growth or Inflation? **AA** University of Copenhagen, CEPR, and EPRU. **SR** CEPR Discussion Paper: 2341; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E42, E52, E58. **KW** Nominal Income Growth. Inflation Targeting. Monetary Policy. Interest Rate Inertia. Income Growth Targeting. **AB** Within a simple New Keynesian model emphasizing forward-looking behavior of private agents, I evaluate optimal nominal income growth targeting versus optimal inflation targeting. When the economy under consideration is mainly subject to shocks that do not involve monetary policy trade-offs for society, inflation targeting is preferable. Otherwise, nominal income growth targeting may be superior because it induces inertial interest rate behavior that improves the inflation-output gap trade-off. Somewhat paradoxically, inflation targeting is relatively less favorable the more society cares for inflation, and the more persistent are the effects of inflation-generating shocks.

Jensen, J. Bradford

TI Plants and Productivity in International Trade. **AU** Bernard, Andrew B.; Eaton, Jonathan; Jensen, J. Bradford; Kortum, Samuel.

Jenter, Dirk

TI Selling Company Shares to Reluctant Employees: France Telecom's Experience. **AU** Degeorge, Francois; Jenter, Dirk; Moel, Alberto; Tufano, Peter.

Jin, Ginger Zhe

TI Games Daughters and Parents Play: Teenage Childbearing, Parental Reputation, and Strategic Transfers. **AU** Hao, Lingxin; Hotz, V. Joseph; Jin, Ginger Zhe.

Joulfaian, David

PD April 2000. **TI** Estate Taxes and Charitable Bequests by the Wealthy. **AA** US Department of the Treasury. **SR** National Bureau of Economic Research Working Paper: 7663; 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** D19, H24, H31. **KW** Estate Taxes. Charitable Bequests. Philanthropy.

AB Charitable bequests are an important source of philanthropic support. Unlike bequests to children, which can be taxed at a maximum statutory rate of 55 percent, such transfers are exempt from estate taxation. Thus, by lowering the price of charitable giving, the estate tax may influence the disposition of terminal wealth. In this paper, I examine the effects of estate taxation on charitable bequests using data from estate tax returns of decedents in 1992. The results suggest that the estate tax deduction is "budget" efficient. The overall effects of the estate tax, however, are likely to be modest as charitable bequests are wealth elastic.

Jovanovic, Boyan

TI The Information Technology Revolution and the Stock Market: Evidence. **AU** Hobijn, Bart; Jovanovic, Boyan.

Jullien, Bruno

PD September 2000. **TI** Resale Price Maintenance and Collusion. **AU** Jullien, Bruno; Rey, Patrick. **AA** Université des Sciences Sociales de Toulouse and CEPR. **SR** CEPR Discussion Paper: 2553; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** K21, L13, L41, L42. **KW** Antitrust. Collusion. Resale Price Maintenance. Vertical Restraints. Retail Prices.

AB The paper revisits the conventional wisdom according to which vertical restrictions on retail prices help upstream firms to collude. We analyze the scope for collusion with and without resale price maintenance (RPM), when retailers observe local shocks on demand or retail costs. In the absence of RPM, retail prices react to retailers' information and deviations from collusive behavior are thus difficult to detect. By eliminating retail price flexibility, RPM facilitates the detection of deviations but reduces profits and increases the short-run gains from a deviation. Overall, RPM can facilitate collusion and it reduces total welfare whenever firms choose to adopt it.

Kajii, Atsushi

TI Local Sunspot Equilibria Reconsidered. **AU** Davila, Julio; Gottardi, Piero; Kajii, Atsushi.

Kalemli-Ozcan, S.

TI Risk Sharing and Industrial Specialization: Regional and International Evidence. **AU** Yosha, Oved; Sorensen, Bent E.; Kalemli-Ozcan, S.

Kandil, Magda

PD March 2002. **TI** The Impact of Cyclical Factors on the U.S. Balance of Payments. **AU** Kandil, Magda; Greene, Joshua E. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/45; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website:

www.imf.org. **PG** 43. **PR** not available. **JE** F31, F32, F36, F41. **KW** United States. Balance of Payments. Current Account. Capital Account. Cyclical Variation.

AB Real gross domestic product (GDP) growth and real effective exchange rate (REER) appreciation appear cointegrated with the current and financial accounts of the U.S. balance of payments. On this basis, we estimate reduced form equations showing that expected changes and shocks to real GDP, the REER, energy prices, and growth in emerging market economies and other industrial countries explain much of the short-term variation in the U.S. current account balance, with the balance worsening as real GDP, energy prices, and the REER increase. In addition, foreign direct investment rises with real growth, while stock market prices affect the composition of capital inflows.

Kaplan, Steven N.

PD April 2000. **TI** Investment-Cash Flow Sensitivities are not Valid Measures of Financing Constraints. **AU** Kaplan, Steven N.; Zingales, Luigi. **AA** University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7659; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 5. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** G29, G31, G32. **KW** Financing Constraints. Investment.

AB Kaplan and Zingales (1997) provide both theoretical arguments and empirical evidence that investment-cash flow sensitivities are not good indicators of financing constraints. Fazzari, Hubbard, and Petersen (1999) criticize those findings. In this note, we explain how the Fazzari et al. criticisms are either very supportive of the claims in Kaplan and Zingales or incorrect. We conclude with a discussion of unanswered questions.

PD April 2000. **TI** Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts. **AU** Kaplan, Steven N.; Stromberg, Per. **AA** University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7660; 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** G24, G32. **KW** Financial Contracts. Venture Capital.

AB In this paper, we compare the characteristics of real world financial contracts to their counterparts in financial contracting theory. We do so by conducting a detailed study of actual contracts between venture capitalists (VCs) and entrepreneurs. We consider VCs to be the real world entities who most closely approximate the investors of theory. The contracts we observe are most consistent with the theoretical work of Aghion and Bolton (1992), and Dewatripont and Tirole (1994). They also are consistent with screening theories.

Kaplow, Louis

PD April 2000. **TI** Horizontal Equity: New Measures, Unclear Principles. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7649; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 23. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D63, H23, H24. **KW** Horizontal Equity. Social Welfare. Welfare.

AB Alan Auerbach and Kevin Hassett offer a new measure of

horizontal equity (HE) that is designed to overcome deficiencies in prior indexes. There is, however, a fundamental problem that their effort shares with their predecessors' attempts: the underlying rationale for pursuing HE at the expense of individuals' well-being is never stated. Moreover, as discussed here, it appears that no plausible rationale can be given because the essence of HE involves giving weight to morally arbitrary factors. Indeed, pursuing HE may even conflict with the Pareto principle. On reflection, it seems that the appeal of HE is specious: HE does not possess intrinsic value, but rather is a rough proxy concept that may signal various ways in which unequal treatment of individuals can lead to a loss in social welfare. Unfortunately, HE indexes are not very useful even with regard to HE's proxy role.

Karacadag, Cem

TI An Attempt to Profile the Finances of China's Enterprise Sector. **AU** Heytens, Paul; Karacadag, Cem.

Keil, Manfred

PD June 2001. **TI** Minimum Wages and Employment. **AU** Keil, Manfred; Robertson, Donald; Symons, James. **AA** Keil: Claremont McKenna College. Robertson: University of Cambridge. Symons: University College London. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 497; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 18. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J23, J31, J39. **KW** Minimum Wage. Panel Data. Cross Sectional Correlation. Employment. Youth Employment.

AB This paper investigates the effect of minimum wages on employment using a panel of US state-based data. We estimate a minimalist dynamic version of the specification implied by neo-classical theory. We find statistically and economically significant effects of minimum wages on youth employment. These results re-establish the conventional wisdom as existing before the work of Card-Krueger-Katz (CKK). The paper meets the methodological criticisms of this sort of panel study made by CKK. An important econometric innovation in this paper is to produce estimates allowing for cross-sectional correlation, which offers unbiased inference and potential efficiency gains.

Keller, Godfrey

PD July 1999. **TI** Market Experimentation in a Dynamic Differentiated-Goods-Duopoly. **AU** Keller, Godfrey; Rady, Sven. **AA** Keller: London School of Economics and Political Science. Rady: Stanford University. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/99/369; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 36. **PR** no charge. **JE** C73, D43, D83, L11, L13. **KW** Duopoly. Bayesian Learning. Markov-Perfect Equilibrium. Differentiated Products. Information Value.

AB We study the evolution of prices in a symmetric duopoly where firms are uncertain about the degree of product differentiation. Customers sometimes perceive the products as close substitutes, sometimes as highly differentiated. Firms learn about their competitive environment from the quantities sold and a background signal. As the information of the market

outcomes increases with the price differential, there is scope for active learning. In a setting with linear demand curves, we derive firms' pricing strategies as payoff-symmetric mixed or correlated Markov perfect equilibria of a stochastic differential game where the common posterior belief is the natural state variable. When information has low value, firms charge the same price as would be set by myopic players, and there is no price dispersion. When firms value information more highly, on the other hand, they actively learn by creating price dispersion. This market experimentation is transient, and most likely to be observed when the firms' environment changes sufficiently often, but not too frequently.

Kerr, Suzi

PD March 2001. **TI** Policy-Induced Technology Adoption: Evidence from the U.S. Lead Phasedown. **AU** Kerr, Suzi; Newell, Richard. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/14; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 24. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** L71, O31, O33, Q28, Q48. **KW** Technology Adoption. Environmental Regulation. Petroleum Industry. Regulation. Incentives.

AB The theory of environmental regulation suggests that economic instruments, such as taxes and tradable permits, create more effective technology adoption incentives than conventional regulatory standards. We explore this issue by analyzing an important industry's technological response to a dramatic decrease in allowed pollution levels -- the petroleum industry's phasedown of lead in gasoline. Using a panel of refineries from 1971 to 1995, we provide some of the first direct evidence that alternative policies affect the pattern of adoption in expected ways. Importantly, we find that the tradable permit system used during the lead phasedown provided incentives for more efficient technology adoption decisions. Where environmentally appropriate, this suggests that flexible market-based regulation can achieve environmental goals while providing better incentives for technology diffusion.

Kerschbamer, Rudolf

PD September 2000. **TI** In-House Competition, Organizational Slack and the Business Cycle. **AU** Kerschbamer, Rudolf; Tournas, Yanni. **AA** Kerschbamer: University of Vienna and CEPR. **SR** CEPR Discussion Paper: 2557; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D20, D82, E32, F23, L22. **KW** Capacity. Demand Fluctuations. Slack. Firm Organization.

AB This paper analyzes the impact of variations of product demand on the amount of internal slack in multi-plant firms. In our model, facilities can produce output at a privately known cost up to a previously determined capacity level. In such a model, the amount of slack in the firm is shown to be procyclical. Indeed, as capacity constraints become tighter in booms, slack increases in booms, because the power of in-house competition is reduced, while the opposite is true in downturns. Also, in downturns the firm may use high-cost facilities even when low-cost plants are not running at capacity.

PD September 2000. **TI** Idiosyncratic Investments,

Outside Opportunities and the Boundaries of the Firm. AU Kerschbamer, Rudolf; Maderner, Nina; Tournas, Yanni. AA Kerschbamer: University of Vienna and CEPR. SR CEPR Discussion Paper: 2558; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG not available. PR 5 pounds, \$8 or 8 euros. JE D23, D24, L14, L22, L23. KW Boundary Choice. Incomplete Contracts. Transaction Costs. Commitment. Vertical Integration.

AB This paper adopts the incomplete contracting perspective to study a firm's continuous choice between producing an essential input in-house (full integration), contracting part of the production out (tapered integration), and contracting all of the production out (non-integration). We assume: (i) an idiosyncratic capacity investment is required to produce the essential input; and (ii) under non-integration, outside opportunities are better. We show that the firm's boundary choice depends crucially on its commitment power. If the firm can pre-commit to a particular provision mode, tapered integration will be chosen more frequently. Also, with commitment power the firm will never subcontract only a small portion of its input needs. In-house capacity is in general smaller and outside capacity larger if the firm can pre-commit. Total capacity is never larger in the commitment than the non-commitment case.

Kessler, A.

PD January 2000. TI Optimal Monitoring in Hierarchical Relationships. AA University of Bonn. SR CEPR Discussion Paper: 2355; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 32. PR 5 pounds, \$8 or 8 euros. JE D82, L22, L23, M11, M12. KW Firm Organization. Hierarchies. Collusion. Monitoring. Principal Agent.

AB This paper studies an agency framework in which a principal hires a supervisor to monitor the agent's productive effort. We consider several monitoring technologies which differ in the quantity (frequency) and the quality (accuracy) of the information they deliver. We show that the frequency of monitoring is irrelevant if the supervisor is honest, or if the supervisor colludes with the agent but monitoring evidence can only be concealed and not forged. In either case, a first-best result can be achieved if monitoring is sufficiently precise even though unbounded punishments are not feasible. Finally, if monitoring evidence can be falsified, the principal benefits both from the frequency and the accuracy of the supervisor's observations. This is the only case in which collusion imposes an additional cost on the relationship. The findings suggest that it is strictly better for the principal to monitor the agent's action rather than testing for an unknown ability or technology parameter.

Khan, Mohsin S.

TI Sources of Economic Growth in East Asia: A Nonparametric Assessment. AU Iwata, Shigeru; Khan, Mohsin S.; Murao, Hiroshi.

Khawaja, Sarmad

PD November 2001. TI Measuring Statistical Capacity Building: A Logical Framework Approach. AU Khawaja, Sarmad; Morrison, Thomas K. AA IMF. SR International

Monetary Fund Working Paper: WP/01/188; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 8. PR not available. JE C49. KW Statistical Capacity. Technical Assistance. International Monetary Fund. Data Quality.

AB This paper suggests a way forward in the effort to measure statistical capacity building by combining features of two tools -- the Project Management System, a logical framework methodology that the International Monetary Fund (IMF) Statistics Department uses to plan, monitor, and evaluate technical assistance projects, and the Data Quality Assessment Framework, a methodology for assessing data quality that brings together best practices and internationally accepted concepts and definitions in statistics.

Kilian, L.

PD December 1999. TI Quantifying the Half-Life of Deviations from PPP: The Role of Economic Priors. AU Kilian, L.; Zha, T. AA Kilian: University of Michigan. Zha: Federal Reserve of Atlanta. SR CEPR Discussion Paper: 2334; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 40. PR 5 pounds, \$8 or 8 euros. JE C11, C22, F31, F41. KW Purchasing Power Parity. Mean Reversion. Persistence. Likelihood. Exchange Rates.

AB The half-life of deviations from purchasing power parity (PPP) plays a central role in the ongoing debate about the ability of macroeconomic models to account for the time series behavior of the real exchange rate. The main contribution of this paper is a general framework in which alternative priors for the half-life of deviations from PPP can be examined. We show how to incorporate formally the prior views of economists about the half-life. In our empirical analysis we provide two examples of such priors. One example is a consensus prior consistent with widely held views among economists with a professional interest in the PPP debate. The other example is a relatively diffuse prior designed to capture a large degree of uncertainty about the half-life. Our methodology allows us to make explicit probability statements about the half-life and to assess the likelihood that the half-life exceeds a given number of years, without taking a stand on whether the data have a unit root or not. We find only very limited support for the common view in the PPP literature that the half-life is between three and five years.

Kim Yungsan

TI Monetary Policy and Corporate Liquid Asset Demand. AU Choi, Woon Gyu; Kim Yungsan.

Kim, Dong Heon

TI A Re-Examination of the Predictability of Economic Activity Using the Yield Spread. AU Hamilton, James D.; Kim, Dong Heon.

Kim, Tae-Hwan

PD April 2002. TI Estimation, Inference, and Specification Testing for Possibly Misspecified Quantile Regression. AU Kim, Tae-Hwan; White, Halbert. AA Kim: University of Nottingham. White: University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 2002/09; Working Paper Coordinator, Department of Economics, 0508,

University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers.
PG 19. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California.
JE C13, C14, C52. **KW** Quantile Estimation. Specification Testing. Heteroaltitudinality.

AB To date the literature on quantile regression and least absolute deviation regression has assumed either explicitly or implicitly that the conditional quantile regression model is correctly specified. When the model is misspecified, confidence intervals and hypothesis tests based on the conventional covariance matrix are invalid. Although misspecification is a generic phenomenon and correct specification is rare in reality, there has to date been no theory proposed for inference when a conditional quantile model may be misspecified. In this paper, we allow for possible misspecification of a linear conditional quantile regression model. We obtain consistency of the quantile estimator for certain "pseudo-true" parameter values and asymptotic normality of the quantile estimator when the model is misspecified. In this case, the asymptotic covariance matrix has a novel form, not seen in earlier work, and we provide a consistent estimator of the asymptotic covariance matrix. We also propose a quick and simple test for conditional quantile misspecification based on the quantile residuals.

Kimhi, Ayal

TI Trade and the Rate of Income Convergence. **AU** Ben-David, Dan; Kimhi, Ayal.

Kingdon, Geeta Gandhi

TI School Participation in Rural India. **AU** Dreze, Jean; Kingdon, Geeta Gandhi.

Klaassen, Franc

TI Is Fiscal Policy Coordination in EMU Desirable? **AU** Beetsma, Roel M.; Debrun, Xavier; Klaassen, Franc.

Klein, Paul

TI A Moving Average Comparison of the Tel-Aviv 25 and S&P 500 Stock Indices. **AU** Shachmurov, Yochanan; BenZion, Uri; Klein, Paul; Yagil, Joseph.

Kletzer, Kenneth M.

TI International Capital Inflows, Domestic Financial Intermediation and Financial Crises under Imperfect Information. **AU** Chinn, Menzie D.; Kletzer, Kenneth M.

PD November 2000. **TI** Monetary Union and Fiscal Federalism. **AU** Kletzer, Kenneth M.; von Hagen, Jurgen. **AA** Kletzer: University of California, Santa Cruz. von Hagen: Universitat Bonn. **SR** CEPR Discussion Paper: 2615; Centre for Economic Policy Research, Discussion Paper Orders, 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, E63, F33, F42. **KW** Monetary Union. Regional Employment. Regional Stabilization. Regional Insurance.

AB Does a monetary union need fiscal shock absorbers helping the participating countries to cope with asymmetric shocks? The consensus in the debate over EMU argues that the answer is yes. In this paper, we revisit the issue, building on a dynamic, general equilibrium framework of regions in a monetary union exposed to asymmetric shocks. We show that

inter-regional taxes and transfers can stabilize regional employment or consumption, but not both. The welfare effects of such a stabilization are, however, ambiguous. In contrast to a popular argument in the EMU debate, inter-regional taxes and transfers do not reduce the incentives for goods and labor market deregulation in the regions, provided that the degree of trade integration among the regions is large. There is, however, reason to coordinate regional reform policies to avoid adverse effects on the aggregate performance of the union.

Knowles, John

TI Marriage, Fertility and Divorce: A Dynamic Equilibrium Analysis of Social Policy in Canada. **AU** Guner, Nezih; Knowles, John.

TI Love and Money: A Theoretical and Empirical Analysis of Household Sorting and Inequality. **AU** Fernandez, Raquel; Guner, Nezih; Knowles, John.

TI The Timing of Births: A Marriage Market Analysis. **AU** Caucutt, Elizabeth M.; Guner, Nezih; Knowles, John.

Kocenda, Evzen

PD August 2000. **TI** Detecting Structural Breaks in Exchange Rates in Transition Economies. **AA** CERGE-EI, Prague and CEPR. **SR** CEPR Discussion Paper: 2546; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** E52, F31, P29, P52. **KW** Exchange Rates. Monetary Policy. Structural Changes. Transition Economies.

AB The aim of this paper is to provide evidence of structural breaks in the exchange rates of European transition economies. The Vogelsang (1997) testing procedure is used. The technique allows for the detection of a break at an unknown date in the trend function of a dynamic univariate time series, and does not impose restrictions on the nature of data. In many cases the detected breaks appear to be linked with policy measures adopted at the same time. In several cases the trend break coincided with a marked change in economic development. In others no break was detected. The results seem to depend on the economic climate of a particular country.

PD November 1999. **TI** Limited Macroeconomic Convergence in Transition Countries. **AA** CERGE-EI, Charles University. **SR** CEPR Discussion Paper: 2285; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 28. **PR** 5 pounds, \$8 or 8 euros. **JE** C23, F15, O11, P24, P52. **KW** Convergence. Transition Economies. Panel Unit-Root Test. Economic Integration.

AB This paper analyzes the performance of the transition economies in the Central and Eastern European (CEE) countries in terms of their convergence in selected macroeconomic fundamentals. The analysis uses monthly data on industrial output, aggregate money (M1), consumer prices, and producer prices from 1991 to 1998. The analysis is carried out within distinctive groups of countries based on different trade and geographical arrangements, and uses a panel unit-root test as an econometric tool. In general, we conclude that so far the transition CEE countries were not successful in achieving a certain degree of natural economic integration among them. Certain levels of convergence occurred only for a limited

number of countries at the advanced stage of the transition process.

Kohli, Renu

PD November 2001. **TI** Capital Flows and Their Macroeconomic Effects in India. **AA** Reserve Bank of India and ICRIER. **SR** International Monetary Fund Working Paper: WP/01/192; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** not available. **JE** E50, E61, F31, F32, F41. **KW** Capital Flows. Foreign Exchange. Intervention. Money Supply. India.

AB This paper documents trends in movement and composition of capital flows into India in a comparative perspective, examines the impact of these flows upon key macroeconomic variables in the economy, and dwells on implications for economic policy. We find that an inflow of foreign capital results in a real appreciation and has a significant impact on domestic money supply. During a capital surge, these effects have been countered through intervention and sterilization. The paper concludes with a discussion on the costs of these policies in the event of a heavy inflow of foreign capital into India.

Kokko, Ari

TI The Determinants of Host Country Spillovers from Foreign Direct Investment. **AU** Blomstrom, Magnus; Kokko, Ari; Globberman, Steve.

Kollintzas, Tryphon

PD January 2000. **TI** Is Tax Policy Coordination Necessary? **AU** Kollintzas, Tryphon; Philippopoulos, Apostolis; Vassilatos, Vangelis. **AA** Kollintzas: Athens University of Economics and Business, CEPR, and IMOP. Philippopoulos: Athens University of Economics and Business and IMOP. Vassilatos: University of Ioannina and IMOP. **SR** CEPR Discussion Paper: 2348; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** E62, F42, H21, H87. **KW** Optimal Taxation. Capital Mobility. Tax Coordination. Residence Principle. International Taxation.

AB We ask whether tax policy coordination is necessary, and find that the answer is "yes". We re-examine noncooperative and cooperative equilibria under perfect capital mobility. To this end, we develop a two-country optimal growth model with endogenous national fiscal policies. The channel for interdependence is distortionary income taxes. We study both the Residence and Source principle of international taxation. National governments play Stackelberg vis-a-vis private agents, while they can play either Nash or cooperate vis-a-vis each other. We solve for Markov-perfect (time consistent) equilibria. We show that the pertinent Nash equilibria are degenerate. Thus, under both the Residence and Source principle, only cooperative equilibria can exist. The driving force is perfect capital mobility. This is a new result that provides a strong argument for world tax coordination. When we solve for cooperative equilibria, we show that it is optimal to set a common tax rate across countries, irrespective of the principle of international taxation (Residence or Source) and differences across countries. A cooperative solution under the Source principle may be more difficult to implement than under

the Residence principle.

Komunjer, Ivana

TI Evaluation and Combination of Conditional Quantile Forecasts. **AU** Giacomini, Raffaella; Komunjer, Ivana.

Konrad, Kai A.

PD December 1999. **TI** Geography of the Family. **AU** Konrad, Kai A.; Lommerud, K. E.; Kunemund, H.; Robledo, J. R. **AA** Konrad: Freie Universitat Berlin. Lommerud, Kunemund, and Robledo: University of Bergen and CEPR. **SR** CEPR Discussion Paper: 2312; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** D64, H41, J12. **KW** Family Public Goods. Intergenerational Transfers. Altruism. Parental Care.

AB We study the residential choice of siblings who are altruistic towards their parents. If some sibling moves further away, he or she can shift some of the burden of taking care of the parents to his or her siblings. Thus, siblings have a strategic incentive to move away that only children do not have. Siblings locate further away from parents than only children do, and, for some preferences, asymmetric location patterns emerge. These theoretical predictions are also confirmed by empirical data.

PD December 1999. **TI** Privacy, Time Consistent Optimal Labour Income Taxation and Education Policy. **AA** Freie Universitat Berlin. **SR** CEPR Discussion Paper: 2326; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D82, H21, H23. **KW** Privacy. Time Consistency. Taxation.

AB Incomplete information is a commitment device for time consistency problems. In the context of time consistent labor income taxation, privacy reduces welfare losses and increases the effectiveness of public education as a second best policy.

Kortum, Samuel

TI Plants and Productivity in International Trade. **AU** Bernard, Andrew B.; Eaton, Jonathan; Jensen, J. Bradford; Kortum, Samuel.

Kraay, Aart

PD February 2002. **TI** Trade Integration and Risk Sharing. **AU** Kraay, Aart; Ventura, Jaime. **AA** Kraay: The World Bank. Ventura: MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/08; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 30. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** F15, F31, F36, G15. **KW** International Trade. Risk Sharing. Trade. Trade Balance. Exchange Rates.

AB What are the effects of increased trade in goods and services on the trade balance? We study the effects of reducing transport costs in a Ricardian model with complete asset markets. Trade integration has three effects on the structure of the economy: a reduction in the home bias in consumption, an increase in the degree of international competition in goods markets, and a reduction in real exchange rate volatility. The reduction in the home bias increases the volatility of the trade

balance regardless of the source of shocks. Except for the case where supply shocks lead to counter-cyclical trade balances, (i) the increase in international competition also increases the volatility of the trade balance; and (ii) the reduction in real exchange rate volatility increases the volatility of the trade balance if risk aversion is low but lowers it if risk aversion is high. The opposite applies when supply shocks lead to counter-cyclical trade balances. We calibrate the model to U.S. data and provide a quantitative assessment of the effects of increased trade in services on the trade balance.

PD June 2002. **TI** Current Accounts in the Long and Short Run. **AU** Kraay, Aart; Ventura, Jaume. **AA** Kraay: The World Bank. Ventura: MIT, CEPR, and NBER. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/21; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 26. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** F32, F41. **KW** Current Account. Capital Flows. Savings. Short Run. Long Run.

AB Faced with income fluctuations, countries smooth their consumption by raising savings when income is high, and vice versa. How much of these savings do countries invest at home and abroad? In other words, what are the effects of fluctuations in savings on domestic investment and the current account? In the long run, we find that countries invest the marginal unit of savings in domestic and foreign assets in the same proportions as in their initial portfolio, so that the latter is remarkably stable. In the short run, we find that countries invest the marginal unit of savings mostly in foreign assets, and only gradually do they rebalance their portfolio back to its original composition. This means that countries not only try to smooth consumption, but also domestic investment. To achieve this, they use foreign assets as a buffer stock.

Kramarz, Francis

PD January 2000. **TI** Employed 40 Hours or Not Employed 39: Lessons from the 1982 Mandatory Reduction of the Workweek. **AU** Kramarz, Francis; Crepon, Bruno. **AA** Kramarz: CREST-INSEE and CEPR. Crepon: INSEE-CREST. **SR** CEPR Discussion Paper: 2358; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** J23, J28, J31, J38. **KW** Working Hours Reduction. Wages. Unemployment. France.

AB We use longitudinal individual wage, hours, and employment data to investigate the effect of the February 1, 1982 mandatory reduction of weekly working hours in France. In May 1981, the government decided to increase the minimum wage by 5 percent. Then, the government reduced the workweek from 40 to 39 hours. At the same time, it mandated stable monthly earnings for minimum wage workers and recommended the stabilization of monthly earnings for other workers. We show that workers directly affected by these changes -- those working 40 hours in March 1981 -- were more likely to lose their jobs between 1981 and 1982 than workers not affected by the changes. Our estimates of the impact of this one-hour reduction of the workweek on employment losses vary between 2 and 4 percent. Furthermore, we show that minimum wage workers have been most affected by the changes. These results should help us understand the possible effects of the mandatory reduction of working hours in France

from 39 to 35 hours beginning in the year 2000. Similar projects are envisaged in other European countries, which hope that reductions in hours will be an efficient policy for reducing unemployment.

Kremer, Michael

TI Outside Funding of Community Organizations: Benefiting or Displacing the Poor? **AU** Gugerty, Mary Kay; Kremer, Michael.

Krishna, Kala

PD December 2001. **TI** Quantity Controls, License Transferability, and the Level of Investment. **AU** Krishna, Kala; Tan, Ling Hui; Ranjan, Ram. **AA** Krishna and Ranjan: Pennsylvania State University. Tan: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/206; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 31. **PR** not available. **JE** D21, D45, F13, L51. **KW** Licensing. Transferability. Tradable Quotas. Entry. Investment.

AB This paper models investment/entry decisions in a competitive industry that is subject to a quantity control on an input for production. The quantity control is implemented by auctioning licenses for the restricted input (e.g., a pollution permit or a production license). The paper shows that liberalizing the quantity control could reduce investment in the industry under certain circumstances. Furthermore, the level of investment is quite different when licenses are tradable than when they are not. Key factors in the comparison include the elasticity of demand for the final good and the degree of input substitutability. Two examples are computed to illustrate the results.

Krishnamurthy, Arvind

TI A Dual Liquidity Model for Emerging Markets. **AU** Caballero, Ricardo J.; Krishnamurthy, Arvind.

TI Excessive Dollar Debt: Financial Development and Underinsurance. **AU** Caballero, Ricardo J.; Krishnamurthy, Arvind.

TI A "Vertical" Analysis of Monetary Policy in Emerging Markets. **AU** Caballero, Ricardo J.; Krishnamurthy, Arvind.

Kristensen, N.

TI Will the Euro Create a Bonanza for Africa? **AU** Cohen, Daniel; Kristensen, N.; Verner, D.

Krueger, Alan

PD April 2000. **TI** The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR. **AU** Krueger, Alan; Whitmore, Diane. **AA** Krueger: Princeton University and NBER. Whitmore: Princeton University. **SR** National Bureau of Economic Research Working Paper: 7656; 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** I21, J15. **KW** Class Size. Test Scores. Minority Students. Student Performance. Education Analysis.

AB This paper provides a long-term follow-up of students who participated in the Tennessee Student Teacher Achievement Ratio (STAR) experiment. The Tennessee STAR

experiment randomly assigned 11,600 elementary school students and their teachers to a small class, regular-size class, or regular-size class with a teacher-aide. The experiment began with the wave of students who entered kindergarten in 1985, and lasted for four years. After the third grade, all students returned to regular-sized classes. We analyze the effect of past attendance in a small class on standardized test scores through the eighth grade, on whether students took college entrance exams, and on how they performed on the entrance exams. The results suggest that attending a small class in the early grades is associated with somewhat higher performance on standardized tests, and an increase in the likelihood that students take a college-entrance exam, especially among minority students. Most significantly, being assigned to a small class appears to have narrowed the black-white gap in college test taking by 54 percent. Calculations suggest that the internal rate of return from reducing class size from 22 to 15 students is 5.5 percent.

Krupnick, Alan

TI Workshop Report: Pollution Abatement Costs and Expenditures (PACE) Survey Design for 2000 and Beyond. **AU** Burtraw, Dallas; Krupnick, Alan; Morgenstern, Richard; Pizer, William; Shih, Jhih-Shyang.

TI Ancillary Benefits of Reduced Air Pollution in the United States from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael A.; Bloyd, Cary.

Kubo, Katsuyuki

TI Does Performance Pay De-Motivate, and Does it Matter? **AU** Marsden, David; French, Stephen; Kubo, Katsuyuki.

Kumar, Manmohan S.

TI Exchange Rates and Capital Flows. **AU** Brooks, Robin; Edison, Hali J.; Kumar, Manmohan S.; Slok, Torsten.

PD January 2002. **TI** Predicting Emerging Market Currency Crashes. **AU** Kumar, Manmohan S.; Moorthy, Uma; Perraudin, William. **AA** Kumar: International Monetary Fund. Moorthy: Birkbeck College. Perraudin: Birkbeck College and Bank of England. **SR** International Monetary Fund Working Paper: WP/02/07; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 36. **PR** not available. **JE** C33, F31, F37. **KW** Exchange Rates. Emerging Market Crises. Trading Strategies. Currency Crises.

AB This paper assesses the extent to which crashes in emerging market currencies are predictable using simple logit models based on lagged macroeconomic and financial data. To evaluate our model, we calculate trading strategies in which an investor goes long or short in the currency depending on whether crash probabilities are low or high. When we estimate the model on part of the data and then use the parameter estimates to generate predictions for the remainder of the sample, we find that substantial profits may be made. Furthermore, the model correctly forecasts major crashes even on an out-of-sample basis.

Kumhof, Michael

PD February 2002. **TI** A Fiscal Theory of the Currency Risk Premium and of Sterilized Intervention. **AU** Kumhof, Michael; Van Nieuwerburgh, Stijn. **AA** Kumhof: IMF and

Stanford University. Van Nieuwerburgh: Stanford University. **SR** International Monetary Fund Policy Working Paper: WP/02/29; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 41. **PR** not available. **JE** E43, E52, F41, G11. **KW** Sterilized Intervention. Fiscal Non-Neutrality. Currency Risk Premium. Portfolio Balance Theory.

AB This paper develops a dynamic stochastic general equilibrium monetary portfolio choice model that accomplishes two objectives. First, it provides a theory of currency risk premia based on a weak and plausible form of fiscal nonneutrality. Domestic and foreign bonds become imperfect substitutes, the uncovered interest parity condition is replaced with a portfolio balance equation, and the central bank can separately choose the growth rate of its nominal anchor and the domestic bond interest rate. Second, it can in turn be shown that, and how, sterilized intervention affects equilibrium allocations and prices.

TI Nominal Exchange Rate Anchoring Under Inflation Inertia. **AU** Calvo, Guillermo; Celasun, Oya; Kumhof, Michael.

Kunemund, H.

TI Geography of the Family. **AU** Konrad, Kai A.; Lommerud, K. E.; Kunemund, H.; Robledo, J. R.

Kwast, Myron L.

TI Systemic Risk and Financial Consolidation: Are They Related? **AU** De Nicolo, Gianni; Kwast, Myron L.

Kyle, Margaret K.

TI Did U.S. Bank Supervisors Get Tougher During the Credit Crunch? Did They Get Easier During the Bank Boom? Did it Matter to Bank Lending? **AU** Berger, Allen N.; Kyle, Margaret K.; Scalise, Joseph M.

La Porta, Rafael

TI The Regulation of Entry. **AU** Djankov, Simeon; La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei.

Lach, Saul

PD October 2000. **TI** Do R&D Subsidies Stimulate or Displace Private R&D? Evidence from Israel. **AA** Hebrew University and NBER. **SR** National Bureau of Economic Research Working Paper: 7943; 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** O32, O38. **KW** Israel. Subsidies. R&D.

AB In evaluating the effect of an R&D subsidy we need to know what the subsidized firm would have spent on R&D had it not received the subsidy. Using data on Israeli manufacturing firms in the 1990s we find evidence suggesting that the R&D subsidies granted by the Ministry of Industry and Trade stimulated long-run company-financed R&D expenditures: their long-run elasticity with respect to R&D subsidies is 0.22. At the means of the data, an extra dollar of R&D subsidies increases long-run company-financed R&D expenditures by 41 cents (total R&D expenditures increase by 1.41 dollars). Although the magnitude of this effect is large enough to justify the existence of the subsidy program, it is lower than expected given the dollar-by-dollar matching upon which most

subsidized projects are based. This "less than full" effect reflects two forces: first, subsidies are sometimes granted to projects that would have been undertaken even in the absence of the subsidy and, second, firms adjust their portfolio of R&D projects -- closing or slowing down non-subsidized projects -- after the subsidy is received.

Laguna, Manuel

TI Assigning Proctors to Exams with Scatter Search.
AU Lourenco; Helena R.; Marti, Rafael; Laguna, Manuel.

Laibson, David

TI Does the Internet Increase Trading? Evidence from Investor Behavior in 401(k) Plans. AU Choi, James J.; Laibson, David; Metrick, Andrew.

TI The 6D Bias and the Equity Premium Puzzle.
AU Gabaix, Xavier; Laibson, David.

Laliberte, Lucie

TI Manuals on Macroeconomic Statistics: A Stocktaking to Guide Future Work. AU Carson, Carol S.; Laliberte, Lucie.

TI Assessing Accuracy and Reliability: A Note Based on Approaches Used in National Accounts and Balance of Payments Statistics. AU Carson, Carol S.; Laliberte, Lucie.

Lane, Julia

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

Lane, Philip R.

PD March 2002. TI External Wealth, the Trade Balance, and the Real Exchange Rate. AU Lane, Philip R.; Milesi-Ferretti, Gian Maria. AA Lane: Trinity College. Milesi-Ferretti: IMF. SR International Monetary Fund Policy Working Paper: WP/02/51; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 34. PR not available. JE F21, F31, F41. KW Foreign Assets. Trade Balance. Real Exchange Rates.

AB This paper examines the link between the net foreign asset position, the trade balance, and the real exchange rate. In particular, it decomposes the impact of a country's net foreign asset position ("external wealth") on its long-run real exchange rate into two mechanisms: the relation between external wealth and the trade balance; and, holding other determinants fixed, a relation between the trade balance and the real exchange rate. It also provides additional evidence that the relative price of nontradables is an important channel linking the trade balance and the real exchange rate.

Lane, Timothy

TI Capital Flows to Transition Economies: Master or Servant? AU Lipschitz, Leslie; Lane, Timothy; Mourmouras, Alex.

Laxminarayan, Ramanan

PD June 2001. TI Bacterial Resistance and the Optimal Use of Antibiotics. AA Resources for the Future. SR Resources for the Future Discussion Paper: 01/23; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. PG 26. PR Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15

Foreign Surface Mail \$8. JE I12, I18, Q18, Q38. KW Antibiotic Resistance. Natural Resource. Optimal Resource Use.

AB The increasing resistance of harmful biological organisms (e.g., bacteria, parasites, and pests) to selection pressure from the widespread use of control agents such as antibiotics, antimalarials, and pesticides is a serious problem in both medicine and agriculture. Modeling resistance -- or, conversely, the effectiveness of these control agents as a biological resource -- yields insights into how these agents should be optimally managed to maximize their economic benefit to society. This paper uses a model of evolution of bacterial resistance to antibiotics to develop a simple sequential algorithm of optimal antibiotic use. Although the solution to this problem follows the well-recognized rule of using resources in the order of increasing marginal cost, the unique ways in which these economic costs arise from differing biological traits distinguishes this problem from others in the natural resources arena. This paper also examines the option of periodically rotating between two or more antibiotics, and characterizes the economic and biological criteria under which a cycling strategy is superior to simultaneous use of two or more antibiotics.

Laxton, Douglas

TI The Zero Interest Rate Floor (ZIF) and its Implications for Monetary Policy in Japan. AU Hunt, Benjamin; Laxton, Douglas.

Le Breton, Michel

PD November 2001. TI The Art of Making Everybody Happy: How to Prevent a Secession. AU Le Breton, Michel; Weber, Shlomo. AA IMF. SR International Monetary Fund Working Paper: WP/01/176; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 24. PR not available. JE H23, H73, R11, R13. KW Transfer Schemes. Partial Equalization. Secession. Regional Inequality.

AB In this paper we consider a model of the country with heterogeneous population and examine compensation schemes that may prevent a threat of secession by dissatisfied regions. We show that horizontal imbalances are combatable with secession-proof compensation schemes that entail a degree of partial equalization: the disadvantaged regions should be subsidized but the burden on advantaged regions should not be too excessive. In the case of uniform distribution, we establish the 50-percent compensation rule for disadvantaged regions. Thus, we argue for a limited gap reduction between advantaged and disadvantaged regions and show that neither *laissez faire* nor Rawlsian allocation is secession-proof.

Leahy, John V.

PD April 2000. TI The Timing of Purchases and Aggregate Fluctuations. AU Leahy, John V.; Zeira, Joseph. AA Leahy: Boston University, NBER, and University of Chicago. Zeira: Hebrew University. SR National Bureau of Economic Research Working Paper: 7672; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 26. PR \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). JE E21, E32. KW Durable Goods. Consumption. Business Cycles. Purchase Timing.

AB This paper analyzes how the decision of when to buy a

durable good affects both non-durable consumption and business cycle dynamics. At the individual level, we show that the timing of durable goods purchases plays an important role in smoothing consumption over time. In the benchmark case, the time at which the agent purchases the durable good is the only variable that reacts to changes in wealth, while other variables, such as the consumption of non-durables or the amount of the durable that the individual purchases, remain unchanged. At the aggregate level, we show that timing decisions can serve as a mechanism for the amplification and propagation of aggregate shocks. A decline in wealth causes individuals to delay their durable goods purchases, which reduces demand dramatically for some time.

Lehmann, Alexander

PD March 2002. **TI** Foreign Direct Investment in Emerging Markets: Income, Repatriations and Financial Vulnerabilities. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/47; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 30. **PR** not available. **JE** F23, F36, G35. **KW** Foreign Direct Investment. Multinational Corporations. Emerging Markets.

AB Based on U.S. data, the returns on foreign direct investment (FDI) in emerging markets are shown to be substantially higher than would be suggested by official balance of payments statistics. This paper identifies the determinants of FDI profitability in 43 industrialized and developing countries. After financial leverage and the effect of tax minimizing income transfers are controlled for, host country risk and market openness are found to raise affiliate returns on equity and returns on sales. In the context of a number of financial crises during the 1990s, income repatriations are shown to be pro-cyclical, though the effect of host country recessions is mitigated through continued spending on fixed capital and a re-direction of affiliate sales towards export markets.

Lemieux, Thomas

TI Can Falling Supply Explain the Rising Return to College for Younger Men? A Cohort-Based Analysis. **AU** Card, David; Lemieux, Thomas.

TI Dropout and Enrollment Trends in the Post-War Period: What Went Wrong in the 1970s? **AU** Card, David; Lemieux, Thomas.

Leruth, Luc E.

TI How Do Treasury Systems Operate in Sub-Saharan Francophone Africa? **AU** Bouley, Dominique; Fournel, Jerome; Leruth, Luc E.

Levine, Paul L.

PD November 1999. **TI** Winners and Losers in a North-South Model of Growth, Innovation and Product Cycles. **AU** Levine, Paul L.; Pearlman, Joseph; Chui, Michael. **AA** Levine: University of Surrey. Pearlman: London Guildhall University. Chui: London Business School. **SR** CEPR Discussion Paper: 2291; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F19, F43, O41. **KW** Trade. Distribution. Growth.

AB The paper examines the welfare gains from North-South

trade and the distribution of these gains. We construct an endogenous growth North-South model with four Southern stages of development as possible equilibria: 1) the South specializes in a traditional good; 2) the South in addition copies Northern high-tech manufactured goods; 3) the South begins to innovate in its own right; and 4) the South only innovates, as in the North. We use this model to show that dynamic gains from trade and from Southern development through the stages can create new winners: unskilled workers in the North, and possibly skilled workers in the South.

Levy, Gilat

PD November 2000. **TI** Strategic Consultation in the Presence of Career Concerns. **AA** London School of Economics and Political Science. **SR** London School of Economics and Political Science, STICERD Theoretical Economics Discussion Paper: TE/00/404; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 44. **PR** no charge. **JE** D82, D83, G24. **KW** Reputation. Consultation. Performance Evaluation. Information Sharing.

AB In this paper I analyze the strategic interaction of decision makers and their advisers in a consultation process. I find that when agents are concerned about their reputation, consultation results in sub-optimal sharing of information; some decision makers may deliberately act unilaterally and not consult even when advice is costless. When they do consult, decision makers may excessively contradict their adviser's recommendation. Anticipating it, advisers may not report their information truthfully. These results are obtained without assuming either a tournament or a competition between decision makers and their advisers for wages or a future job.

Levy, Joaquim

TI Euro Area Money Demand: Measuring the Opportunity Costs Appropriately. **AU** Calza, Alessandro; Gerdesmeier, Dieter; Levy, Joaquim.

Lienert, Ian

PD December 2001. **TI** Systemic Weaknesses of Budget Management in Anglophone Africa. **AU** Lienert, Ian; Sarraf, Feridoun. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/211; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** not available. **JE** H11, H50, H61, N47, O23. **KW** Africa. British Budget System. Budget Management. Government Expenditure. Audit.

AB This paper examines the merits of the British budget management system that was inherited in Anglophone African countries and which has changed substantially in the United Kingdom since the 1960s. It considers whether the disappointing budgetary performance in Africa is due to weaknesses in the inherited British system, other external influences, or domestic developments. It finds that all three factors have played a role in the widespread problems with budget management systems. Reforms in institutional arrangements are needed, especially in budget execution. Technical reforms will be ineffective unless there are concomitant changes to enhance accountability, improve governance, and increase compliance.

Lim, Ewe-Ghee

PD November 2001. **TI** Determinants of, and the Relation Between, Foreign Direct Investment and Growth: A Summary of the Recent Literature. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/175; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** not available. **JE** F21, F23, O16, O19, O41. **KW** Foreign Direct Investment. Growth. Spillovers.

AB This paper summarizes recent arguments/findings on two aspects of foreign direct investment (FDI): its correlation with economic growth and its determinants. The first part focuses on recent literature regarding positive spillovers from FDI while the second deals with the determinants of FDI. The paper finds that while substantial support exists for positive spillovers from FDI, there is no consensus on causality. On determinants, the paper finds that market size, infrastructure quality, political/economic stability, and free trade zones are important for FDI, while results are mixed regarding the importance of fiscal incentives, the business/investment climate, labor costs, and openness.

Limao, N.

TI Geographical Disadvantage: A Heckscher-Ohlin-Von Thunen Model of International Specialization. **AU** Venables, Anthony J.; Limao, N.

Link, Albert N.

TI Universities as Research Partners. **AU** Hall, Bronwyn H.; Scott, John T.; Link, Albert N.

Lippi, Francesco

PD December 1999. **TI** Revisiting the Case for a Populist Central Banker. **AA** Banca d'Italia. **SR** CEPR Discussion Paper: 2306; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** E52, E58, J51. **KW** Monetary Policy. Central Bank Conservatism. Wage Bargaining. Non-Atomism. Inflationary Bias.

AB It has been argued that the inflationary bias of discretionary monetary policy can be eliminated, and welfare maximized, by the appointment of a central banker who does not care at all about inflation (a "populist central banker"). We show that this result hinges crucially on the assumption that wage bargaining occurs in terms of the real wage. When the strategic variable chosen by the unions is the nominal wage, the above result is true only in the special case of a single, all-encompassing union. In the more general case of multiple unions, however, inflation increases linearly with their number and a populist central bank may turn out to be bad for welfare. The paper also shows that whether unions bargain their wages in nominal or in real terms influences the number of channels through which monetary policy can have systematic effects on real variables.

Lippi, Marc

TI The Generalized Dynamic Factor Model: Identification and Estimation. **AU** Forni, Mario; Lippi, Marc; Reichlin, Lucrezia; Hallin, Marc.

Lipschitz, Leslie

PD January 2002. **TI** Capital Flows to Transition

Economies: Master or Servant? **AU** Lipschitz, Leslie; Lane, Timothy; Mourmouras, Alex. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/11; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 35. **PR** not available. **JE** E44, F32, F36, F40, P29. **KW** Transition Economies. Eastern Europe. Capital Flows. Convergence. Macroeconomic Policy.

AB This paper discusses the forces driving capital flows in transition countries of Central and Eastern Europe (CEE), factors limiting these inflows, their macroeconomic consequences, and policy issues they raise. Capital inflows in the CEE countries reflect real factors and can be a useful servant in the process of development, convergence, and catch up. But to the extent that inflows render CEE countries vulnerable to global capital market conditions, they can also be a cruel master, punishing perceived domestic policy weaknesses and responding to events beyond the control of domestic policymakers.

Lipset, Seymour Martin

TI Frustrated Demand for Unionisation: The Case of the United States and Canada Revisited. **AU** Gomez, Rafael; Lipset, Seymour Martin; Meltz, Noah.

Ljungqvist, Alexander P.

TI Firm Value and Managerial Incentives: A Stochastic Frontier Approach. **AU** Habib, Michel; Ljungqvist, Alexander P.

Lockwood, Ben

PD September 2000. **TI** Commodity Tax Competition and Tax Coordination Under Destination and Origin Principles. **AA** University of Warwick and CEPR. **SR** CEPR Discussion Paper: 2556; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F11, H21, H23, H73, H77. **KW** Destination Principles. Origin Principles. Tax Competition. Tax Spillovers.

AB This paper proposes a general framework for analyzing commodity tax competition under destination and origin principles, based on three possible tax spillovers: the consumer price spillover, the producer price/terms of trade spillover, and rent spillovers. A model is presented which can be extended to accommodate all three spillovers. Using this model, many of the results in the existing literature can be derived, compared, and extended.

Lommerud, K. E.

TI Geography of the Family. **AU** Konrad, Kai A.; Lommerud, K. E.; Kunemund, H.; Robledo, J. R.

Lopez-Casasnovas, Guillem

PD November 2000. **TI** Financement et Autonomie Fiscale de la Catalogne: Deux Decennies de Problemes non Resolus. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 519; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 29. **PR** Papers available for free on the web; no hardcopies. **JE** H42, H77, R58. **KW** Spanish Fiscal Decentralization. Regional Public

Finance. Intergovernmental Budget Relationships.

AB (Paper in French) From the perspective of redistributing income from rich to poor, equalizing intergovernmental grants are bound to have some perverse effects. For such grants, although transferring income from wealthy to poor on average, will inevitably result in some income transfers from poor individuals who reside in wealthy jurisdictions to rich persons in generally poor areas.

TI Financiacion Capitativa, Articulacion entre Niveles Asistenciales y Descentralizacion de las Organizaciones Sanitarias. **AU** Ortun-Rubio, Vicente; Lopez-Casasnovas, Guillem.

Lopez-de-Silanes, Florencio

TI The Regulation of Entry. **AU** Djankov, Simeon; La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei.

TI The Regulation of Entry. **AU** Djankov, Simeon; La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei.

Lopez-Nicolas, Angel

PD February 2001. **TI** How Important Are Tobacco Prices in the Propensity to Start and Quit Smoking? An Analysis of Smoking Histories from the Spanish National Health Survey. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 548; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 22. **PR** Papers available for free on the web; no hardcopies. **JE** D12, H23, H31. **KW** Smoking. Taxes. Health. Care.

AB This paper analyses the effect of tobacco prices on the propensity to start and quit smoking using a pool of the 1993, 1995 and 1997 editions of the Spanish National Health Surveys. The estimates for several parametric models of the hazard rate for starting and quitting suggest that i) The public health measures applied as of 1992 have had a significant effect on both reducing the hazard of starting and increasing the hazard of quitting, ii) Prices have a very weak effect on the hazard of starting in the male population and no significant effect in the female population, iii) The price floor of cigarettes, proxied by the average price of a pack of black cigarettes, has a significant effect on the quitting hazard which is robust across specifications and applies to both men and women. The implied price elasticity of the time up to quitting is situated around 1.4.

Loungani, Prakash

PD December 2001. **TI** Sources of Inflation in Developing Countries. **AU** Loungani, Prakash; Swagel, Phillip. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/198; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 14. **PR** not available. **JE** E31, E42, F31. **KW** Inflation. Developing Countries. Exchange Rates.

AB This paper develops stylized facts about the inflation process in developing countries, focusing particularly on the relationship between the exchange rate regime and the sources of inflation. Using annual data from 1964 to 1998 for 53 developing countries, we find that money growth and exchange rate changes -- factors typically related to fiscal influences -- are far more important in countries with floating exchange rate regimes than in those with fixed exchange rates. Instead, inertial factors dominate the inflation process in developing

countries with fixed exchange rate regimes.

Lourenco, Helena R.

PD November 2000. **TI** Iterated Local Search. **AU** Lourenco, Helena R.; Martin, Olivier C.; Stutzle, Thomas. **AA** Lourenco: Universitat Pompeu Fabra. Martin: Universite Paris-Sud. Stutzle: Darmstadt University of Technology, Germany. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 513; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 42. **PR** Papers available for free on the web; no hardcopies. **JE** Metaheuristics. Local Search. Combinatorial Optimization. **KW** C61, C63, D83.

AB Iterated Local Search (ILS) has many of the desirable features of a metaheuristic: it is simple, easy to implement, robust, and highly effective. The essential idea of ILS lies in focusing the search not on the full space of solutions but on a smaller subspace defined by the solutions that are locally optimal for a given optimization engine. The success of ILS lies in the biased sampling of this set of local optima. How effective this approach turns out to be depends mainly on the choice of the local search, the perturbations, and the acceptance criterion. So far, it has led to a number of state-of-the-art results without the use of too much problem-specific knowledge. ILS can often become a competitive or even state of the art algorithm. The purpose of this review is both to give a detailed description of ILS and to show where it stands in terms of performance.

TI A Multi-Objective Model for a Multi-Period Distribution Management Problem. **AU** Ribeiro, Rita; Lourenco, Helena R.

PD February 2001. **TI** Assigning Proctors to Exams with Scatter Search. **AU** Lourenco, Helena R.; Marti, Rafael; Laguna, Manuel. **AA** Lourenco: Universitat Pompeu Fabra. Marti: Universitat de Valencia, Spain. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 534; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 16. **PR** Papers available for free on the web; no hardcopies. **JE** C61, C63, D83. **KW** Multiobjective Optimization. Combinatorial Optimization. Metaheuristics. Scatter Search.

AB In this paper we present an algorithm to assign proctors to exams. This NP-hard problem is related to the generalized assignment problem with multiple objectives. The problem consists of assigning teaching assistants to proctor final exams at a university. We formulate this problem as a multiobjective integer program (IP) with a preference function and a workload-fairness function. We then consider also a weighted objective that combines both functions. We develop a scatter search procedure and compare its outcome with solutions found by solving the IP model with CPLEX 6.5. Our test problems are real instances from a University in Spain.

PD March 2001. **TI** Supply Chain Management: An Opportunity for Metaheuristics. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 538; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 25. **PR** Papers available for free on the web; no hardcopies. **JE** C63, M29. **KW** Supply Chain

Management. Metaheuristics. Iterated Local Search. Scatter Search.

AB In the last two decades, logistics and supply chain has moved to the center stage due the growing recognition that it is through an effective management of the logistics function that the goal of cost reduction and service enhancement can be achieved. The key to success in Supply Chain Management (SCM) require heavy emphasis on integration of activities, cooperation, coordination and information sharing throughout the entire supply chain, from suppliers to customers. To be able to respond to the challenge of integration there is the need of sophisticated decision support systems based on powerful mathematical models and solution techniques. We present a brief discussion on the important issues in SCM. We then argue that metaheuristics can play an important role in solving complex supply chain related problems derived by the importance of designing and managing the entire supply chain as a single entity. We will present briefly some successful applications.

PD May 2001. **TI** The Crew-Scheduling Module in the GIST System. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 547; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 21. **PR** Papers available for free on the web; no hardcopies. **JE** D83, L92, M12. **KW** Integrated Transportation. Crew Scheduling. Metaheuristics.

AB The public transportation is gaining importance every year basically due to population growth, environmental policies and, route and street congestion. To enable efficient management of the resources related to public transportation, several techniques are applied and several projects in Transportation Planning Systems, are being developed in different countries. This paper presents the GIST Planning Transportation Systems, a Portuguese project involving two universities and six public transportation companies. We describe in detail one of the most relevant modules of this project, the crew-scheduling module. The crew-scheduling module is based on the application of meta-heuristics, in particular GRASP, tabu search and genetic algorithm to solve the bus-driver-scheduling problem. The metaheuristics have been successfully incorporated in the GIST Planning Transportation Systems and are actually used by several companies.

Louri, Helen

PD January 2000. **TI** Determinants of Ownership Structure: A Comparative Analysis of Multinational Firms' Preferences in Greece and Portugal. **AU** Louri, Helen; Barbosa, Natalia. **AA** Louri: Athens University of Economics and Business. Barbosa: Universidade do Minho. **SR** CEPR Discussion Paper: 2347; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** F23, G32, L22. **KW** Multinational Firms. Ownership Structure. Foreign Direct Investment. Transaction Costs. Industry Characteristics.

AB The aim of the paper is to examine the determinants of the ownership choice (full, majority, minority) of manufacturing multinational firms (MNFs) established in Greece and Portugal in the 1990s. Foreign Direct Investment

(FDI) observations in the two countries underline differences between them in terms of relative FDI size and industry as well as ownership preferences. Transaction cost arguments together with bargaining power considerations provide the theoretical basis for the econometric model which uses multinomial logit analysis applied on 363 and 469 MNFs in, respectively, Greece and Portugal. The estimations contribute to a better understanding of such differences, showing that location and industry characteristics through their effect on risk-adjusted expected profits influence ownership decisions.

Lowry, Michelle

PD October 2000. **TI** IPO Market Cycles: Bubbles or Sequential Learning? **AU** Lowry, Michelle; Schwert, G. William. **AA** Lowry: Penn State University. Schwert: University of Rochester and NBER. **SR** National Bureau of Economic Research Working Paper: 7935; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 23. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** G14, G24, G32. **KW** IPO Returns. Information Spillovers. IPO Clustering.

AB We examine the strong cycles in the number of initial public offerings (IPOs) and in the average initial returns realized by investors who participated in the IPOs. At the aggregate level, initial returns are predictably related to past initial returns and also to future IPO volume from 1960-1997. To understand these patterns, we use firm-level data from 1985-97 to model the initial return. Our results show that aggregate IPO cycles occur because of the time it takes to complete an IPO, the clustering of similar types of IPOs in time, and information spillovers among IPOs.

Ludwig, Alexander

PD January 2002. **TI** The Impact of Changes in Stock Prices and House Prices on Consumption in OECD Countries. **AU** Ludwig, Alexander; Slok, Torsten. **AA** Ludwig: University of Mannheim. Slok: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/02/01; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 36. **PR** not available. **JE** E21, E44. **KW** Consumption. Wealth Effect. Panel Cointegration. Asset Prices. Housing Prices.

AB This paper quantifies the different impact of stock and house prices on consumption using data for 16 Organization for Economic Cooperation and Development (OECD) countries. The analysis finds that the long-run impact of an increase in stock prices and house prices is in general higher in countries with a market-based financial system. The sensitivity of consumption to changes in stock wealth is about twice as large as the sensitivity to changes in housing wealth. Splitting the sample into the 1980s and 1990s shows that both countries with a market-based financial system and countries with a bank-based financial system moved toward a higher degree of responsiveness of consumption to changes in stock prices and house prices.

Lugosi, Gabor

TI A Note on Robust Detection. **AU** Devroye, Luc; Györfi, László; Lugosi, Gabor.

TI Strategies for Sequential Prediction of Stationary Time Series. **AU** Györfi, László; Lugosi, Gabor.

TI Model Selection and Error Estimation. **AU** Bartlett, Peter L.; Boucheron, Stephane; Lugosi, Gabor.

Lyle, David

TI Women, War and Wages: The Effect of Female Labor Supply on the Wage Structure at Mid-Century. **AU** Acemoglu, Daron; Autor, David H.; Lyle, David.

Ma, Yue

TI The Forward Premium Puzzle Revisited. **AU** Meredith, Guy; Ma, Yue.

Macauley, Molly K.

PD June 2001. **TI** Modeling the Costs and Environmental Benefits of Disposal Options for End-of-Life Electronic Equipment: The Case of Used Computer Monitors. **AU** Macauley, Molly K.; Palmer, Karen; Shih, Jih-Shyang; Cline, Sarah; Holsinger, Heather. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/27; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 66. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** H89, Q28. **KW** Electronics Disposal. Waste Stream. Environmental Impact. Computer Disposal. Cost-Benefit Analysis.

AB Managing the growing quantity of used electronic equipment poses challenges for waste management officials. In this paper, we focus on a large component of the electronic waste stream -- computer monitors -- and the disposal concerns associated with the lead embodied in cathode ray tubes (CRTs) used in most monitors. We develop a policy simulation model of consumers' disposal options based on the costs of these options and their associated environmental impacts. For the stock of monitors disposed of in the United States in 1998, our preliminary findings suggest that bans on some disposal options would increase disposal costs from about \$1 per monitor to between \$3 and \$20 per monitor. Policies to promote a modest amount of recycling of monitor parts, including lead, can be less expensive. In both cases, the costs of the policies exceed the value of the avoided health effects of CRT disposal.

PD October 2001. **TI** An Economic Assessment of Space Solar Power as a Source of Electricity for Space-Based Activities. **AU** Macauley, Molly K.; Davis, James F. **AA** Macauley; Resources for the Future. Davis; Aerospace Corporation. **SR** Resources for the Future Discussion Paper: 01/46; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 26. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** L98, O32, O33. **KW** Innovation. Government Policy. Solar Power. Space Energy.

AB We develop a conceptual model of the economic value of space solar power (SSP) as a source of power to in-space activities, such as spacecrafts and space stations. We offer several estimates of the value based on interviews and published data, discuss technological innovations that may compete with or be complementary to SSP, and consider alternative institutional arrangements for government and the private sector to provide SSP.

MacDonald, Ronald

PD February 2002. **TI** Purchasing Power Parity and New

Trade Theory. **AU** MacDonald, Ronald; Ricci, Luca. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/32; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 34. **PR** not available. **JE** F31. **KW** New Trade Theory. Real Exchange Rates. Purchasing Power Parity. Productivity Differentials. Exchange Rates.

AB This paper theoretically derives and empirically tests the implications of a new trade theory framework for the systematic movements in the real exchange rate. It focuses on the effect of imperfect substitutability of tradables and on the importance of competitiveness, for which we construct an original proxy. Using a panel dynamic ordinary least squares estimation of nine bilateral US dollar real exchange rates, we derive long-run coefficients for relative productivity and competitiveness in the tradable and non-tradable sectors, controlling for standard macroeconomic variables. The implications of imperfect substitutability of tradables fit the data better than the standard neoclassical assumption of price equalization. Our new measure of competitiveness is statistically significant in explaining deviations from purchasing power parity.

Machina, Mark J.

PD July 2001. **TI** Almost-Objective Uncertainty. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/12; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 25. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D11, D81. **KW** Subjective Uncertainty. Almost-Objective Uncertainty. Uncertainty.

AB Every subjective state space with sufficient (e.g., Euclidean) structure contains almost-objective events that approximate, and in the limit attain, the standard properties of objectively uncertain events for all individuals with event-smooth betting preferences -- whether they are expected utility/non-expected utility, state-independent/state-dependent, or probabilistically sophisticated/non-probabilistically sophisticated. These properties include well-defined and unanimously agreed-upon revealed likelihoods that are independent of the realization of other subjective events, probabilistic sophistication over almost-objective acts, and linearity of state-independent or state-dependent expected utility preferences over almost-objective acts and almost-objective mixtures of subjective acts. Many real-world randomization devices are based on events of this form.

PD March 2002. **TI** Robustifying the Classical Model of Risk Preferences and Beliefs. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/06; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 57. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D11, D81. **KW** Uncertainty. Risk. Subjective Probability.

AB robustify -- To identify the analytical aspects of a model that continue to hold under more general conditions. This usually requires expressing the model and its results in a particular manner, as statements that may be logically

equivalent under the assumptions of a given model can differ widely in their robustness to dropping these assumptions. E.g.: "By expressing the classical expected utility/subjective probability model in event-theoretic terms, its basic concepts, tools, and results can be locally and globally robustified to general "event-smooth" preferences over subjectively uncertain acts that do not necessarily exhibit either expected utility risk preferences or probabilistic beliefs."

Mackenzie, G. A.

PD December 2001. **TI** Pension Reform and the Fiscal Policy Stance. **AU** Mackenzie, G. A.; Gerson, Philip; Cuevas, Alfredo; Heller, Peter S. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/214; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 14. **PR** not available. **JE** E62, H55, H60, J32. **KW** Social Security. Pension Reform. Fiscal Balance.

AB The increased budget deficit caused by the privatization of a public pension plan does not imply a relaxation of the stance of fiscal policy. The reform's impact on the fiscal stance and national saving depends primarily on its effect on the sum of explicit and implicit public debt and on the post-reform payroll tax and private system contribution rates. However, the precise impact of reform also depends on such influences as the relationship between the rates of interest on implicit and explicit public debt. There may be circumstances in which pension privatization, if not offset by fiscal consolidation, will loosen the fiscal stance.

Maderner, Nina

TI Idiosyncratic Investments, Outside Opportunities and the Boundaries of the Firm. **AU** Kerschbamer, Rudolf; Maderner, Nina; Tournas, Yanni.

Madrian, Brigitte C.

PD May 2000. **TI** The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior. **AU** Madrian, Brigitte C.; Shea, Dennis F. **AA** Madrian: University of Chicago. Shea: United Health Group, Minnesota. **SR** National Bureau of Economic Research Working Paper: 7682; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 42. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D12, H55, G11, J32. **KW** 401k's. Savings Behavior. Behavioral Economics.

AB In this paper, we analyze the 401(k) savings behavior of employees in a large U.S. corporation before and after an interesting change in the company 401(k) plan. Before the plan change, employees were required to affirmatively elect participation in the 401(k) plan. After the plan change, employees were automatically and immediately enrolled in the 401(k) plan unless they made a negative election to opt out of the plan. Although none of the economic features of the plan changed, this switch to automatic enrollment dramatically changed the savings behavior of employees. We have two key findings. First, 401(k) participation is significantly higher under automatic enrollment. Second, the default contribution rate and investment allocation chosen by the company under automatic enrollment has a strong influence on the savings behavior of 401(k) participants. These findings have important implications for the optimal design of 401(k) savings plans, as well as for any type of Social Security reform that includes personal

accounts over which individuals have some amount of control. They also shed light on the importance of both economic and non-economic factors in the determination of individual savings behavior.

Mahieu, Ronald J.

TI Price Discovery on Foreign Exchange Markets. **AU** de Jong, Franck; van Leeuwen, I.; Schotman, Peter C.; Mahieu, Ronald J.

Maler, Karl-Goran

TI Decentralization Schemes, Cost-Benefit Analysis, and Net National Product as a Measure of Social Well-Being. **AU** Dasgupta, Partha; Maler, Karl-Goran.

Mani, Muthukumara

TI The Rule of Law and the Pattern of Environmental Protection. **AU** Fredriksson, Per G.; Mani, Muthukumara.

Mankiw, N. Gregory

PD September 2000. **TI** The Inexorable and Mysterious Tradeoff Between Inflation and Unemployment. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7884; 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** E24, E31, E32, E52. **KW** Inflation. Unemployment. Monetary Policy. Business Cycles.

AB This paper discusses the short-run tradeoff between inflation and unemployment. Although this tradeoff remains a necessary building block of business cycle theory, economists have yet to provide a completely satisfactory explanation for it. According to the consensus view among central bankers and monetary economists, a contractionary monetary shock raises unemployment, at least temporarily, and leads to a delayed and gradual fall in inflation. Standard dynamic models of price adjustment, however, cannot explain this pattern of responses. Reconciling the consensus view about the effects of monetary policy with models of price adjustment remains an outstanding puzzle for business cycle theorists.

Manning, Alan

PD July 2001. **TI** A Generalised Model of Monopsony. **AA** CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 499; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 20. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J42, J63. **KW** Labor Models. Monopsony Labor Model. Recruitment. Turnover Costs.

AB Recent research in labor economics (e.g., the work of Card and Krueger (1995) on the impact of minimum wages) has led to renewed interest in the appropriate model to use when thinking about the labor market. However, the standard textbook models of perfect competition and monopsony are both implausible, though for different reasons: the competitive model because it assumes the wage elasticity of the supply of labor to the individual firm is infinite, and the monopsony model because it assumes that an employer cannot do anything to raise employment other than raise the wage. This paper presents a more general but very simple model in which the

employer can also raise employment by increasing expenditure on recruitment. Using this, it is shown that the division between perfect competition and monopsony is not the issue of whether the wage elasticity in labor supply is infinite or finite but whether there are diseconomies of scale in recruitment. Using a unique British data set containing information on both labor turnover costs and the number of recruits, we present estimates that suggest that there is an increasing marginal cost of recruitment.

Margo, Robert A.

TI Rising Wage Dispersion Across American Manufacturing Establishments, 1850-1880. AU Atack, Jeremy; Bateman, Fred; Margo, Robert A.

Marin, Dalia

PD September 2000. TI Trust vs. Illusion: What is Driving Demonetization in Russia? AA NBER, Universitat Munchen, and CEPR. SR CEPR Discussion Paper: 2570; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG not available. PR 5 pounds, \$8 or 8 euros. JE D21, E41, L11, O16, P34. KW Imperfect Markets. Virtual Economy. Trust. Pricing. Barter.

AB The virtual economy argument for Russia suggests that barter -- a payment in goods rather than cash -- allows the parties to pretend that the manufacturing sector is producing value added by enabling this sector to sell its output at a higher price than its market value. We confront this prediction with the actual pricing behavior of industrial sectors in the Ukraine in 1997. Based on pricing data of 165 barter deals, we find no systematic difference in the pricing behavior in non-cash transactions across sectors. What appears to matter for the pricing behavior is whether the firm is on the selling or buying end of the barter transaction. We offer a model that sees this pricing behavior as a mechanism to deal with the absence of trust and liquidity in the economy.

Marin, Pedro L.

TI Strategic Bidding in Electricity Pools with Short-Lived Bids: An Application to the Spanish Market. AU Garcia-Diaz, Anton; Marin, Pedro L.

Marion, Nancy

TI A Model of the Joint Distribution of Banking and Exchange-Rate Crises. AU Flood, Robert P.; Marion, Nancy.

Mark, Nelson C.

TI Price Level Convergence Among United States Cities: Lessons for the European Central Bank. AU Cecchetti, Stephen G.; Mark, Nelson C.; Sonora Robert J.

Marsden, David

PD August 2001. TI Does Performance Pay De-Motivate, and Does it Matter? AU Marsden, David; French, Stephen; Kubo, Katsuyuki. AA Marsden: CEP and LSE. French: Keele University. Kubo: The Institute of Economic Research and Hitotsubashi University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 503; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England.

Website: cep.lse.ac.uk. PG 35. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J33, J45, M12. KW Performance Related Pay. Organizational Commitment. Public Sector. Payment System. Employee Motivation.

AB The sheer scale and speed of the shift of payment system from time-based salaries to performance-related pay (PRP) in the British public services provides a unique opportunity to test the effects of incentive pay schemes. This study is based on the first large-scale survey designed to measure the effects of performance-related pay on: a) employee motivation and work behavior across the British public service; and b) workplace performance. The latter uses an index of organizational performance based on line-manager judgments. While there is evidence of a clear incentive effect for those gaining above-average Performance Related Pay, it is likely that it is offset by a more widespread de-motivating effect arising from difficulties of measuring and evaluating performance fairly. These motivational outcomes are found to affect workplace performance. Organizational commitment appears to offset some of the negative effects of PRP. In contrast to the many studies of top executives, sales, and sports personnel, our study examines PRP for large numbers of ordinary employees.

Marti, Rafael

TI Assigning Proctors to Exams with Scatter Search. AU Lourenco, Helena R.; Marti, Rafael; Laguna, Manuel.

Martin, Olivier C.

TI Iterated Local Search. AU Lourenco, Helena R.; Martin, Olivier C.; Stutzle, Thomas.

Martin, Philippe

TI Financial Integration and Asset Returns. AU Rey, Helene; Martin, Philippe.

Martinez, Salvador

TI Implementing Electricity Restructuring: Policies, Potholes, and Prospects. AU Brennan, Timothy J.; Palmer, Karen; Martinez, Salvador.

Mathis, Mitchell

TI The Greening of Development Economics: A Survey. AU Blackman, Allen; Mathis, Mitchell; Nelson, Peter.

Matouschek, Niko

PD November 1999. TI Foreign Direct Investment and Spillovers Through Backward Linkages. AA London School of Economics. SR CEPR Discussion Paper: 2283; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 36. PR 5 pounds, \$8 or 8 euros. JE D23, F23, L22. KW Foreign Direct Investment. Property Rights. Vertical Integration. Spillovers.

AB Foreign direct investment projects can generate spillovers through backward linkages in the host economy. This will be the case if local competitors in the project's own industry can benefit from the upstream efficiency improvements that were induced by the foreign firm. We provide microfoundations for this spillover effect and argue that its creation depends crucially on the supplier arrangement that is chosen by the multinational corporation (MNC). We use an incomplete contract framework to study the optimal supplier

arrangement. The foreign investment only generates spillovers to the local industry if the MNC uses several independent suppliers.

Matsuyama, Kiminori

PD November 2000. **TI** The Rise of Mass Consumption Societies. **AA** Northwestern University. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/23; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 62. **PR** no charge. **JE** O11, O12, O33. **KW** Income Distribution. Mass Consumption Society. Endogenous Productivity. Sustainable Development. Productivity.

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 large 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.

Mavroidis, Petros C.

PD November 2000. **TI** The International Dimension of the Antitrust Practice in Poland, Hungary and the Czech Republic. **AU** Mavroidis, Petros C.; Neven, Damien J. **AA** Mavroidis: Universite de Neuchatel and CEPR. Neven: Graduate Institute of International Studies, Geneva. **SR** CEPR Discussion Paper: 2601; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** L43, L44. **KW** Antitrust. Transition.

AB This paper analyses how the competition authorities in the Czech republic, Poland and Hungary (CPH) have dealt with the interface between trade and competition in their actual practice. The following findings emerge: (i) There has not been any significant conflict in the allocation of jurisdiction between CPH on the one hand and the EU on the other hand. This may however be due to a lack of integration between these countries. (ii) The definition of the relevant geographic market suffers from significant shortcomings in each country under review with a general bias in favor of narrow market definition. Problems are most severe in the Czech republic. (iii) Anti-trust agencies in all three countries have attempted to advocate competition in the formulation of trade policy. (iv) Anti-trust agencies in all three countries could indeed be pursuing objectives of industrial policy in the exercise of merger control towards foreign firms. The situation is most severe in Poland where the suspicion arises that profitable market positions have been auctioned off to foreign buyers in exchange for

commitments, which are unrelated to the competitive situation.

PD December 1999. **TI** Is the Use of the WTO Dispute Settlement System Biased? **AU** Mavroidis, Petros C.; Nordstrom, H.; Horn, Henrik. **AA** Mavroidis: Universite de Neuchatel. Nordstrom and Horn: World Trade Organization. **SR** CEPR Discussion Paper: 2340; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** F02, F13, K33. **KW** World Trade Organization. Dispute Settlement. Exports. Legal Capacity. Trade Disputes.

AB The larger trading nations have been the main users of the World Trade Organization (WTO) Dispute Settlement (DS) system during its first four years of existence (1995-1998). This has prompted a debate about whether the DS system is biased against smaller and poorer countries, for example, because of a lack of legal capacities and retaliatory power. This paper shows that a simple model in which countries bring disputes proportionally to the diversity and value of exports explains the dispute pattern fairly well. Differences in legal capacities appear to play some role, while "power" considerations do not seem to matter.

McCallum, Bennett T.

PD April 2000. **TI** Theoretical Analysis Regarding a Zero Lower Bound on Nominal Interest Rates. **AA** Carnegie Mellon University, NBER, and Federal Reserve Bank of Richmond. **SR** National Bureau of Economic Research Working Paper: 7677; 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** E43, E52, F31, F41. **KW** Nominal Interest Rates. Interest Rates. Monetary Policy. Foreign Exchange.

AB This paper explores several issues concerning a possible zero lower bound (ZLB), including: its theoretical rationale; the magnitude of effects of low sustained inflation on real interest rates; the validity of analyzing monetary policy in models with no monetary variables; and the dynamic stabilizing properties of Taylor rules in a ZLB context. The most important argument, however, is that if the short-run nominal interest rate is immobilized at zero, there nevertheless exists a route for monetary stabilization policy to be effective -- via the foreign exchange market. Its quantitative importance is examined in a calibrated, optimizing, open-economy model.

McDermott, C. John

TI An Unbiased Appraisal of Purchasing Power Parity. **AU** Cashin, Paul; McDermott, C. John.

McGuinness, Meghan

TI Uncertainty and the Cost-Effectiveness of Regional NOx Emissions Reductions from Electricity Generation. **AU** Burtraw, Dallas; Bharvirkar, Ranjit; McGuinness, Meghan.

McGuire, Therese J.

TI Fiscal Decentralization Policies and Sub-National Government Debt in Evolving Federations. **AU** Garcia-Mila, Teresa; Goodspeed, Timothy J.; McGuire, Therese J.

Mehta, Paras

TI Ferreting Out Tunneling: An Application to Indian Business Groups. AU Bertrand, Marianne; Mehta, Paras; Mullainathan, Sendhil.

Meltz, Noah

TI Frustrated Demand for Unionisation: The Case of the United States and Canada Revisited. AU Gomez, Rafael; Lipset, Seymour Martin; Meltz, Noah.

Mendelsohn, Robert

TI Estimating Carbon Supply Curves for Global Forests and Other Land Uses. AU Sedjo, Roger A.; Sohngen, Brent; Mendelsohn, Robert.

Meredith, Guy

PD February 2002. TI The Forward Premium Puzzle Revisited. AU Meredith, Guy; Ma, Yue. AA Meredith: IMF. Ma: Lingnan University. SR International Monetary Fund Policy Working Paper: WP/02/28; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 38. PR not available. JE F31, F37, F41, F47. KW Exchange Rates. Forward Premium Puzzle. Uncovered Interest Parity.

AB The forward premium is a notoriously poor predictor of exchange rate movements. This failure must reflect deviations from risk neutrality and/or rational expectations. In addition, a mechanism is needed that generates the appropriate correlation between the forward premium and shocks arising from risk premia or expectations errors. This paper extends McCallum (1994) to show how such a correlation can arise from the response of monetary policy to output and inflation, which are in turn affected by the exchange rate. The theoretical models considered all generate results that are consistent with the forward premium being a biased predictor of short-term exchange rate movements; the bias decreases, however, as the horizon of the exchange rate change lengthens. Another common feature of the models is that the true reduced-form equation for exchange rate changes contains variables other than the interest differential, providing a justification for "eclectic" relationships for forecasting exchange rates. The results, however, remain consistent with using uncovered interest parity as a building block for structural models.

Merino-Castello, Anna

PD December 2000. TI The Impact of the Reference Price System on the Pharmaceutical Market: A Theoretical Approach. AA Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 524; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 33. PR Papers available for free on the web; no hardcopies. JE I18, L11, L15, L51. KW Brand-Name. Generic Drugs. Pricing Mechanism. Switching Costs.

AB This article analyses the impact of the reference price system on the price-setting strategies of the pharmaceutical firms and on the level of generic usage. This model is the first to take explicitly into account the impact of the reference price mechanism on the level of competition between brand-name and generic drugs and national pharmaceutical spending. We consider a duopolistic model with one firm producing the brand-name drug, whose patent has already expired, and the

other producing the corresponding generic version. We work in a partial equilibrium framework where firms set prices sequentially and consumers face heterogeneous switching costs. We show that brand producers compensate the decline of profits by selling greater quantities instead of charging higher prices, thus fostering price competition in the pharmaceutical market. This result is a consequence of both the assumption of a vertically differentiated model and the introduction of the reference price system.

Metcalf, David

PD April 2001. TI British Unions: Dissolution or Resurgence Revisited. AA CEP and LSE. SR London School of Economics, Centre for Economic Performance Discussion Paper: 493; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 45. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J51. KW Trade Union Membership. Representative Voice. Union Decline.

AB Union membership rose in 1999, ending two decades of sustained membership losses -- the longest, deepest decline in British labor history yielding a cumulative fall of over 5 million members. This paper analyses that hemorrhage in membership and asks whether or not the recent increase augurs a resurgence in unions' fortunes. Membership data and voice arrangements are described first. Then the decline in membership is analyzed, emphasizing both the failure of unions to achieve recognition in newly established workplaces and plummeting density where unions remain recognized. The health of unions turns on their appeal to potential members, so their "sword of justice" impact is set out next, showing the positive effects of unions in the workplace. It is unlikely that employment will grow disproportionately in unionized sectors of the economy, so any revival of unions depends on organizing activity among both individuals and firms. The paper concludes that a twin-track organizing strategy would help unions partially reverse their membership losses -- signing up new employers, but also focusing on the over 3 million free riders who are covered by collective agreements but are not members.

Metcalf, Gilbert E.

TI Behavioral and Distributional Effects of Environmental Policy Introduction. AU Carraro, Carlo; Metcalf, Gilbert E.

Metrick, Andrew

TI Does the Internet Increase Trading? Evidence from Investor Behavior in 401(k) Plans. AU Choi, James J.; Laibson, David; Metrick, Andrew.

Midelfart Knarvik, Karen-Helene

PD November 2000. TI Comparative Advantage and Economic Geography: Estimating the Location of Production in the EU. AU Midelfart Knarvik, Karen-Helene; Overman, Henry G.; Venables, Anthony J. AA Midelfart Knarvik: Norwegian School of Economics and Business Administration, Bergen and CEPR. Overman and Venables: London School of Economics. SR CEPR Discussion Paper: 2618; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG not available. PR 5 pounds, \$8 or 8 euros. JE F12, F17. KW Comparative Advantage.

Economic Geography. Specialization.

AB We develop and econometrically estimate a model of the location of industries across countries. The model combines factor endowments and geographical considerations, and shows how industry and country characteristics interact to determine the location of production. We estimate the model on sectoral data for EU countries over the period 1980-97, and find that endowments of skilled and scientific labor are important determinants of industrial structure, as also are forward and backward linkages to industry.

Miguel, Ted

PD June 1999. **TI** Ethnic Diversity, Mobility and School Funding: Theory and Evidence from Kenya. **AA** Harvard University. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/14; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 50. **PR** no charge. **JE** H72, I21, I22, J19, O15. **KW** Education. Ethnicity. Kenya. Student Mobility. School Funding.

AB This paper explores the relationship between ethnic diversity and local school funding in Kenyan primary schools. The empirical results paint a picture of pervasive local collective action problems in ethnically diverse Kenyan primary schools. Local ethnic diversity is robustly associated with lower local school funding, less parental involvement in school functions, and fewer desks, latrines, and classrooms per pupil in ninety-seven rural Kenyan primary schools. However, local ethnic diversity is not related to average school test score performance in these schools. The theory examines the school choice and school funding process when student mobility between schools is limited by land market imperfections, and some aspect of educational quality -- such as headmaster competence -- differs markedly across schools. The implications for human capital accumulation, economic growth, and local collective action are discussed, especially for Africa.

Milesi-Ferretti, Gian Maria

TI External Wealth, the Trade Balance, and the Real Exchange Rate. **AU** Lane, Philip R.; Milesi-Ferretti, Gian Maria.

Minford, Patrick

PD November 2000. **TI** Optimal Monetary Policy with Endogenous Contracts: Should we Return to a Commodity Standard? **AU** Minford, Patrick; Nowell, Eric. **AA** Minford: Cardiff Business School and CEPR. **SR** CEPR Discussion Paper: 2616; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** E43, E58. **KW** Inflation Targeting. Interest Rates. Monetary Rules. Price Level Targeting.

AB A representative agent who is employed chooses an optimal degree of wage indexation (to prices and the auction wage) in response to the monetary regime. Should that regime target the growth rate or the level of the money supply, or of prices (as in a commodity standard)? We find that, contrary to the usual finding from macroeconomic models with fixed wage contract structures, there are gains in welfare for the average

household, with both real wages and employment being stabilized. The reason is that when the monetary regime shifts to targeting levels, indexation falls markedly; this flattens the aggregate supply curve and steepens the aggregate demand curve, providing a high degree of "automatic" stabilization. The choice between targeting money or prices creates a trade-off between employment and real wage stability-implicating a distributional conflict between insiders and outsiders in the labor market.

Miravete, Eugenio J.

PD September 2000. **TI** Choosing the Wrong Calling Plan? Ignorance, Learning, and Risk Aversion. **AA** University of Pennsylvania and CEPR. **SR** CEPR Discussion Paper: 2562; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D42, D81, D82, D83, L96. **KW** Expectation Bias. Learning. Risk Aversion. Telecommunications. Tariff Choice.

AB It is commonly believed that consumers behave irrationally when subscribing to optional telephone tariffs. The fact that consumers show a strong preference for flat rate options has commonly been interpreted as evidence of irrational behavior, since such a choice is often not ex post cost-minimizing. My results, obtained using the data from the 1986 Kentucky tariff experiment, contradict these views and provide strong evidence in favor of the rationality of consumers' choices. I find that expectations on future consumption play a major role in the choice of tariffs, and also that consumption forecast errors are more related to the volume of local telephone usage than to any particular demographic profile. More importantly, the evidence shows that there exist learning effects that induce tariff switching, often in response to very small cost differences, in order to minimize the magnitude of monthly bills even in the short term. Finally, risk aversion is ruled out as a possible source of consumers' biased taste for flat tariffs.

Mitra, Tappan

TI Aggregating Infinite Utility Streams with Inter-Generational Equity. **AU** Basu, Kaushik; Mitra, Tappan.

Mlachila, Montfort

PD January 2002. **TI** Financial Reforms and Interest Rate Spreads in the Commercial Banking System in Malawi. **AU** Mlachila, Montfort; Chirwa, Ephraim W. **AA** Montfort: International Monetary Fund. Chirwa: University of Malawi. **SR** International Monetary Fund Working Paper: WP/02/06; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 23. **PR** not available. **JE** E43, E58, G21, L13. **KW** Commercial Banks. Interest Spreads. Financial Liberalization. Malawi.

AB This study investigates the impact of financial sector reforms on interest rate spreads in the commercial banking system in Malawi. The financial reform program commenced in 1989 when both the Reserve Bank Act and the Banking Act were revised with the easing of entry requirements into the banking system, and indirect monetary policy instruments were subsequently introduced in 1990. The adoption of a floating exchange rate in 1994 marked the end of major policy reforms in the Malawian financial sector. Using alternative definitions

of spreads, our analysis shows that spreads increased significantly following liberalization, and panel regression results suggest that the observed high spreads can be attributed to high monopoly power, high reserve requirements, high central bank discount rate, and high inflation.

Moav, Omer

TI From Physical to Human Capital Accumulation: Inequality in the Process of Development. **AU** Galor, Oded; Moav, Omer.

Mocan, H. Naci

PD April 2000. **TI** The Demand for Medical Care in Urban China. **AU** Mocan, H. Naci; Tekin, Erdal; Zax, Jeffrey S. **AA** Mocan: University of Colorado at Denver and NBER. Tekin: University of North Carolina at Chapel Hill. Zax: University of Colorado at Boulder. **SR** National Bureau of Economic Research Working Paper: 7673; 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** I11, O53, R22. **KW** China. Medical Care. Health Care. **AB** This is the first paper to investigate the determinants of the demand for medical care in the People's Republic of China. It uses a data set that includes detailed characteristics of 6407 urban households, and a continuous measure of health care spending and price. A two-part model and a discrete factor model are used in the estimation. Household characteristics and work conditions impact the demand for medical care. Income elasticity is around 0.3, indicating medical care is a necessity. Medical care demand is price inelastic, and price elasticity is larger in absolute value for poorer households.

Mody, Ashoka

PD February 2002. **TI** International Capital Crunches: The Time-Varying Role of International Asymmetries. **AU** Mody, Ashoka; Taylor, Mark P. **AA** Mody: IMF. Taylor: University of Warwick. **SR** International Monetary Fund Policy Working Paper: WP/02/43; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 25. **PR** not available. **JE** F32, F34, O19. **KW** Capital Flows. Disequilibrium. Rationing. Asymmetric Information. Developing Countries.

AB We examine the determinants of capital flows to four developing countries during the 1990s using an explicitly disequilibrium econometric framework in which the supply and demand for capital are not necessarily equal and the actual amount of the flow is determined by the "short side" of the market. We are thus able to detect instances of "international capital crunch" -- where capital flows are curtailed because of supply-side rationing -- and to relate these instances to movements in the underlying fundamentals. The analysis highlights the role of asymmetric information -- as distinct from the traditional concern with default risk -- in conditioning capital flows.

TI Would Collective Action Clauses Raise Borrowing Costs? **AU** Eichengreen, Barry; Mody, Ashoka.

Moel, Alberto

TI Selling Company Shares to Reluctant Employees: France Telecom's Experience. **AU** DeGeorge, Francois; Jenter, Dirk; Moel, Alberto; Tufano, Peter.

Monastiriotis, Vassilis

TI Mind the Gaps: The Evolution of Regional Inequalities in the UK 1982-1997. **AU** Duranton, Gilles; Monastiriotis, Vassilis.

Moore, John

TI On the Design of Hierarchies: Coordination Versus Specialization. **AU** Hart, Oliver; Moore, John.

Moorthy, Uma

TI Predicting Emerging Market Currency Crashes. **AU** Kumar, Manmohan S.; Moorthy, Uma; Perraudin, William.

Moreno, Manuel

PD April 2001. **TI** On the Robustness of Least-Squares Monte Carlo (LSM) for Pricing American Derivatives. **AU** Moreno, Manuel; Navas, Javier F. **AA** Moreno: Universitat Pompeu Fabra. Navas: Instituto de Empresa, Madrid. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 543; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 38. **PR** Papers available for free on the web: no hardcopies. **JE** C15, C63, G13. **KW** Least-Squares Monte Carlo. Option Pricing. American Options.

AB This paper analyses the robustness of Least-Squares Monte Carlo, a technique recently proposed by Longstaff and Schwartz (2001) for pricing American options. This method is based on least-squares regressions in which the explanatory variables are certain polynomial functions. We analyze the impact of different basis functions on option prices. Numerical results for American put options provide evidence that a) this approach is very robust to the choice of different alternative polynomials and b) few basis functions are required. However, these conclusions are not reached when analyzing more complex derivatives.

Morgenstern, Richard

TI Workshop Report: Pollution Abatement Costs and Expenditures (PACE) Survey Design for 2000 and Beyond. **AU** Burtraw, Dallas; Krupnick, Alan; Morgenstern, Richard; Pizer, William; Shih, Jih-Shyang.

Morita, Hodaka

TI International Credit and Welfare: Some Paradoxical Results with Implications for the Organization of International Lending. **AU** Basu, Kaushik; Morita, Hodaka.

Morris, JoAnne

PD December 2001. **TI** Risk Diversification in the Credit Portfolio: An Overview of Country Practices. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/200; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 36. **PR** not available. **JE** G21, G28. **KW** Risk Diversification. Credit Concentration. Large Credit Exposure. Credit Risk.

AB This paper reviews the rules in place in selected countries to limit risk concentrations in the credit portfolio. The paper focuses on a number of issues suggested by international organizations for countries and bank supervisors to consider in

imposing standards for risk diversification in the credit portfolio. The issues reviewed for each country are the large exposure limits, the definition of credit exposure (including application on a consolidated basis), and the definition of a group of related borrowers. The paper concludes that most of the countries reviewed set limits on large exposures for banks and define a related group of borrowers in line with recommended international standards. The major differences identified among countries include how to determine the credit exposure, the application of the exposure limits on a consolidated basis, and whether to impose limits on exposure to a specific sector.

Morris, Stephen

TI Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. **AU** Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song.

Morrison, Thomas K.

TI Measuring Statistical Capacity Building: A Logical Framework Approach. **AU** Khawaja, Sarmad; Morrison, Thomas K.

Motta, Massimo

PD January 2000. **TI** Leniency Programs and Cartel Prosecution. **AU** Motta, Massimo; Polo, M. **AA** Motta: European University Institute and Universitat Pompeu Fabra. Polo: Universita Bocconi. **SR** CEPR Discussion Paper: 2349; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** D21, K21, L41. **KW** Antitrust Policy. Cartels. Collusion. Deterrence. Amnesties.

AB We study the enforcement of competition policy against collusion under Leniency Programs, which give reduced fines to firms revealing information to the Antitrust Authority. Such programs give firms an incentive to break collusion, but may also have a pro-collusive effect since they decrease the expected cost of misbehavior. We analyze the optimal policy under alternative rules, obtaining a ranking of the different schemes and showing when the use of reduced fines may improve antitrust enforcement.

Mourmouras, Alex

TI Convertibility Risk: The Precautionary Demand for Foreign Currency in a Crisis. **AU** Black, Stanley W.; Christofides, Charis; Mourmouras, Alex.

TI Capital Flows to Transition Economies: Master or Servant? **AU** Lipschitz, Leslie; Lane, Timothy; Mourmouras, Alex.

Moya-Gutierrez, Soledad

PD January 2001. **TI** The So-Called "External Partners" in the Groups of Corporations: A Model of Presentation in the Consolidated Statements. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 528; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 22. **PR** Papers available for free on the web; no hardcopies. **JE** M21, M41. **KW** External Partners. Consolidated Statements. Consolidated Information.

AB This paper studies, on the one hand, theories set out around the consideration of the external partners in the consolidated information and on the other hand, financial models that discuss the convenience of the separation or not of the different elements that form part of the liabilities of the balance sheet of the companies. A Model is proposed, the External Partners Model, which financially argues a certain presentation and processing of such and that, in our opinion, facilitates the analysis of the consolidated financial statements. This model is based on two hypotheses: (1) the economic and financial variables are not independent and (2) the value of the company depends, among other factors, of the type of sources that constitute their capital. These two hypotheses will imply that a separation should be included in the consolidated balance sheet between equity and liabilities as they are different sources of capital and then its separation will give relevant information to its users.

Mroz, Thomas A.

TI Estimating the Effects of Covariates on Health Expenditures. **AU** Gilleskie, Donna B.; Mroz, Thomas A.

Mulder, Christian

PD November 2001. **TI** Foreign Currency Credit Ratings for Emerging Market Economies. **AU** Mulder, Christian; Perrelli, Roberto. **AA** Mulder: IMF. Perrelli: University of Illinois. **SR** International Monetary Fund Working Paper: WP/01/191; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 10. **PR** not available. **JE** F34, G18, O16. **KW** Emerging Markets. Foreign Credit Ratings. Currency Credit Ratings. Economic Crisis. Credit Ratings.

AB This paper examines how ratings for emerging market economies have been set. Given the high degree of autocorrelation in ratings, we use estimators that yield consistent parameters in the presence of such correlation. The results show that rating changes for emerging market economies have been dominated by variables different from those suggested by the literature. We also conclude that some deterioration in the ratings was warranted during the recent crisis episodes in view of the behavior of economic fundamentals, but that the agencies overreacted for several key countries. We find evidence of a structural break: since the Asian crisis period, ratings have been influenced by reserves in relation to short-term debt.

PD March 2002. **TI** The Role of Corporate, Legal and Macroeconomic Balance Sheet Indicators in Crisis Detection and Prevention. **AU** Mulder, Christian; Perrelli, Roberto; Rocha, Manuel. **AA** Mulder: IMF. Perrelli: University of Illinois. Rocha: Oxford University. **SR** International Monetary Fund Policy Working Paper: WP/02/59; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** F34, F42, G18. **KW** External Vulnerability. Currency Crises. Balance Sheet Effects. Corporate Sector.

AB This study tests the recent balance sheet explanations of external crises in emerging market countries and the role of standards in these crises. Using several unique data sets, it finds that corporate sector balance sheets have a very significant impact on both the likelihood and depth of external crises. The indicators supplement, rather than substitute for, traditional macroeconomic variables, with standards playing potentially an important role. The results have implications for strategies to

limit external vulnerability: they suggest that policymakers need to promote sound private sector financial structures, support sound shareholder rights, in addition to employing prudent macroeconomic policies to reduce exposure to crises. In-sample predictions point to potentially large improvements in the predictive power of models that include these indicators.

Mullahy, John

PD September 2000. **TI** Live Long, Live Well: Quantifying the Health of Heterogenous Populations. **AA** University of Wisconsin-Madison and NBER. **SR** National Bureau of Economic Research Working Paper: 7895; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** 112, 118. **KW** Health. Life Expectancy. Life Quality.

AB Various health-, quality-, and disability-adjusted life year or life expectancy measures have become gold standards for defining outcomes in technology evaluation, population health monitoring, and other evaluative efforts. As such, it is critical that the analytical framework within which these measures are used for descriptive and evaluative purposes be theoretically consistent and statistically rigorous. This paper demonstrates that estimation of these expectations necessarily requires consideration of the population variation in, and covariation between, quality and longevity. An empirical example of the central issues is provided by means of an analysis of the Years of Healthy Life (YHL) measure drawn from the U.S. National Health Interview Survey.

Mullainathan, Sendhil

PD October 2000. **TI** Behavioral Economics. **AU** Mullainathan, Sendhil; Thaler, Richard H. **AA** Mullainathan: MIT and NBER. Thaler: University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7948; 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** D11, D21, D63, D64, J22. **KW** Behavioral Economics. Bounded Rationality. Bounded Willpower. Bounded Self-Interest.

AB Behavioral Economics is the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications. We begin with a preliminary question about relevance. Does some combination of market forces, learning and evolution render these human qualities irrelevant? No. Because of limits of arbitrage less than perfect agents survive and influence market outcomes. We then discuss three important ways in which humans deviate from the standard economic model. Bounded rationality reflects the limited cognitive abilities that constrain human problem solving. Bounded willpower captures the fact that people sometimes make choices that are not in their long-run interest. Bounded self-interest incorporates the comforting fact that humans are often willing to sacrifice their own interests to help others. We then illustrate how these concepts can be applied in two settings: finance and savings. Financial markets have greater arbitrage opportunities than other markets, so behavioral factors might be thought to be less important here, but we show that even here the limits of arbitrage create anomalies that the psychology of decision making helps explain.

TI Ferreting Out Tunneling: An Application to Indian

Business Groups. **AU** Bertrand, Marianne; Mehta, Paras; Mullainathan, Sendhil.

Muller, Ulrich K.

PD December 2001. **TI** Tests for Unit Roots and the Initial Observation. **AU** Muller, Ulrich K.; Elliott, Graham. **AA** Muller: University of St. Gallen (Switzerland). Elliott: University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/19; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 28. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C12, C22. **KW** Unit Root Tests. Point Optimal Tests. Weighted Average Power. Asymptotic Distributions.

AB The paper analyzes the impact of the initial observation on the problem of testing for unit roots. To this end, we derive a family of optimal tests that maximize a weighted average power criterion with respect to the initial observation. We then investigate the relationship of this optimal family to unit root tests in an asymptotic framework. We find that many popular unit root tests are closely related to specific members of the optimal family, but the corresponding members employ very different weightings for the initial observation. The popular Dickey-Fuller tests, for instance, are closely related to optimal tests that put a large weight on extreme derivations of the initial observation from the deterministic component, whereas other popular tests put more weight on moderate deviations. At the same time, the power of the various unit root tests varies dramatically with the initial observation. This paper therefore helps to explain the results of the comparative power studies of unit root tests, and allows a much deeper understanding of the merits of particular tests in specific circumstances.

Mulligan, Casey B.

TI Human Capital, Heterogeneity, and Estimated Degrees of Intergenerational Mobility. **AU** Han, Song; Mulligan, Casey B.

PD April 2000. **TI** Induced Retirement, Social Security, and the Pyramid Mirage. **AA** University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7679; 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** D72, D78, D91, H55, J26. **KW** Social Security. Generational Accounts. Redistribution. Induced Retirement. Retirement.

AB Does Social Security redistribute across cohorts, or is it a program for "purchasing the jobs" of the elderly? I formalize both models, showing how they have some predictions in common -- the most important of which is that generational accounts have the appearance of a "pyramid scheme." I also derive important differences between the two interpretations, and compare those differences with data on Social Security programs around the world. Since implicit and explicit tax rates on elderly labor income are so high, and so closely (and positively) related with the amount of Social Security spending, and because substitution effects of the program can be as large as its wealth effects, I conclude that Social Security's induced retirement motive is much more important for explaining differences among European countries than is the

intergenerational redistribution motive. Furthermore, when policy is at least in part designed to induce retirement, its generational incidence can be very different than the incidence of a pyramid scheme, even for those countries where the induced retirement motive is not the dominant one. The possibility of induced retirement also makes it difficult for perpetual intergenerational redistribution to be supported as a subgame perfect political equilibrium.

PD April 2000. **TI** Can Monopoly Unionism Explain Publicly Induced Retirement? **AA** University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7680; 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 U.S.). **JE** D78, H55, J26, J51. **KW** Unions. Public Pensions. Retirement. Pensions.

AB It has long been suggested that trade unions take actions and favor public policies that reduce the quantity of labor so that union members might enjoy greater labor incomes. Can this explain the prevalence of generous public pension programs inducing retirement? I suggest not, by formalizing the monopoly unionism model and showing that labor's interest in reducing the quantity of labor cannot explain why the old are induced to retire rather than discouraging work among workers of all ages. Discouraging work of a subset of union workers introduces allocative inefficiencies without promoting the objectives of the monopoly union. And, unless the old have a disproportionate influence within the union, union interests cannot explain why public pension programs are so generous.

Munich, Daniel

TI Returns to Human Capital Under the Communist Wage Grid and During the Transition to a Market Economy. **AU** Svejnar, Jan; Terrell, Katherine; Munich, Daniel.

Murao, Hiroshi

TI Sources of Economic Growth in East Asia: A Nonparametric Assessment. **AU** Iwata, Shigeru; Khan, Mohsin S.; Murao, Hiroshi.

Murshid, Antu P.

TI Are Financial Crises Becoming Increasingly More Contagious? What is the Historical Evidence on Contagion? **AU** Bordo, Michael D.; Murshid, Antu P.

Murthi, Mamta

TI Fertility, Education and Development: Further Evidence from India. **AU** Dreze, Jean; Murthi, Mamta.

Myers, Mary Margaret

PD October 2001. **TI** Copycat Funds: Information Disclosure Regulation and the Returns to Active Management in the Mutual Fund Industry. **AU** Myers, Mary Margaret; Poterba, James M.; Shackelford, Douglas A.; Shoven, John B. **AA** Myers: University of Chicago. Poterba: MIT. Shackelford: University of North Carolina. Shoven: Stanford University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/04; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 23. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** G23, G28, K22, L15.

KW Mutual Funds. Disclosure Regulation. Intellectual Property. Patents.

AB Mutual funds must disclose their portfolio holdings to investors semiannually. For actively managed funds, one cost of such disclosures is a potential reduction in the private benefits from research on asset values. This paper tries to quantify this cost of disclosure by testing whether "copycat" mutual funds, funds that purchase the same assets as actively-managed funds as soon as those asset holdings are disclosed, can earn returns that are similar to those of the actively-managed funds. Copycat funds do not incur the research expenses associated with the actively-managed funds that they are mimicking. Our results for a limited sample of high expense funds in the 1990s suggest that while returns before expenses are significantly higher for the underlying actively managed funds relative to the copycat funds, after expenses copycat funds earn statistically indistinguishable, and possibly higher, returns than the underlying actively managed funds.

Nadal-De Simone, Francisco

PD December 2001. **TI** An Investigation of Output Variance Before and During Inflation Targeting. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/215; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** C33, E23, E31, E52, F41. **KW** Output Variance. Inflation Targeting. Markov-Switching.

AB Since Taylor estimated a trade-off between inflation and output variance, it has been widely accepted that efforts to keep the inflation rate "too low and stable" will likely result in relatively larger output fluctuations. Following the generalized reduction in inflation variance in the 1990s, that concern was rekindled. This study estimates whether conditional output variance has changed in a sample of 12 countries. With the possible exception of Canada, there is no evidence of an increase in output variance. Either output variance has not changed (i.e., in Korea and Singapore) or has fallen (i.e., in Australia and New Zealand).

Navas, Javier F.

TI On the Robustness of Least-Squares Monte Carlo (LSM) for Pricing American Derivatives. **AU** Moreno, Manuel; Navas, Javier F.

Nelson, Peter

TI The Greening of Development Economics: A Survey. **AU** Blackman, Allen; Mathis, Mitchell; Nelson, Peter.

Neven, Damien J.

TI The International Dimension of the Antitrust Practice in Poland, Hungary and the Czech Republic. **AU** Mavroidis, Petros C.; Neven, Damien J.

PD November 2000. **TI** How Should "Protection" Be Evaluated in Art. III GATT Disputes? **AA** Graduate Institute of International Studies, Geneva and CEPR. **SR** CEPR Discussion Paper: 2613; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F13, K33, L16. **KW** GATT. Market Definition. Protection.

AB This Paper considers the economic analysis of non-tariff

barriers in the context of disputes under Art. III of the GATT. This article establishes the principle of National Treatment, which requires WTO Members not to introduce internal measures that protect domestic products. We first observe that the appropriate measure of protection and the level of protection that is acceptable have hardly been discussed in the case law and that panels tend to presume that a strong substitution between domestic and foreign products always lead to substantial protection. Next, we consider a stylized model of trade and find that the ability to raise price is a robust measure of protection and that protection falls significantly (for a given barrier) with the degree of product differentiation but also with the degree of rivalry. We also observe that the effects of non-tariff barriers on import values in ambiguous so that imports are not a robust measure of protection. Our findings suggest that the distinction drawn in the case law between "like" and "directly competitive and substitutable" products is not helpful. Finally, we suggest a method to evaluate protection in trade disputes, which is inspired by the definition of the relevant market in antitrust.

Newell, Richard

TI Policy-Induced Technology Adoption: Evidence from the U.S. Lead Phasedown. **AU** Kerr, Suzi; Newell, Richard.

Nickel, Christiane

TI The Effects of Capital Controls on Exchange Rate Volatility and Output. **AU** Frenkel, Michael; Nickel, Christiane; Schmidt, Gunter; Stadtmann, Georg.

Nickell, Stephen

PD October 2000. **TI** Technological Innovation and Economic Performance in the United Kingdom. **AU** Nickell, Stephen; Van Reenen, John. **AA** Nickell: Bank of England and CEP. Van Reenen: University College London. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 488; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 49. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D24, E23, O31, O32, O52. **KW** Innovation. Technology. Productivity Growth. United Kingdom.

AB Over the period since 1970, Britain has improved its relative productivity performance, but there remains a significant gap in the market sector productivity between Britain and both Continental Europe and the United States. Much of the gap between Britain and Continental Europe is due to lower levels of capital intensity and skill. However, even taking these into account, there remains a significant gap between Britain and the United States. This reflects not just a weakness in high tech areas, but also an inability to absorb best-practice techniques and methods in wide swathes of the market sector. Part of this is due to a weakness in technological innovation despite a high quality science base. This includes comparatively low and falling levels of research and development and patenting, as well as a distinct lag in the diffusion of innovations relative to other countries.

PD March 2001. **TI** Nominal Wage Rigidity and the Rate of Inflation. **AU** Nickell, Stephen; Quintini, Glenda. **AA** Nickell: Bank of England and CEP. Quintini: CEP. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 489; Publications Unit, Centre

for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 29. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E24, E31. **KW** Inflation. Wage Rigidity.

AB Using the accurate and extensive data available in the UK New Earnings Survey, this paper investigates the extent to which nominal wages are downwardly rigid, and whether such rigidity interferes with necessary real wage adjustments when inflation is low. Despite the substantial numbers of individuals whose nominal wages fall from one year to the next, we find that if long-run inflation is one percent higher, the number of individuals with negative real pay growth increases by around 1.4 percent. This is controlling for the median and dispersion of the real wage change distribution.

Nino-Mora, Jose

PD November 2000. **TI** Beyond Smith's Rule: An Optimal-Dynamic Index, Rule for Single Machine Stochastic Scheduling with Convex Holding Costs. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 514; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 21. **PR** Papers available for free on the web; no hardcopies. **JE** C61, C63. **KW** Stochastic Scheduling. Dynamic Index Rule. Decomposition. Convex Holding Costs. Conservation Laws. Polyhedral Methods.

AB We study a model for scheduling n classes of stochastic jobs on a single machine, with the objective of minimizing the total expected holding cost (discounted or undiscounted). We allow general holding cost rates that are separable, nondecreasing and convex on the number of jobs in each class. We formulate the problem as a linear program over a certain greedoid polytope, and establish that it is solved optimally by a dynamic (priority) index rule, which extends the classical Smith's rule (1956) for the linear case.

Nitzan, S.

TI The Endogenous Determination of Minimum Wage. **AU** Epstein, Gil S.; Nitzan, S.

Nordstrom, H.

TI Is the Use of the WTO Dispute Settlement System Biased? **AU** Mavroidis, Petros C.; Nordstrom, H.; Horn, Henrik.

Nothaft, Frank E.

TI The Role of Affordable Mortgages in Improving Living Standards and Stimulating Growth: A Survey of Selected MENA Countries. **AU** Erbas, S. Nuri; Nothaft, Frank E.

Nowell, Eric

TI Optimal Monetary Policy with Endogenous Contracts: Should we Return to a Commodity Standard? **AU** Minford, Patrick; Nowell, Eric.

Nugent, Jeffrey B.

TI Investment and Instability. **AU** Campos, Nauro F.; Nugent, Jeffrey B.

Oates, Wallace E.

PD November 2001. **TI** A Reconsideration of Environmental Federalism. **AA** University of Maryland and Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/54; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 25. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** H11, H79, Q28. **KW** Environmental Federalism. Environmental Policy. Federalism.

AB This paper provides a review and assessment of the debate over environmental federalism -- the issue of the roles of different levels of government in environmental management. The paper begins with the presentation of three benchmark cases that provide a framework for thinking about the issue. It then offers a review, first of the theoretical literature, and second of some new, provocative empirical literature on the race to the bottom. The paper contends that there remains, under certain circumstances, an important role for decentralized government in the setting of environmental standards and the design of regulatory programs. The central government, in addition to setting standards for "national" pollutants, has a fundamental contribution to make in supporting research in environmental science and pollution control technology, and in providing needed information and guidance to state and local governments.

PD November 2001. **TI** The Political Economy of Environmental Policy. **AU** Oates, Wallace E.; Portney, Paul R. **AA** Oates: University of Maryland and Resources for the Future. Portney: Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/55; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 27. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D72, D78, H11, Q28. **KW** Environmental Policy. Policy Determinants. Interest Groups. Environmental Regulation.

AB This paper provides a review and assessment of the extensive literature on the political determination of environmental regulation. A promising theoretical literature has emerged relatively recently that provides models of the political interaction of government with various interest groups in the setting of environmental standards and the choice of regulatory instruments. A large empirical literature supports such models, finding evidence of the influence of interest groups but also evidence that net social benefits are often an important determinant of environmental policy choices. We then take up the issue of environmental federalism and the large and growing theoretical literature that addresses the competitive "race to the bottom." The paper concludes with a brief look at the evolution of environmental policy and finds that economics has come to play a growing role both in the setting of standards for environmental quality and in the design of regulatory measures.

Okogu, Bright E.

PD February 2002. **TI** Issues in Global Natural Gas: A Primer and Analysis. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/40; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 35. **PR** not available. **JE** L22, L71, L95, Q32, Q41. **KW** Natural Gas. Pipelines. Gas Pricing. User-Cost. Transportation Constraints.

AB This paper discusses the rising profile of natural gas in global energy, factors constraining its further development, the gas contracting process, and the absence of a global market, which is analyzed in the context of the economic rent in the gas price and the opaque nature of gas contracts. A proposal for rationalizing the trade to ease these constraints is offered. Gas pricing and factors driving demand are also analyzed using evidence from the literature. Foreign direct investment can help to monetize some of the "stranded" gas reserves, but success would depend on an investor-friendly climate, including appropriate tariff regimes in the domestic markets.

Olarreaga, Marcelo

TI The Protectionist Bias of Duty Drawbacks and the New Regionalism. **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo.

PD September 2000. **TI** Exports and Information Spillovers. **AA** World Bank and CEPR. **SR** CEPR Discussion Paper: 2560; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F12, F13, F14. **KW** Developing Countries. Exports. Information Spillovers.

AB Exporters' performance in a particular market may affect their future exports to the rest of the world. Importers may base their future transaction decisions upon the information revealed by exporters' past performance in other countries. Similarly, exporters acquire valuable information on foreign consumer tastes, product standards, or customs administration that may profitably be used in future transactions with other countries. This paper estimates the large effects of these information spillovers across markets on the export patterns of four developing countries (Egypt, Korea, Malaysia and Tunisia). A dollar increase in exports to the United States generates on average an extra 2 to 14 cents of exports to the rest of the world in the next period. Social and ethnic networks seem to reinforce these information spillovers, especially in developing countries, where they appear to be geographically more concentrated. The exception is China and to some extent Hong Kong, probably reflecting a geographically more diversified migration pattern.

TI Asymmetric Regionalism in Sub-Saharan Africa: Where Do We Stand? **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo.

PD December 1999. **TI** What's Behind Mercosur's CET? **AU** Olarreaga, Marcelo; Winters, L. Alan; Soloaga, Isidro. **AA** Olarreaga: World Bank and CEPR. Winters: University of Sussex. Soloaga: World Bank. **SR** CEPR Discussion Paper: 2310; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** F13, F14, F15. **KW** Endogenous Tariffs. Terms-of-Trade. Mercosur. Customs Union. Tariffs.

AB The theoretical literature follows two different approaches to explain the endogenous formation of a Customs Union (CU). The first one explains CU formation through the willingness of integrating partners to exploit terms-of-trade effects. Indeed, as the union forms, the "domestic market" gets larger and members' international market power increases. The alternative explanation is related to political-economy aspects, such as the CU offering the possibility of exchanging markets or protection within the enlarged market. Which is the engine

behind CU formation? This is the question at the core of this paper. Results suggest that in the case of the Common Market of the Southern Cone (Mercosur) both forces were important. Terms-of-trade effects account for between 6 and 28 percent of the explained variation in the structure of protection. There is also evidence that the terms-of-trade externalities among Mercosur's members have been internalized in the Common External Tariff (CET).

Oliveras, Ester

PD March 2001. **TI** Teaching, Research and Service: Experience and Opinions of Accounting Spanish Academics. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 536; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. **Website:** www.econ.upf.es. **PG** 19. **PR** Papers available for free on the web; no hardcopies. **JE** A22, M41. **KW** Teaching, Research, Accounting.

AB Research, teaching and service are the main activities carried out in almost all European universities. Previous research, which has been mainly centered in North-American universities, has found solid results indicating that research and teaching are not equally valued when deciding on faculty promotion. This paper presents the results of a survey realized in two European countries: Spain and the United Kingdom. Mainly, we focus on (i) the impact of teaching and service on time available for research; (ii) the integration of teaching and research and (iii) the perceived value of teaching and research for career success. The results show that both in Spain and in the United Kingdom there is a conflict between teaching and research, which has its origin in the importance attached to research activities on promotion decisions. It also seems evident that the conflict is being solved in favor of research.

TI One Hundred Issues of Revista Espanola de Financiacion y Contabilidad (REFC) -- Insights into Trends in the Spanish Academic Community. **AU** Amat, Oriol; Oliveras, Ester.

Olmstead, Alan L.

PD October 2000. **TI** The Diffusion of the Tractor in American Agriculture: 1910-60. **AU** Olmstead, Alan L.; Rhode, Paul W. **AA** Olmstead: University of California, Davis. Rhode: University of North Carolina, Chapel Hill and NBER. **SR** National Bureau of Economic Research Working Paper: 7947; 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** N52, O33, Q16. **KW** Gasoline Tractor. Agriculture. Technological Change.

AB This paper examines the impact and diffusion of the gasoline tractor in American agriculture. A key feature of the transition from horses to tractors was a long intermediate stage when both modes of power were used on the same farm. This is largely explained in the technical limitations of early tractors. In addition, we explore how rural markets and institutions adjusted to facilitate diffusion. Our simultaneous-equation regression analysis reveals that farm scale and tractor adoption had positive, independent effects on each other. Finally, we analyze diffusion as a capital replacement problem, which reveals that the shift to the new technology came far sooner than has generally been thought.

Oppers, Stefan Erik

PD January 2002. **TI** The Austrian Theory of Business Cycles: Old Lessons for Modern Economic Policy? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/02/02; International Monetary Fund, 700 19th Street, Washington, DC 20431. **Website:** www.imf.org. **PG** 15. **PR** not available. **JE** B53, E32, E51, E52. **KW** Austrian School. Hayek. Business Cycles. Monetary Policy.

AB This paper reviews the "Austrian" theory of the business cycle first proposed by Friedrich Hayek in the 1920s. His theory claimed that credit creation by monetary authorities would push investment beyond society's long-term willingness to save, creating a mismatch between supply and demand that would inevitably cause recession. The theory argued, moreover, that expansionary policies in recession could generally only postpone the necessary structural adjustment, making the subsequent correction more severe. Modern followers of this theory see Austrian features in a number of recent business cycles, including Japan in the 1980s and 1990s, and the more recent U.S. slowdown.

Ortun-Rubio, Vicente

PD November 2000. **TI** Financiacion Capitativa, Articulacion entre Niveles Asistenciales y Descentralizacion de las Organizaciones Sanitarias. **AU** Ortun-Rubio, Vicente; Lopez-Casasnovas, Guillem. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 523; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. **Website:** www.econ.upf.es. **PG** 43. **PR** Papers available for free on the web; no hardcopies. **JE** H11, H57, I18. **KW** Spanish Health System. Capitation Financing. Incentives. Health Care Management.

AB (Paper in Spanish) Public organizations are subjected to weak incentives for competition. Therefore, institutional Darwinism cannot apply. Regulation and performance monitoring is required to protect the public interest. This is particularly the case of health care organizations, where strong incentives may become inappropriate. This paper tries to ground some theoretical bases for the organizational change in the Spanish health system. We do this by building our argument from the very basic public goal: the improvement of the health status of the population. This requires a better integration of health care services. To this regard, capitation in finance shows some comparative advantages: it takes an integral view for the care of the population, it allows for a better decentralization of risks to health providers and favors managed care under a global perspective. However, the paper shows some potential limitations for this purpose and the need of a gradual strategy for its implementation.

Overman, Henry G.

TI Spatial Evolution of the US Urban System. **AU** Ioannides, Yannis; Overman, Henry G.

PD November 2000. **TI** Cross Sectional Evolution of the US City Size Distribution. **AU** Overman, Henry G.; Ioannides, Yannis. **AA** Overman: CEP and CEPR. Ioannides: Tufts University. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 483; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. **Website:** cep.lse.ac.uk. **PG** 24.

PR 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C14, J11, R11, R15, R23. **KW** Labor Mobility. City Size. Regional Mobility. Urban Mobility.

AB We report nonparametrically estimated stochastic transition kernels for the evolution of the distribution of US metropolitan area populations, for the period of 1900 to 1990. These suggest a fair amount of uniformity in the patterns of mobility during the study period. The distribution of city sizes is predominantly characterized by persistence. Additional kernel estimates do not reveal any stark differences in intra-region mobility patterns. We characterize the nature of intra-size distribution dynamics by means of measures that do not require discretisation of the city size distribution. We employ these measures to study the degree of mobility within the US city size distribution and, separately, within regional and urban subsystems. We find that different regions show different degrees of intra-distribution mobility. Second-tier cities show more mobility than top-tier cities.

PD November 2000. **TI** Zipf's Law for Cities: An Empirical Examination. **AU** Overman, Henry G.; Ioannides, Yannis. **AA** Overman: CEP and CEPR. Ioannides: Tufts University. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 484; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 8. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C14, R11, R15, R23. **KW** Urban Growth. Zipf's Law. Gibrat's Law. Brownian Motion. City Size.

AB We use US Census data on metropolitan areas from 1900-1990 to test the validity of Zipf's Law for cities. Previous investigations are restricted to regressions of log size against log rank. In contrast, we use a nonparametric procedure to calculate local Zipf exponents from the mean and variance of city growth rates. This also allows us to test for the validity of Gibrat's Law for city growth processes. Despite variation in growth rates as a function of city size, Gibrat's Law does hold. In addition, the local Zipf exponents are broadly consistent with Zipf's Law. Deviations from Zipf's Law are easily explained by deviations from Gibrat's Law.

TI Comparative Advantage and Economic Geography: Estimating the Location of Production in the EU. **AU** Midelfart Knarvik, Karen-Helene; Overman, Henry G.; Venables, Anthony J.

PD September 2001. **TI** The Economic Geography of Trade, Production, and Income: A Survey of Empirics. **AU** Overman, Henry G.; Redding, Stephen; Venables, Anthony J. **AA** LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 508; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 45. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F12, F23, F29. **KW** International Trade. Industrial Clustering. Economic Geography. Trade. Factor Prices.

AB This paper surveys the empirical literature on the economic geography of trade flows, factor prices, and the location of production. The discussion is structured around the empirical predictions of a canonical theoretical model. We review empirical evidence on the determinants of trade costs and the effects of these costs on trade flows. Geography is a

major determinant of factor prices, and access to foreign markets alone is shown to explain some 35 percent of the cross-country variation in per capita income. The paper documents empirical findings of home market (or magnification) effects, suggesting that imperfectly competitive industries are drawn more than proportionately to locations with good market access. Sub-national evidence establishes the presence of industrial clustering, and we examine the roles played by product market linkages to customer and supplier firms, knowledge spillovers, and labor market externalities.

Palfrey, Thomas R.

TI Mixed Equilibrium in a Downsian Model with a Favored Candidate. **AU** Aragonés, Enriqueta; Palfrey, Thomas R.

Palmer, Karen

TI Modeling the Costs and Environmental Benefits of Disposal Options for End-of-Life Electronic Equipment: The Case of Used Computer Monitors. **AU** Macauley, Molly K.; Palmer, Karen; Shih, Jih-Shyang; Cline, Sarah; Holsinger, Heather.

PD July 2001. **TI** Restructuring and the Cost of Reducing NOx Emissions in Electricity Generation. **AU** Palmer, Karen; Bharvirkar, Ranjit; Burtraw, Dallas; Paul, Anthony. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/10R; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 34. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** Q25, Q28, Q48. **KW** Electricity Sector. Restructuring. Emissions. Nitrogen Oxides. Environmental Quality.

AB We look at the effects of restructuring on three issues: (a) economic surplus and environmental quality, (b) the cost of nitrogen oxide (NOx) control policies and who bears the costs, and (c) the cost-effectiveness of a seasonal and an annual NOx cap in the SIP (State Implementation Plan) Call region. We find that without the NOx cap, nationwide restructuring leads to higher NOx and carbon emissions from the electricity sector. Adding either a seasonal or an annual NOx cap-and-trade regime in the eastern United States mitigates the increase in NOx emissions, but has a much smaller effect on carbon emissions. The out-of-pocket compliance cost associated with achieving a NOx cap is moderately higher with nationwide restructuring than without, but the changes in economic surplus are significantly higher. However, the economic benefits of nationwide restructuring more than offset the higher costs of controlling NOx emissions. The foregone economic surplus is compared with the benefits resulting from NOx emission reductions using an integrated assessment model of atmospheric transport and valuation of human health effects. We find an annual policy dominates a seasonal policy from a cost effectiveness perspective under limited restructuring, and even more strongly under nationwide restructuring.

TI The Effect of Allowance Allocation on the Cost of Carbon Emission Trading. **AU** Burtraw, Dallas; Palmer, Karen; Bharvirkar, Ranjit; Paul, Anthony.

TI Ancillary Benefits of Reduced Air Pollution in the United States from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael A.; Bloyd, Cary.

TI Implementing Electricity Restructuring: Policies, Potholes, and Prospects. **AU** Brennan, Timothy J.; Palmer, Karen; Martinez, Salvador.

Pande, Rohini

PD June 1999. **TI** Minority Representation and Policy Choices: The Significance of Legislator Identity. **AA** Columbia University. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/16; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 47. **PR** no charge. **JE** D72, H79, J15, J78, P16. **KW** Political Economy. Minorities. Electoral Law. India. Legislature Representation. **AB** Disadvantaged groups tend to be constituted of population minorities. Often, policies implemented by electorally accountable governments fail to reflect minority interests. A policy solution is to enhance the political power of minority groups as a vehicle for promoting their interests. This paper analyzes the success of an electoral law, which reserves seats for minority groups in legislatures, in promoting minority interests. The paper develops a theoretical model of the political process to analyze the policy impact of such a law. The key theoretical assumption, that candidates cannot commit to policies, implies that identity is relevant to policy choices. The analysis identifies economic reasons why this may lead parties to never field minority candidates. In such cases the model predicts that an electoral law of political reservation will influence policies. The paper looks at such a law in India to test this prediction empirically. The principal finding is that minority representation has increased transfers to minorities. More generally, the results indicate that legislator identity influences policies, and provide some support for the contention that politicians cannot fully commit to policies.

Parigi, Bruno

PD December 1999. **TI** Systemic Risk, Interbank Relations and Liquidity Provision by the Central Bank. **AU** Parigi, Bruno; Rochet, Jean-Charles; Freixas, Xavier. **AA** Parigi: Universita de Padova. Rochet: Universite des Sciences Sociales de Toulouse. Freixas: Universitat Pompeu Fabra. **SR** CEPR Discussion Paper: 2325; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** E58, G21, G28. **KW** Liquidity. Coordination. Payment System. Banking Industry. Central Banks. **AB** We model systemic risk in an interbank market. Banks face liquidity needs, as consumers are uncertain about where they need to consume. Interbank credit lines allow banks to cope with these liquidity shocks while reducing the cost of maintaining reserves. However, the interbank market exposes the system to a coordination failure (gridlock equilibrium) even if all banks are solvent. When one bank is insolvent, the stability of the banking system is affected in various ways depending on the patterns of payments across locations. We investigate the ability of the banking industry to withstand the insolvency of one bank and whether the closure of one bank generates a chain reaction on the rest of the system. We analyze the coordinating role of the Central Bank in preventing payments' systemic repercussions and we examine the justification of the "too-big-to-fail-policy."

Parker, Jonathan

PD January 2000. **TI** Consumption Over the Life-Cycle. **AU** Parker, Jonathan; Gourinchas, Pierre-Olivier. **AA** Princeton University. **SR** CEPR Discussion Paper: 2345; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C61, D91, E21. **KW** Buffer Stocks. Precautionary Savings. Life Cycle. Simulated Moments. Consumption. **AB** This paper employs cohort techniques and Consumer Expenditure Survey data to construct average age-profiles of consumption and income over the working lives of typical households across different education and occupation groups. Using these profiles, we estimate a structural model of optimal life-cycle consumption expenditures in the presence of realistic labor income uncertainty. The model fits the profiles quite well. In addition to providing tight estimates of the discount rate and risk aversion, we find that consumer behavior changes strikingly over the life cycle. Young consumers behave as buffer-stock agents. Around the age of 40, the typical household starts accumulating liquid assets for retirement and its behavior mimics more closely that of a certainty equivalent consumer. This change in behavior is mostly driven by the life-cycle profile of expected income. Our methodology provides a natural decomposition of saving into its precautionary and retirement components.

Parry, Ian W. H.

PD January 2001. **TI** On the Efficiency of Public and Private Health Care Systems: An Application to Alternative Health Policies in the United Kingdom. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/07; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 22. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D61, H42, H51, I11, I18. **KW** Public Health Care. Rationing. Subsidies. Welfare Effects. Health Care. **AB** Health policy will be a major issue in Britain's next general election. The Labor government is committed to a substantial increase in funds for the National Health Service (NHS) and has eliminated tax relief for private health insurance. The Conservative Opposition party favors subsidizing private health insurance, though it has pledged to match the government's funding increases for the NHS. This paper develops and implements a methodology for estimating the welfare effects of increasing public and private health care in the United Kingdom, when these policies are financed either by distortionary taxes or by user fees for the NHS. We find that the welfare change from increasing NHS output could easily be negative, particularly when extra spending is financed by distortionary taxes. In contrast, expanding private health care is always efficiency-improving in our simulations. Financing policies by user fees improves efficiency outcomes. In fact, increasing national health care output produces an overall efficiency gain in most of our simulations when the policy is financed by higher user fees rather than by distortionary taxes. Still, the policy is generally less efficient than a user fee-financed increase in private health care.

PD May 2001. **TI** How Should Metropolitan Washington, DC, Finance Its Transportation Deficit? **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper:

01/12; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. PG 23. PR Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. JE H21, H23, R41, R48. KW Transportation. Taxes. Welfare Cost. Washington, DC. Urban Transportation.

AB It is widely perceived that projected public spending on transportation infrastructure in the metropolitan Washington, DC, area for the next 20 years will not be enough to halt, let alone reverse, the trend of increasing traffic congestion. Consequently, there has been much debate about how additional sources of local revenues might be raised to finance more transportation spending. This paper develops and implements an analytical framework for estimating the efficiency costs of raising \$500 million per annum in local revenue from five possible sources. These sources are increasing labor taxes, property taxes, gasoline taxes, transit fares, and implementing congestion taxes. Our model incorporates congestion and pollution externalities, and it allows for interactions between the different policies. Under our central estimates, the efficiency cost of raising \$500 million in additional revenue from labor taxes is \$118 million; from transit fares is \$136 million; from property taxes is \$16 million; from gasoline taxes is \$66 million; and from congestion taxes is -\$19 million. These results are interpreted, both in terms of their causes and the resulting policy implications.

PD August 2001. **TI** On the Implications of Technological Innovation for Environmental Policy. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/44; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 20. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** O33, O38, Q28. **KW** Environmental Policy. Technological Innovation. Pollution Control. Policy Choice.

AB This paper draws on a number of recent studies to shed light on several policy issues raised by the impact of environmental policies on technological innovation. First, to what extent does induced innovation raise the overall net benefits to society from environmental policies? Second, how does induced innovation affect the appropriate choice among alternative environmental policy instruments? Third, how does it affect the optimal stringency of environmental regulations? Fourth, should environmental policies be supplemented with additional policies to promote innovation, such as research contracts or prizes for new technologies?.

Parsley, David

PD December 2001. **TI** Limiting Currency Volatility to Stimulate Goods Market Integration: A Price-Based Approach. **AU** Parsley, David; Wei, Shang-Jin. **AA** Parsley: Vanderbilt University. Wei: IMF. **SR** International Monetary Fund Working Paper: WP/01/197; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 14. **PR** not available. **JE** F15, F31, F33. **KW** Currency Union. Dollarization. Market Integration. Exchange Rates.

AB This paper studies the effect of instrumental and institutional stabilization of exchange rate volatility on the integration of goods markets. Rather than using data on volume of trade, this paper employs a 3-dimensional panel of prices of 95 very disaggregated goods (e.g., light bulbs) in 83 cities around the world during 1990-2000. We find that the impact of

an institutional stabilization -- currency board or dollarization -- promotes market integration far beyond an instrumental stabilization. Among them, long-term currency unions are more effective than more recent currency boards. All have room to improve relative to a U.S. benchmark.

Patton, Andrew J.

PD November 2001. **TI** Estimation of Copula Models for Time Series of Possibly Different Lengths. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/17; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 25. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C13, C32, C51, F31. **KW** Copulas. Maximum Likelihood. Two-Stage Estimation. Exchange Rates. Missing Data.

AB The theory of conditional copulas provides a means of constructing flexible multivariate density models, allowing for time-varying conditional densities of each individual variable, and for time-varying conditional dependence between the variables. This paper presents a multi-stage maximum likelihood estimator for the case that a partitioning of the parameter vector into elements relating only to the marginal distributions, and to the copula, is possible. We extend the existing statistics literature to consider data that exhibit temporal dependence and heterogeneity, and consider the case that unequal amounts of data are available on each variable. We investigate the small sample properties of the estimator in a Monte Carlo study, and find that it performs well in comparisons with the standard maximum likelihood estimator. Finally, we present an application of the estimator to a model of the joint distribution of daily Japanese yen -- U.S. dollar and euro -- U.S. dollar exchange rates.

Paul, Anthony

TI Restructuring and the Cost of Reducing NOx Emissions in Electricity Generation. **AU** Palmer, Karen; Bharvirkar, Ranjit; Burtraw, Dallas; Paul, Anthony.

TI The Effect of Allowance Allocation on the Cost of Carbon Emission Trading. **AU** Burtraw, Dallas; Palmer, Karen; Bharvirkar, Ranjit; Paul, Anthony.

TI Ancillary Benefits of Reduced Air Pollution in the United States from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael A.; Bloyd, Cary.

TI Ancillary Benefits of Reduced Air Pollution in the United States from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael A.; Bloyd, Cary.

Paxson, Christina

TI Mother and Others: Who Invests in Children's Health? **AU** Case, Anne; Paxson, Christina.

Pearlman, Joseph

TI Winners and Losers in a North-South Model of Growth,

Innovation and Product Cycles. AU Levine, Paul L.; Pearlman, Joseph; Chui, Michael.

Penalva-Zuasti, Jose S.

PD January 2001. TI Insuring California Earthquakes and the Role for Catastrophe Bonds. AA Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 527; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 40. PR Papers available for free on the web; no hardcopies. JE D58, G12, G22. KW Catastrophe Bonds. Earthquake Insurance. Calibration. Survival Analysis.

AB The 1994 Northridge earthquake sent ripples to insurance companies everywhere. This was one in a series of natural disasters such as Hurricane Andrew which together with the problems in Lloyd's of London have insurance companies running for cover. This paper presents a calibration of the U.S. economy in a model with financial markets for insurance derivatives that suggests the U.S. economy can deal with the damage of natural catastrophe far better than one might think.

Perez-Castrillo, David

TI Endogeneizing Know-How Flows through the Nature of R&D Investments. AU Cassiman, Bruno; Perez-Castrillo, David; Veugelers, Reinhilde.

Perez-Quiros, Gabriel

PD July 2000. TI The Daily Market for Funds in Europe: Mathematical Appendix. AU Perez-Quiros, Gabriel; Rodriguez, Hugo. AA Perez-Quiros: European Central Bank. Rodriguez: Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 496; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 33. PR Papers available for free on the web; no hardcopies. JE E44, E52. KW Overnight Rates. Reserve Demand. Martingale Hypothesis.

AB This paper includes the derivations of the main expressions in the paper "The Daily Market for Funds in Europe: Has Something Changed with the EMU?" by Gabriel Perez-Quiros and Hugo Rodriguez.

Peri, Giovanni

TI Human Capital and Externalities in Cities. AU Ciccone, Antonio; Peri, Giovanni.

Perotti, Enrico C.

PD December 1999. TI Option Pricing and Foreign Investment under Political Risk. AU Perotti, Enrico C.; Cherian, Joseph A. AA Perotti: Universiteit van Amsterdam. Cherian: Boston University. SR CEPR Discussion Paper: 2327; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 40. PR 5 pounds, \$8 or 8 euros. JE F21, F36, G12, G13, G15. KW International Investment. Asset Pricing. Political Risk. Option Pricing. Volatility.

AB The paper analyzes foreign investment and asset prices in a context of uncertainty over future government policy. The model endogenizes the process of learning by foreign investors facing a potentially opportunistic government, which chooses

strategically the timing of a policy reversal in order to attract more capital. We characterize the evolution of confidence, investment, and asset prices over time, as well as perceived policy risk. Generally, perceived risk abates as current policy is maintained, leading to a gradual appreciation of asset prices and a gradual decrease in their conditional variance. The approach thus provides a measure of the evolution over time of perceived political risk from market prices. We next compute option prices under the process generated by the model's hazard rate of policy reversal plus an additional market risk component, and analyze its conditional volatility. A testable implication is that in price series without a policy reversal, implied volatility from option prices will exceed actual volatility. Over time, in the absence of a reversal, this wedge progressively disappears; this may be viewed as the volatility analogue of the "peso premium" for assets subject to large, infrequent price drops.

Perraudin, William

TI Predicting Emerging Market Currency Crashes. AU Kumar, Manmohan S.; Moorthy, Uma; Perraudin, William.

Perrelli, Roberto

TI Foreign Currency Credit Ratings for Emerging Market Economies. AU Mulder, Christian; Perrelli, Roberto.

TI The Role of Corporate, Legal and Macroeconomic Balance Sheet Indicators in Crisis Detection and Prevention. AU Mulder, Christian; Perrelli, Roberto; Rocha, Manuel.

Persson, Lars

TI The Equilibrium Ownership of an International Oligopoly. AU Horn, Henrik; Persson, Lars.

Petersen, Mitchell A.

PD May 2000. TI Does Distance Still Matter? The Information Revolution in Small Business Lending. AU Petersen, Mitchell A.; Rajan, Raghuram G. AA Petersen: Northwestern University. Rajan: University of Chicago and NBER. SR National Bureau of Economic Research Working Paper: 7685; 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 G21, G28, O33. KW Lending. Financial Sector. Banking Industry. Credit Records. Information Technology.

AB The distance between small firms and their lenders in the United States is increasing. Not only are firms choosing more distant lenders, they are also communicating with them in more impersonal ways. After documenting these systematic changes, we demonstrate that they do not stem from small firms locating differently, from simple consolidation in the banking industry, or from biases in the sample. Instead, they seem correlated with improvements in bank productivity. We conjecture that greater and more timely availability of borrower credit records, as well as the greater ease of processing these records, may explain the increased lending at a distance. Consistent with such an explanation, distant firms no longer have to be observably the highest quality credits, suggesting that a wider cross-section of firms can now obtain funding from a particular lender. These findings, we believe, are direct evidence that there has been substantial development of the financial sector in the United

States, even in areas such as small business lending that have not been directly influenced by the growth in public markets. We discuss some policy implications for the banking industry.

Pezzey, John C. V.

PD January 2002. **TI** The Economics of Sustainability: A Review of Journal Articles. **AU** Pezzey, John C. V.; Toman, Michael A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 02/03; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 24. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D61, D63, D91, O13, Q32. **KW** Environmental Resources. Intergenerational Equity. Social Optimality. Sustainable Development. Equity. **AB** Concern about sustainability helped to launch a new agenda for development and environmental economics and challenged many of the fundamental goals and assumptions of the conventional, neoclassical economics of growth and development. We review 25 years' of refereed journal articles on the economics of sustainability, with emphasis on analyses that involve concern for intergenerational equity in the long-term decisionmaking of a society; recognition of the role of finite environmental resources in long-term decisionmaking; and recognizable, if perhaps unconventional, use of economic concepts, such as instantaneous utility, cost, or intertemporal welfare. Taken as a whole, the articles reviewed here indicate that several areas must be addressed in future investigation: improving the clarity of sustainability criteria, maintaining distinctions between economic efficiency and equity, more thoroughly investigating many common assumptions in the literature about prospects for resource substitution and resource-enhancing technical change, and encouraging the empirical investigation of sustainability issues.

Pfann, Gerard Antonie

PD September 2000. **TI** Options to Quit. **AA** IZA, Bonn, University of Maastricht, and CEPR. **SR** CEPR Discussion Paper: 2563; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** J63. **KW** Downsizing. Fixed Costs. Job Mobility. Turnover. **AB** This paper develops a theoretical model of optimal quit behavior for a worker who holds an option to quit but faces a fixed cost of quitting. A worker will accept the outside offer only if the net present value of the difference in expected future cash flows between the old and the new job exceeds the costs of quitting plus the value of keeping the option to quit open. The implications of the model are consistent with some empirical facts of quit behavior that we observe in manufacturing data in the U.S. and in plant level data in The Netherlands.

Phibbs, Ciaran S.

TI Managed Care, Technology Adoption, and Health Care: The Adoption of Neonatal Intensive Care. **AU** Baker, Laurence C.; Phibbs, Ciaran S.

Philippopoulos, Apostolis

TI Is Tax Policy Coordination Necessary? **AU** Kollintzas, Tryphon; Philippopoulos, Apostolis; Vassilatos, Vangelis.

Pina, Joaquim Pires

TI Monetary Policy Misspecification in VAR Models. **AU** Canova, Fabio; Pina, Joaquim Pires.

Pita Barros, Pedro Luis

TI The Impact of Mobile Phone Diffusion on the Fixed-Link Network. **AU** Cadima, Nuno; Pita Barros, Pedro Luis.

Pizer, William

TI Workshop Report: Pollution Abatement Costs and Expenditures (PACE) Survey Design for 2000 and Beyond. **AU** Burtraw, Dallas; Krupnick, Alan; Morgenstern, Richard; Pizer, William; Shih, Jih-Shyang.

TI Workshop Report: Pollution Abatement Costs and Expenditures (PACE) Survey Design for 2000 and Beyond. **AU** Burtraw, Dallas; Krupnick, Alan; Morgenstern, Richard; Pizer, William; Shih, Jih-Shyang.

Plank, Manfred

TI Bank Capital Regulation with Random Audits. **AU** Bhattacharya, Sudipto; Plank, Manfred; Strobl, Gunter; Zechner, Josef.

Polo, M.

TI Leniency Programs and Cartel Prosecution. **AU** Motta, Massimo; Polo, M.

Porter, Michael E.

TI The Determinants of National Innovative Capacity. **AU** Stern, Scott; Porter, Michael E.; Furman, Jeffrey L.

PD September 2000. **TI** Measuring the "Ideas" Production Function: Evidence from International Patent Output. **AU** Porter, Michael E.; Stern, Scott. **AA** Porter: Harvard University. Stern: MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7891; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** O31, O34, O47, O57. **KW** Innovation. Patents. Research and Development. Growth. Productivity. **AB** This paper estimates the parameters of the "ideas" production function central to recent models of economic growth. We do so by evaluating the determinants of international patenting rates across the Organization for Economic Cooperation and Development (OECD) countries, where an international patent is one granted by the U.S. patent office to a foreign establishment. Taking advantage of variation in the flow of ideas produced by different countries over time, we provide evidence for three main findings. First, at the level of the production of international patents, country-level research and development (R&D) productivity increases proportionally with the stock of ideas already discovered. Second, we find that ideas productivity in a given country is constant or declining in the worldwide stock of ideas. Finally, ideas productivity is concave in the size of the R&D workforce, and the linkage between ideas production and overall productivity growth is small. The results suggest that while the parametric restrictions required to generate endogenous technological change may be satisfied for individual economies, the growth rate associated with such effects may be modest.

Portes, Richard

PD November 1999. TI Global Financial Markets and Financial Stability: Europe's Role. AA London Business School and CEPR. SR CEPR Discussion Paper: 2298; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 48. PR 5 pounds, \$8 or 8 euros. JE F21, F31, F33, F36, F41. KW Euro. EMU. Securities Markets. Exchange Rates. Financial Stability. AB Europe's contribution to the international financial system is a new currency, the euro. Economic and Monetary Union in Europe (EMU), of which the single currency is the manifestation, has emerged in the context of a complex process of interaction between globalization and regional integration. This paper discusses the internationalization of the euro and draws out the consequences for European securities markets, exchange rates, and international financial stability.

Portney, Paul R.

TI The Political Economy of Environmental Policy. AU Oates, Wallace E.; Portney, Paul R.

Postlewaite, Andrew

TI Campaign Rhetoric: A Model of Reputation. AU Aragonés, Enriqueta; Postlewaite, Andrew.

Poterba, James M.

TI Copycat Funds: Information Disclosure Regulation and the Returns to Active Management in the Mutual Fund Industry. AU Myers, Mary Margaret; Poterba, James M.; Shackelford, Douglas A.; Shoven, John B.

PD January 2002. TI Exchange Traded Funds: A New Investment Option for Taxable Investors. AU Poterba, James M.; Shoven, John B. AA Poterba: MIT and NBER. Shoven: Stanford University and NBER. SR Massachusetts Institute of Technology, Department of Economics Working Paper: 02/07; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. PG 10. PR \$7.00 U.S., Canada, Mexico; \$10.00 other international. JE G23, H24. KW Mutual Funds. Capital Gains Taxes. Exchange Traded Funds.

AB Exchange traded funds (ETFs) are a new variety of mutual fund that first became available in 1993. ETFs have grown rapidly and now hold nearly \$80 billion in assets. ETFs are sometimes described as more "tax efficient" than traditional equity mutual funds, since in recent years some large ETFs have made smaller distributions of realized and taxable capital gains than most mutual funds. This paper provides an introduction to the operation of exchange traded funds. It also compares the pre-tax and post-tax returns on the largest ETF, the SPDR trust that invests in the S&P500, with the returns on the largest equity index fund, the Vanguard Index 500. The results suggest that between 1994 and 2000, the before- and after-tax returns on the SPDR trust and this mutual fund were very similar. Both the after-tax and the pre-tax returns on the fund were slightly greater than those on the ETF. These findings suggest that ETFs offer taxable investors a method of holding broad baskets of stocks that deliver returns comparable to those of low-cost index funds.

Prasad, Eswar S.

PD February 2002. TI Wage Inequality in the United

Kingdom, 1975-99. AA IMF. SR International Monetary Fund Policy Working Paper: WP/02/42; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 29. PR not available. JE D31, E24, J31. KW Wage Distribution. Earnings Distribution. Micro Survey Data. Inequality.

AB This paper provides evidence that cross-sectional wage inequality in the U.K. rose sharply in the 1980s, continued to rise moderately through the mid-1990s, and has remained essentially unchanged since then. As in the U.S., increases in within-group inequality account for a substantial fraction of the rise in wage dispersion during 1975-99. Compositional shifts in the occupational and industry structures of aggregate employment are also shown to have had important effects on the evolution of wage inequality. The convergence of the wage distributions for men and women has, however, had a stabilizing effect on the overall wage distribution.

Prati, Alessandro

PD January 2002. TI Currency Crises and Uncertainty About Fundamentals. AU Prati, Alessandro; Sbraccia, Massimo. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/02/03; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 30. PR not available. JE D82, D84, F31. KW Speculative Attacks. Exchange Rate Crisis. Public Information. Private Information. Currency Crises.

AB This paper studies how uncertainty about fundamentals contributed to currency crises from both a theoretical and an empirical perspective. We find evidence -- based on a monthly dataset of Consensus forecasts for six Asian countries in the period January 1995-May 2001 -- confirming the theoretical predictions (from both unique- and multiple- equilibria models) that: (i) speculative attacks depend not only on actual and expected fundamentals but also on the variance of speculators' expectations about them; and (ii) the sign of the effect of the variance depends on whether expected fundamentals are "good" or "bad". These results are robust to the definition of exchange rate pressure indices, the estimation sample (pre-crisis vs. full sample), the method chosen to avoid spurious correlations, and possible time-varying coefficients for the mean, the variance, and the threshold separating good from bad expected fundamentals.

Probst, Kate

TI Regulating Government. AU Davies, Terry; Probst, Kate.

Profit, Stefan

TI Externalities in the Matching of Workers and Firms in Britain. AU Burgess, Simon; Profit, Stefan.

Puig-Junoy, Jaume

PD July 2000. TI Measuring and Explaining Farm Inefficiency in a Panel Data Set of Mixed Farms. AU Puig-Junoy, Jaume; Argiles, Josep M. AA Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 503; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 28. PR Papers available for free on the web; no hardcopies. JE C23, D24. KW Technical Efficiency.

Stochastic Frontier. Agricultural Economics. Farm Efficiency.
AB This paper aims to estimate a translog stochastic frontier production function in the analysis of a panel of 150 mixed Catalan farms in the period 1989-1993, in order to attempt to measure and explain variation in technical inefficiency scores with a one-stage approach. The model uses gross value added as the output aggregate measure. Total employment, fixed capital, current assets, specific costs and overhead costs are introduced into the model as inputs. Stochastic frontier estimates are compared with those obtained using a linear programming method using a two-stage approach. The specification of the translog stochastic frontier model appears as an appropriate representation of the data, technical change was rejected and the technical inefficiency effects were statistically significant. The mean technical efficiency in the period analyzed was estimated to be 64.0 percent. Farm inefficiency levels were found significantly at 5 percent level and positively correlated with the number of economic size units.

Quah, Danny T.

PD November 1999. **TI** UK Phillips Curves and Monetary Policy. **AU** Quah, Danny T.; Haldane, Andrew. **AA** Quah: London School of Economics. Haldane: Bank of England. **SR** CEPR Discussion Paper: 2292; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E52. **KW** Inflation. Natural Rate Hypothesis. Stability. Phillips Curve. Monetary Policy Beliefs.

AB This paper documents some stylized facts on evolving UK Phillips curves, and shows how these differ from their US versions. We interpret UK Phillips curve dynamics in a positive theory of monetary policy -- how policy-maker attitudes on the Phillips curve have evolved since the 1950s -- rather than, more traditionally, as interaction between exogenous demand and supply disturbances. Combining this framework with reasoned conjectures on how policy-makers' beliefs have changed helps explain some features of the evolving UK Phillips curve. We suggest that correlations suggesting an extreme favorable unemployment-inflation tradeoff might indicate not something to be exploited but instead only policy-makers' correctly acknowledging that no tradeoff exists.

PD November 1999. **TI** Internet Cluster Emergence. **AA** London School of Economics. **SR** CEPR Discussion Paper: 2293; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 24. **PR** 5 pounds, \$8 or 8 euros. **JE** D30, O14, O18, O33, R12. **KW** Distribution Dynamics. Economic Geography. Internet. Location. Development.

AB Internet development holds the promise of transmitting economic value across physical space at zero marginal cost. In such a "weightless economy," what factors matter for the location of economic activity and thus for economic development? This paper sketches a model of spatial dynamics over a three-dimensional globe, where transportation costs don't matter. The paper develops conditions under which clusters of activity emerge.

PD November 1999. **TI** Cross-Country Growth Comparison: Theory to Empirics. **AA** London School of Economics. **SR** CEPR Discussion Paper: 2294; Centre for

Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** C21, C23, O33, O41, O57. **KW** Convergence. Cross-Country Growth. Endogenous Growth. Growth. Technology.

AB This paper reviews the cross-country record of economic growth, using as organizing framework how economic theory has guided that empirical analysis. The paper argues that recent studies of economic growth, both empirical and theoretical, are distinguished from previous work in three distinct ways. Recent studies have: 1. An explicit focus on cross-country growth and development experiences; 2. Improved, more extensive cross-country data; 3. A heightened need, driven by real-world topicality, for understanding the role of knowledge and technology in economic growth.

Quintini, Glenda

TI Nominal Wage Rigidity and the Rate of Inflation. **AU** Nickell, Stephen; Quintini, Glenda.

Quintyn, Marc

PD March 2002. **TI** Regulatory and Supervisory Independence and Financial Stability. **AU** Quintyn, Marc; Taylor, Michael W. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/46; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 53. **PR** not available. **JE** G18, G28, K23, L51. **KW** Financial Regulation. Banking Supervision. Regulatory Agencies. Agency Independence. Central Bank Independence.

AB Despite its importance, the issue of financial sector regulatory and supervisory independence (RSI) has received only marginal attention in literature and practice. However, experience has demonstrated that improper supervisory arrangements have contributed significantly to the deepening of several recent systemic banking crises. In this paper, we argue that RSI is important for financial stability for the same reasons that central bank independence is important for monetary stability. The paper lays out four key dimensions of RSI -- regulatory, supervisory, institutional, and budgetary -- and discusses ways to achieve them. We also discuss institutional arrangements needed to make independence work in practice. The key issue in this respect is that agency independence and accountability need to go hand in hand. The paper discusses a number of accountability arrangements.

Rady, Sven

TI Market Experimentation in a Dynamic Differentiated-Goods-Duopoly. **AU** Keller, Godfrey; Rady, Sven.

Raedy, Jana Smith

TI Capital Gains Taxes and Stock Reactions to Quarterly Earnings Announcements. **AU** Blouin, Jennifer L.; Shackelford, Douglas A.; Raedy, Jana Smith.

Rajan, Raghuram G.

TI Does Distance Still Matter? The Information Revolution in Small Business Lending. **AU** Petersen, Mitchell A.; Rajan, Raghuram G.

PD October 2000. **TI** The Governance of the New Enterprise. **AU** Rajan, Raghuram G.; Zingales, Luigi. **AA** Rajan: University of Chicago and NBER. Zingales:

University of Chicago, NBER, and CEPR. **SR** National Bureau of Economic Research Working Paper: 7958; 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** G34, L21. **KW** Corporate Governance. Incentives. Human Capital.

AB The changing nature of the corporation forces us to re-examine much of what we take for granted in corporate governance. What precisely is the entity that is being governed? How does the governance system obtain power over it, and what determines the division of power between various stakeholders? And is the objective of allocating power only to enhance the returns of outside investors? In this paper we argue that, given the changing nature of the firm, the focus of corporate governance must shift from alleviating the agency problems between managers and shareholders to studying mechanisms that give the firm the power to provide incentives to human capital. We also provide some examples of the kind of subjects that should now be the main focus of study in corporate governance.

Ramcharan, Rodney

PD February 2002. **TI** Columbia or High School? Understanding the Roles of Education in Development. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/36; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 42. **PR** not available. **JE** I20, O11, O15, O41. **KW** Education. Development. Growth.

AB No country has achieved sustained economic development without investment in education. Thus, education policy can play a vital role in facilitating development. But which types of schooling -- secondary or tertiary -- should public policy promote? This paper develops an analytical framework to address this question. It shows how the composition of human capital stock determines a country's development. Hence, promoting the "wrong" type of schooling can have little effect on development. In addition to identifying some characteristics of an optimal education policy, the paper helps in understanding why empirical studies have failed to find a significant relationship between schooling and growth.

Ramey, Garey

TI Adaptive Expectations, Underparameterization and the Lucas Critique. **AU** Evans, George W.; Ramey, Garey.

TI Shocks and Institutions in a Job Matching Model. **AU** den Haan, Wouter J.; Haefke, Christian; Ramey, Garey.

Ramey, Valerie A.

TI The Cost Channel of Monetary Transmission. **AU** Barth, Marvin J., III; Ramey, Valerie A.

TI Is the Technology-Driven Real Business Cycle Hypothesis Dead? Shocks and Aggregate Fluctuations Revisited. **AU** Francis, Neville; Ramey, Valerie A.

Ramos, Alberto M.

TI Fiscal Sustainability and Monetary versus Fiscal Dominance: Evidence from Brazil, 1991-2000. **AU** Tanner, Evan; Ramos, Alberto M.

Ranjan, Ram

TI Quantity Controls, License Transferability, and the Level of Investment. **AU** Krishna, Kala; Tan, Ling Hui; Ranjan, Ram.

Rauch, James E.

PD April 2000. **TI** Information and Globalization: Wage Co-Movements, Labor Demand Elasticity, and Conventional Trade Liberalization. **AU** Rauch, James E.; Trindade, Vitor. **AA** Rauch: University of California, San Diego and NBER. Trindade: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 7671; 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** F11, F15, F16, F41. **KW** Trade. International Integration. Wages. Labor Demand. Globalization.

AB We model home country familiarity with business opportunities in a foreign country as a parameter in a matching process between domestic and foreign firms. We show that as familiarity increases the effect of relative national labor supplies on relative national wages declines, the elasticity of domestic labor demand increases, and the extent of "pass-through" of trade tax changes to home wages increases. Since the volume of trade is increasing in familiarity, trade liberalization has a greater impact on wages when the initial volume of trade is greater, all else equal. As familiarity becomes complete, the results of the 2 x 2 Heckscher-Ohlin-Samuelson model are obtained: relative national wages are fixed by trade taxes independent of relative national labor supplies; domestic labor demand is infinitely elastic; and pass-through of tax changes to wages is "complete" in the sense that it is determined entirely by production technology and no arbitrage opportunities remain.

PD November 2001. **TI** Overcoming Informational Barriers to International Resource Allocation: Prices and Ties. **AU** Rauch, James E.; Casella, Alessandra. **AA** Rauch: University of California, San Diego. Casella: Columbia University. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/18; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 31. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** F11, F12. **KW** International Trade. Informational Barriers. Trade Barriers. Resource Allocation. Ties. Networks.

AB Incomplete information in the international markets creates difficulty in matching agents with productive opportunities and interferes with the ability of prices to allocate scarce resources across countries. Ties through international information-sharing networks or parent-subsidiary relationships overcome this matching friction. When the difference between country factor-endowment ratios is small relative to the share of agents that is tied, efficient arbitrage and the standard properties of neoclassical trade models prevail. When the difference between factor-endowment ratios is sufficiently large, this equilibrium breaks down and countries become partially insulated from each other in the sense that the price (wage) of each country's immobile resource is more sensitive to changes in domestic than foreign supply and trade liberalization causes less convergence in relative resource prices. The model is applied to the debate over the impact of

international trade on domestic wages, and extended to address whether ties can reduce world welfare through trade diversion and to compare the effect of ties on trade in differentiated versus homogenous products.

PD December 2001. **TI** Entrepreneurship in International Trade. **AU** Rauch, James E.; Watson, Joel. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/20; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 22. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C78, D23, F10. **KW** Networks. Intermediation. Trade. Matching.

AB Motivated by evidence on the importance of incomplete information and networks in international trade, we investigate the supply of "network intermediation." We hypothesize that the agents who become international trade intermediaries first accumulate networks of foreign contacts while working as employees in production or sales, then become entrepreneurs who sell access to and use of the networks they accumulated. We report supportive results regarding this hypothesis from a pilot survey of international trade intermediaries. We then build a simple general-equilibrium model of this type of entrepreneurship, and use it for comparative statics and welfare analysis. One welfare conclusion is that intermediaries may have inadequate incentives to maintain or expand their networks, suggesting a rationale for the policies followed by some countries to encourage large-scale trading companies that imitate the Japanese *sogo shosha*.

Rebelo, Sergio

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

Rebucci, Alessandro

TI Monetary Rules for Emerging Market Economies. **AU** Ghironi, Fabio; Rebucci, Alessandro.

TI The Transmission Mechanism of European Monetary Policy: Is There Heterogeneity? Is it Changing over Time? **AU** Ciccarelli, Matteo; Rebucci, Alessandro.

Redding, Stephen

PD September 2000. **TI** Economic Geography and International Inequality. **AU** Redding, Stephen; Venables, Anthony J. **AA** London School of Economics and CEPR. **SR** CEPR Discussion Paper: 2568; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** F12, F14, O13, O19, R12. **KW** Economic Development. Geographic Access. International Trade.

AB This paper estimates a structural model of economic geography using cross-country data on per capita income, bilateral trade, and the relative price of manufacturing goods. More than 70% of the variation in per capita income can be explained by the geography of access to markets and to sources of supply of intermediate inputs. These results are robust to the inclusion of other geographical, social, and institutional characteristics. The estimated coefficients are consistent with

plausible values for the structural parameters of the model. We find quantitatively important effects of distance, access to the coast, and openness on levels of per capita income.

PD May 2001. **TI** Economic Geography and International Inequality. **AU** Redding, Stephen; Venables, Anthony J. **AA** CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 495; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 51. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F12, F14, F43, O11, O19. **KW** Development. Economic Geography. International Trade. Income Inequality.

AB This paper estimates a structural model of economic geography using cross-country data on per capita income, bilateral trade, and the relative price of manufacturing goods. More than 70 percent of the variation in per capita income can be explained by the geography of access to markets and to sources of supply of intermediate inputs. These results are robust to the inclusion of other geographical, social, and institutional characteristics. The estimated coefficients are consistent with plausible values for the structural parameters of the model. We find quantitatively important effects of distance, access to the coast, and openness on levels of per capita income.

PD July 2001. **TI** Factor Endowments and Production in European Regions. **AU** Redding, Stephen; Vera-Martin, Mercedes. **AA** Redding; CEP and LSE. Vera-Martin; CEP. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 501; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 44. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E23, F11, F14, F15, R13. **KW** Factor Endowments. Production Patterns. Specialization. European Integration. Integration.

AB This paper analyses patterns of production across 14 industries in 45 regions from 7 European countries since 1975. We estimate a structural equation derived directly from Heckscher-Ohlin theory that relates an industry's share of a region's gross domestic product to factor endowments and relative prices. Factor endowments are found to play a statistically significant and quantitatively important role in explaining production patterns. The explanation is most successful for aggregate industries, such as Agriculture, Manufacturing, and Services, and works less well for disaggregated industries within Manufacturing. We find no evidence that increasing European integration has weakened the relationship between factor endowments and production patterns within countries.

TI The Economic Geography of Trade, Production, and Income: A Survey of Empirics. **AU** Overman, Henry G.; Redding, Stephen; Venables, Anthony J.

TI Measuring the Cost Effectiveness of an R&D Tax Credit for the UK. **AU** Griffith, Rachel; Redding, Stephen; Van Reenen, John.

PD November 1999. **TI** The Dynamics of International Specialization. **AA** London School of Economics. **SR** CEPR Discussion Paper: 2287; Centre for Economic

Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 52. PR 5 pounds, \$8 or 8 euros. JE C14, D33, F11, F14. KW Distribution Dynamics. Factor Endowments. International Trade. Specialization. Comparative Advantage.

AB The theoretical literature on trade and growth suggests that comparative advantage is endogenous and evolves over time. However, most of the empirical analysis of international trade flows is essentially static in nature. This paper proposes an empirical model of the dynamics of international specialization. Employing disaggregated data on twenty industries in seven Organization for Economic Cooperation and Development (OECD) countries, we examine the evolution of patterns of international specialization over time and evaluate the role of changes in factor endowments in explaining observed dynamics.

Refalo, James F.

TI An Options-Based Analysis of Emerging Market Exchange Rate Expectations: Brazil's Real Plan, 1994-1999. **AU** Campa, Jose Manuel; Chang, Kevin; Refalo, James F.

Reichlin, Lucrezia

TI The Generalized Dynamic Factor Model: Identification and Estimation. **AU** Forni, Mario; Lippi, Marc; Reichlin, Lucrezia; Hallin, Marc.

TI A Measure of Comovement for Economic Variables: Theory and Empirics. **AU** Forni, Mario; Reichlin, Lucrezia; Croux, Christophe.

Reichlin, Pietro

PD January 2000. **TI** Optimal Debt Contracts and Moral Hazard Along the Business Cycle. **AU** Reichlin, Pietro; Siconolfi, Paolo. **AA** Reichlin: Universita' di Roma La Sapienza and CEPR. Siconolfi: Columbia University. **SR** CEPR Discussion Paper: 2351; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 48. PR 5 pounds, \$8 or 8 euros. JE D82, E32, G14, G21. KW Financial Intermediation. Business Cycles. Debt Contracts. Moral Hazard. Asymmetric Information.

AB We analyze the Pareto optimal contracts between lenders and borrowers in a model with asymmetric information. The model is a generalization of the Rothschild-Stiglitz pure adverse selection problem to include moral hazard with limited liability contracts. Entrepreneurs with unequal "abilities" borrow to finance alternative investment projects that differ in degree of risk and productivity. We determine the endogenous distribution of projects as functions of the amount of loanable funds, when lenders have no information about borrowers' ability and technological choices. Then, we embed these results in a general equilibrium overlapping generations economy with production and show that, for a wide set of economies, equilibria are characterized by multiple steady states and persistent endogenous cycles such that the average quality of the selected projects is high in recessions and low in booms.

Repullo, Rafael

TI A Model of the Open Market Operations of the European Central Bank. **AU** Ayuso, Juan; Repullo, Rafael.

Rey, Helene

PD November 1999. **TI** Financial Integration and Asset Returns. **AU** Rey, Helene; Martin, Philippe. **AA** Rey: London School of Economics. Martin: Graduate Institute of International Studies, Geneva. **SR** CEPR Discussion Paper: 2282; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 40. PR 5 pounds, \$8 or 8 euros. JE F12, F36, F41, G12, G15. KW Financial Integration. Asset Trade. Transaction Costs. Cross-Listing. Asset Pricing.

AB This paper investigates the impact of financial integration on asset returns, risk diversification, and breadth of financial markets. We analyze a three-country macroeconomic model in which: i) the number of financial assets is endogenous; ii) assets are imperfect substitutes; iii) cross-border asset trade entails some transaction costs; iv) the investment technology is indivisible. In such an environment, lower transaction costs between two financial markets translate into higher demand for assets issued on those markets, higher asset prices, and larger diversification. For the country left outside the integrated area, the welfare impact is ambiguous: it enjoys better risk diversification but faces an adverse movement in its financial terms of trade. When we endogenize financial market location, we find that financial integration benefits the largest economy of the integrated area. Only when transaction costs become very small does financial integration lead to relocation of markets to the smallest economy.

Rey, Patrick

TI Resale Price Maintenance and Collusion. **AU** Jullien, Bruno; Rey, Patrick.

Rhode, Paul W.

PD October 2000. **TI** A Historical Test of the Tiebout Hypothesis: Local Heterogeneity from 1850 to 1990. **AU** Rhode, Paul W.; Strumpf, Koleman S. **AA** Rhode: University of North Carolina, Chapel Hill and NBER. Strumpf: University of North Carolina, Chapel Hill. **SR** National Bureau of Economic Research Working Paper: 7946; 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 D72, H71, N32, R53. KW Tiebout Hypothesis. Local Heterogeneity. Public Goods.

AB The Tiebout hypothesis, which states that individuals will costlessly sort themselves across local communities according to their public good preferences, is the workhorse of the local public finance literature. This paper develops a test of the Tiebout hypothesis using historical variation in mobility costs. Our extension of the Tiebout model to incorporate such costs yields the following comparative statics: as mobility costs fall, the heterogeneity across communities of individual public good preferences and, under some standard assumptions, of public good provision must (weakly) increase. Given mobility costs have fallen over time, a natural test of the Tiebout hypothesis is to take these predictions to the data. Contrary to the predictions, we find decreasing heterogeneity between counties in policy outcomes (local education spending and total taxes or revenues) and in a wide variety of proxies for public good preferences (age groups, education levels, election outcomes, home ownership, income, race, and religious affiliation). Using the Boston SMSA as a case study, we show that the

heterogeneity trends are similar to the municipal and county levels. These results suggest that forces working in opposition to Tiebout sorting have dominated individual location decisions over the past century.

TI The Diffusion of the Tractor in American Agriculture: 1910-60. **AU** Olmstead, Alan L.; Rhode, Paul W.

Ribeiro, Rita

PD February 2001. **TI** A Multi-Objective Model for a Multi-Period Distribution Management Problem. **AU** Ribeiro, Rita; Lourenco, Helena R. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 532; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 22. **PR** Papers available for free on the web; no hardcopies. **JE** C61, C63, M49. **KW** Distribution Problem. Multi-Objective Models.

AB The problems arising in commercial distribution are complex and involve several players and decision levels. One important decision is related with the design of the routes to distribute the products, in an efficient and inexpensive way. This article deals with a complex vehicle routing problem that can be seen as a new extension of the basic vehicle routing problem. The proposed model is a multi-objective combinatorial optimization problem that considers three objectives and multiple periods, which models in a closer way the real distribution problems. The first objective is cost minimization, the second is balancing work levels and the third is a marketing objective. An application of the model on a small example, with 5 clients and 3 days, is presented. The results of the model show the complexity of solving multi-objective combinatorial optimization problems and the contradiction between the several distribution management objectives.

Ricci, Luca

TI Purchasing Power Parity and New Trade Theory. **AU** MacDonald, Ronald; Ricci, Luca.

Riphahn, Regina T.

PD December 1999. **TI** Immigrant Participation in Social Assistance Programs: Evidence from German Guestworkers. **AA** Universitat Munchen, CEPR, and IZA. **SR** CEPR Discussion Paper: 2318; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** I38, J61. **KW** Panel Attrition. Social Assistance. Assimilation. Welfare Programs. Immigrants.

AB The share of immigrants in the German social assistance program exceeds their population share and continues to grow. This study evaluates the causes of this phenomenon and tests for the effects of assimilation, cohort, age at migration, and country of origin on immigrant behavior. It uses panel data and jointly models panel attrition, labor force status, and household social assistance dependence. Assimilation and age at migration increase the probability of social assistance dependence. In addition, the labor force status of the household head has different effects for native and immigrant welfare risks. The correction for unobserved heterogeneities in the estimation substantively affects the results.

Ritschl, Albrecht

PD September 2000. **TI** Did Monetary Forces Cause the Great Depression? **AU** Ritschl, Albrecht; Woitek, Ulrich. **AA** Ritschl: Humboldt University and CEPR. **SR** CEPR Discussion Paper: 2547; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C11, C53, E37, N12. **KW** Conditional Forecasts. Great Depression. Monetary Causes. Recursive Estimates.

AB This paper recasts Termin's (1976) question of whether monetary forces caused the Great Depression in a modern time series framework. We analyze money-income causalities and predict U.S. output in a recursive Bayesian framework, allowing for information updating and time-varying coefficients. The predictive power of money aggregates and the Fed discount rate is in general very weak and collapses after the crisis of the gold standard in 1931. In contrast, non-monetary variables have impressive forecasting power, forecasting almost half the output decline already in mid-1929. Our recursive framework also allows examination of the stability of our estimated dynamic parameters. Recursive estimates of the monetary impulse responses exhibit remarkable structural instability and strongly react to monetary regime changes during the depression. This phenomenon is disconcerting in the light of the Lucas (1976) critique, as it suggests that the money/income relationship may be endogenous to policy and was not in the set of deep parameters of the U.S. economy. Given the instability and poor predictive power of monetary instruments and the strong showing of leading indicators of real activity, we remain skeptical about a monetary interpretation of the Great Depression in the U.S.

Rob, Rafael

PD January 2001. **TI** Foreign Direct Investment and Exports with Growing Demand. **AU** Rob, Rafael; Vettas, Nikolaos. **AA** Rob: University of Pennsylvania. Vettas: Duke University and CEPR. **SR** University of Pennsylvania, CARESS Working Paper: 01/04; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 50. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** D81, D92, F13, F21, F23. **KW** Foreign Direct Investment. Entry. Exports. Multinational Firms.

AB We explore entry into a foreign market with uncertain demand growth. A multinational can serve the foreign demand by two modes, or by a combination thereof: it can export its product, or it can create productive capacity via Foreign Direct Investment (FDI). The advantage of FDI is that it allows lower marginal cost than exports. The disadvantage of FDI is that it is irreversible, and hence entails the risk of creating underutilized capacity in case the market turns out to be smaller than expected. The presence of demand uncertainty and irreversibility gives rise to an interior solution, whereby the multinational chooses -- under certain conditions -- both exports and FDI. We argue that this feature is consistent with observed behavior of multinationals, yet it has not arisen in previous theoretical formulations.

TI Product Durability and Innovations: The Duopoly Case. **AU** Fishman, Arthur; Rob, Rafael.

TI Product Innovations and Quality-Adjusted Prices.
AU Fishman, Arthur; Rob, Rafael.

TI Is Bigger Better? Investing in Reputation.
AU Fishman, Arthur; Rob, Rafael.

Roberts, Kevin

TI Does Competition Solve the Hold-up Problem?
AU Felli, Leonardo; Roberts, Kevin.

PD January 1999. **TI** Dynamic Voting in Clubs.
AA London School of Economics and Political Science.
SR London School of Economics and Political Science,
STICERD Theoretical Economics Discussion Paper:
TE/99/367; **STICERD**, Room Q280, London School of
Economics and Political Science, Houghton Street, London
WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk.
PG 42. **PR** no charge. **JE** C72, D71, D72, D92, H41.
KW Cooperatives. Public Goods. Majority Voting.
Organization Size. Voting.

AB This paper examines the process and outcomes of democratic decision-making in clubs, where a club is defined by its set of members whose preferences and decisions relate to the set of members in the club: the electorate is endogenous. Examples range from international organizations like the European Union to firms, workers' cooperatives, and trade unions. Although the policy space is infinite, a majority voting equilibrium exists under plausible conditions and the equilibrium rule and the dynamics of clubs are characterized. Two types of club, one where a group funds some public good and the other where the group shares a given benefit, are analyzed in detail.

Robertson, Donald

TI Minimum Wages and Employment. **AU** Keil, Manfred; Robertson, Donald; Symons, James.

Robinson, James A.

TI Economic Backwardness in Political Perspective.
AU Acemoglu, Daron; Robinson, James A.

Robledo, J. R.

TI Geography of the Family. **AU** Konrad, Kai A.; Lommerud, K. E.; Kunemund, H.; Robledo, J. R.

Rocha, Manuel

TI The Role of Corporate, Legal and Macroeconomic Balance Sheet Indicators in Crisis Detection and Prevention.
AU Mulder, Christian; Perrelli, Roberto; Rocha, Manuel.

Rochet, Jean-Charles

TI Systemic Risk, Interbank Relations and Liquidity Provision by the Central Bank. **AU** Parigi, Bruno; Rochet, Jean-Charles; Freixas, Xavier.

Rockinger, M.

TI A Time Varying Parameter Model to Test for Predictability and Integration in Stock Markets of Transition Economies. **AU** Urga, G.; Rockinger, M.

Rodriguez, Hugo

TI The Daily Market for Funds in Europe: Mathematical Appendix. **AU** Perez-Quiros, Gabriel; Rodriguez, Hugo.

Rogerson, R.

TI Sorting and Long-Run Inequality. **AU** Fernandez, Raquel; Rogerson, R.

Rogoff, Kenneth

TI Commodity Currencies and Empirical Exchange Rate Puzzles. **AU** Chen, Yu-chin; Rogoff, Kenneth.

PD February 2002. **TI** Dornbusch's Overshooting Model After Twenty-Five Years. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/39; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 40. **PR** not available. **JE** F31, F41. **KW** Overshooting. Exchange Rates.

AB This Mundell Fleming lecture at the International Monetary Fund's 2001 annual research conference marks the 25th anniversary of Rudiger Dornbusch's masterpiece, "Expectations and Exchange Rate Dynamics," a seminal contribution to both policy and research in the field of international finance. This essay provides a simple overview of the model as well as some empirics, not only on exchange rates but on measures of the paper's influence. Last, but not least, I offer some personal reflections on how Dornbusch conveyed the ideas in his "overshooting model" to inspire a generation of students.

PD March 2002. **TI** Early Ideas on Sovereign Bankruptcy Reorganization: A Survey. **AU** Rogoff, Kenneth; Zettelmeyer, Jeromin. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/57; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 18. **PR** not available. **JE** B29, B31, F02, F34. **KW** Sovereign Bankruptcy. Debt Crises. International Bankruptcy. Chapter 11. Bankruptcy Reorganization.

AB This paper surveys early intellectual antecedents of the Krueger (2001) proposal for creating bankruptcy reorganization procedures at the international level. We focus on actual proposals for new procedures made from the late 1970s up to an influential lecture by Sachs (1995), with brief reference to the formal economics literature on sovereign debt. Beginning with a paper by Oechsli (1981), several key contributions are made during this period, including the analogy with domestic bankruptcy procedures, an understanding of the inefficiencies in international lending that might justify such procedures, and specific institutional and legal suggestions that continue to play a role in the current debate.

Roller, Lars-Hendrik

PD November 2000. **TI** Strategic Choice of Partners: Research Joint Ventures and Market Power. **AU** Roller, Lars-Hendrik; Siebert, Ralph; Tombak, Mihkel. **AA** Roller and Siebert: Wissenschaftszentrum Berlin für Sozialforschung and CEPR. **SR** CEPR Discussion Paper: 2617; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** L60, O31, O32. **KW** Joint Ventures. Product Market Competition. R&D.

AB The literature on research joint ventures (RJVs) has emphasized internalizing spillovers and cost-sharing as motives for RJV formation. In this paper we develop an additional explanation: the incentive to exclude rivals in order to gain market power. We illustrate this effect in a simple model of

RJV formation with asymmetric firms. We then test our hypothesis by estimating an endogenous switching model using data from the US National Cooperative Research Act. The empirical findings support our Hypothesis that RJVs can be used as an instrument by which firms leverage their market power in the product market.

Roller, O.

TI A Political Economy Model of Infrastructure Allocation: An Empirical Assessment. **AU** Cadot, Olivier; Roller, O.; Stephan, A.

Romano, Richard

TI Competition Between Private and Public Schools: Testing Stratification and Pricing Predictions. **AU** Eppe, Dennis; Figlio, David; Romano, Richard.

Rose, Andrew K.

TI Uncovered Interest Parity in Crisis: The Interest Rate Defense in the 1990s. **AU** Flood, Robert P.; Rose, Andrew K.

PD December 1999. **TI** One Money, One Market: Estimating the Effect of Common Currencies on Trade. **AA** University of California, Berkeley. **SR** CEPR Discussion Paper: 2329; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 56. **PR** 5 pounds, \$8 or 8 euros. **JE** F12, F15, F31, F33. **KW** Currency Union. Exchange Rate Volatility. Gravity Model. Trade. International Trade.

AB A gravity model is used to assess the separate effects of exchange rate volatility and currency unions on international trade. The panel data set used includes bilateral observations for five years spanning 1970 through 1990 for 186 countries. In this data set, there are over one hundred pairings and three hundred observations in which both countries use the same currency. I find a large positive effect of a currency union on international trade, and a small negative effect of exchange rate volatility, even after controlling for a host of features, including the endogenous nature of the exchange rate regime. These effects are statistically significant and imply that two countries that share the same currency trade three times as much as they would with different currencies. Currency unions may thus lead to a large increase in international trade, with all that entails.

Roses, Joan R.

TI Productividad, Competencia e Innovacion en la Banca Privada Espanola (1900-1914). **AU** Cuadras-Morato, Xavier; Fernandez-Castro, Angel S.; Roses, Joan R.

Ross, Kevin

PD December 2001. **TI** Mind the Gap: What is the Best Measure of Slack in the Euro Area? **AU** Ross, Kevin; Ubide, Angel. **AA** Ross: International Monetary Fund. Ubide: Tudor Investment Corporation. **SR** International Monetary Fund Working Paper: WP/01/203; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 21. **PR** not available. **JE** C22, C32, E23, E31, E32. **KW** Output Gaps. Unobservable Components. Business Cycles.

AB Assessing the magnitude of the output gap is critical to achieving an optimal policy mix. Unfortunately, the gap is an unobservable variable, which, in practice, has been estimated in

a variety of ways, depending on the preferences of the modeler. This model selection problem leads to a substantial degree of uncertainty regarding the magnitude of the output gap, which can reduce its usefulness as a policy tool. To overcome this problem, in this paper we attempt to insert some discipline into this search by providing two metrics -- inflation forecasting and business cycle dating -- against which different options can be evaluated using aggregated euro-area gross domestic product (GDP) data. Our results suggest that Gali, Gertler, and Lopez-Salido's (2001) inefficiency wedge performs best in inflation forecasting, and production function methodology dominates in the prediction of turning points. If, however, a unique methodology must be selected, the quadratic trend delivers the best overall results.

Ruehl, Christof

TI The Bail-In Problem: Systematic Goals, Ad Hoc Means. **AU** Eichengreen, Barry; Ruehl, Christof.

Ruhm, Christopher J.

PD April 2000. **TI** Parental Employment and Child Cognitive Development. **AA** University of North Carolina, Greensboro and NBER. **SR** National Bureau of Economic Research Working Paper: 7666; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 29. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** I12, J13, J22. **KW** Child Development. Parental Employment.

AB This study investigates the relationship between parental employment and child cognitive development using data from multiple years of the National Longitudinal Survey of Youth. Maternal labor supply during the first three years of the child's life is predicted to have a small negative effect on the verbal ability of 3 and 4 year olds and a substantial detrimental impact on the reading and math achievement of 5 and 6 year olds. Working during the second and third years appears to have less favorable or more deleterious consequences when the mother is also employed in the first year. The results are robust to the inclusion of controls for day care arrangements or paternal job-holding, and there is some indication that early employment may be particularly costly for children in "traditional" two-parent families. Finally, the data suggest that paternal and maternal employment have qualitatively similar effects, hinting at the importance of time investments by fathers. The overall conclusion is that previous research may have provided an overly optimistic assessment of the effects of parental employment on child cognitive development.

Sacerdote, Bruce

TI The Determinants of Punishment: Deterrence, Incapacitation and Vengeance. **AU** Glaeser, Edward L.; Sacerdote, Bruce.

PD October 2000. **TI** The Nature and Nurture of Economic Outcomes. **AA** Dartmouth College and NBER. **SR** National Bureau of Economic Research Working Paper: 7949; 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** I21, J22, J24. **KW** Educational Outcomes. Labor Market Outcomes. Biology.

AB This paper uses data on adopted children to examine the relative importance of biology and environment in determining educational and labor market outcomes. I employ three long-

term panel data sets which contain information on adopted children, their adoptive parents, and their biological parents. In at least two of the tree data sets, the mechanism for assigning children to adoptive parents is fairly random and does not match children to adoptive parents based on child test scores but a large impact on college attendance, marital status, and earnings. In contrast, with existing work on IQ scores, I do not find that the influence of adoptive parents declines with child age.

Saez, Emmanuel

TI The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment. **AU** Duflo, Esther; Saez, Emmanuel.

Sahay, Ratna

TI The Transition Economies After Ten Years. **AU** Fischer, Stanley; Sahay, Ratna.

Saint-Paul, Gilles

PD November 1999. **TI** On the Distribution of Income and Worker Assignment Under Intra-Firm Spillovers, With an Application to Ideas and Networks. **AA** Universitat Pompeu Fabra and CEPR. **SR** CEPR Discussion Paper: 2290; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** D31, J24, J31. **KW** Income Distribution. Worker Assignment. Spillovers. Networks. Information Technology. **AB** We study the earnings structure and the equilibrium assignment of workers when they exert intra-firm spillovers on each other. We allow for arbitrary spillovers provided output depends on some aggregate index of workers' skill. Despite the possibility of increasing returns to skills, equilibrium typically exists. We show that equilibrium will typically be segregated -- that the skill space can be partitioned into a set of segments and any firm hires from only one segment. Next, we apply the model to analyze the effect of information technology on segmentation and the distribution of income. There are two types of human capital: productivity and creativity (i.e., the ability to produce ideas that may be duplicated over a network). Under plausible assumptions, inequality rises and then falls when network size increases, and the poorest workers cannot lose. We also analyze the impact of an improvement in worker quality and of an increased international mobility of ideas.

Salgado, Raniil

PD January 2002. **TI** Impact of Structural Reforms on Productivity Growth in Industrial Countries. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/10; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 25. **PR** not available. **JE** D24, E23, F49, O47, O57. **KW** Productivity. Growth. Structural Reforms. Trade. Product Markets.

AB This paper investigates the impact of structural reforms on productivity growth. A panel analysis of 20 Organization for Economic Cooperation and Development (OECD) countries finds that the impact of structural reforms on productivity growth may be weak or negative in the short run, possibly due to adjustment costs and the need for firms to learn how to operate in a less regulated and more competitive environment. In the long run, however, structural reforms are found to have

significantly positive effects on productivity growth.

Sarraf, Feridoun

TI Systemic Weaknesses of Budget Management in Anglophone Africa. **AU** Lienert, Ian; Sarraf, Feridoun.

Sbracia, Massimo

TI Currency Crises and Uncertainty About Fundamentals. **AU** Prati, Alessandro; Sbracia, Massimo.

Scalise, Joseph M.

TI Did U.S. Bank Supervisors Get Tougher During the Credit Crunch? Did They Get Easier During the Bank Boom? Did it Matter to Bank Lending? **AU** Berger, Allen N.; Kyle, Margaret K.; Scalise, Joseph M.

Schaling, Eric

TI A Theory of Central Bank Accountability. **AU** Eijffinger, Sylvester; Schaling, Eric; Hoeberichts, Marco.

Schankerman, Mark

PD September 2000. **TI** Damages and Injunctions in Protecting Proprietary Research Tools. **AU** Schankerman, Mark; Scotchmer, Suzanne. **AA** Schankerman: London School of Economics and CEPR. **SR** CEPR Discussion Paper: 2554; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** D23, K11, O31, O34, O38. **KW** Intellectual Property. Research Tools. Property Rules. Patents. Liability Rules.

AB We investigate how liability rules and property rules affect the incentives to invest in research tools. We argue that it is hard to deter infringement under any of the enforcement regimes available. However, counterintuitively, a credible threat of infringement can actually be beneficial to the patent holder. We compare the two doctrines of damages under the liability rule, namely, lost profit (lost royalty) and unjust enrichment, and argue that unjust enrichment protects the patent holder better than lost royalty. Both can be superior to a property rule (the right to enjoin infringement), depending on how much delay is permitted before infringement is enjoined. We also show that, for patents on end-user products, the ranking of liability doctrines is reversed: unjust enrichment is inferior to lost profits.

Schivardi, Fabiano

TI Information Spillover and Factor Adjustment. **AU** Guiso, Luigi; Schivardi, Fabiano.

Schmidt, Gunter

TI The Effects of Capital Controls on Exchange Rate Volatility and Output. **AU** Frenkel, Michael; Nickel, Christiane; Schmidt, Gunter; Stadtmann, Georg.

Schmidt, K. M.

PD December 1999. **TI** Convertible Securities and Venture Capital Finance. **AA** Universitat Munchen and CEPR. **SR** CEPR Discussion Paper: 2317; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros.

JE D23, G24, G32. **KW** Convertible Securities. Venture Capital. Corporate Finance. Moral Hazard. Incomplete Contracts.

AB This paper offers a new explanation for the prevalent use of convertible securities in venture capital finance. Convertible securities can be used to endogenously allocate cash flow rights as a function of the realized quality of the project. This property can be used to mitigate the double moral hazard problem between the entrepreneur and the venture capitalist. It is shown that an optimally designed convertible security outperforms any mixture of debt and equity, and it can induce both parties to invest efficiently. The result is robust to renegotiation and to changes in the timing of investments and information flows.

Schmitt-Grohe, Stephanie

TI The Perils of Taylor Rules. **AU** Benhabib, Jess.; Schmitt-Grohe, Stephanie; Uribe, Martin.

PD December 1999. **TI** Endogenous Business Cycles and the Dynamics of Output, Hours, and Consumption. **AA** Rutgers University. **SR** CEPR Discussion Paper: 2315; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** E32. **KW** Business Cycles. Expectations-Driven Cycles.

AB This paper studies the business-cycle fluctuations predicted by a two-sector endogenous business-cycle model with sector-specific external increasing returns to scale. It focuses on aspects of actual fluctuations that have been identified both as defining features of the business cycle and as ones that standard real-business-cycle models cannot explain: the autocorrelation function of output growth, the impulse response function of output to demand shocks, and the forecastable movements of output, hours, and consumption. For empirically realistic calibrations of the degree of sector-specific external returns to scale, the results suggest that endogenous fluctuations do not provide the dynamic element that is missing in existing real-business-cycle models.

TI Monetary Policy and Multiple Equilibria. **AU** Benhabib, Jess.; Schmitt-Grohe, Stephanie; Uribe, Martin.

Schmukler, Sergio

TI Verifiability and the Vanishing Intermediate Exchange Rate Regime. **AU** Frankel, Jeffrey; Schmukler, Sergio; Servén, Luis.

Schob, Ronnie

TI Optimal Central Bank Conservatism and Monopoly Trade Unions. **AU** Berger, Helge; Hefeker, Carsten; Schob, Ronnie.

Schorderet, Yann

PD August 2001. **TI** Revisiting Okun's Law: An Hysteretic Perspective. **AA** University of Geneva. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/13; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 14. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C22, E24,

J64. **KW** Hysteresis. Unemployment. Non-Linearity. Cointegration.

AB Many developed countries have suffered from high unemployment rates during the last few decades. Beyond the economic and social consequences of this painful experience, the understanding of the mechanisms underlying unemployment still constitutes an important challenge. Focusing on one of its relevant determinants, we reexamine the link between output and unemployment. We show that the difficulty of detecting the close relationship between the two is due to a phenomenon of non-linearity. The asymmetric feature characterizing the data refers to a theory known as hysteresis.

Schotman, Peter C.

TI Price Discovery on Foreign Exchange Markets. **AU** de Jong, Frank; van Leeuwen, I.; Schotman, Peter C.; Mahieu, Ronald J.

Schwartz, Alan

PD December 2001. **TI** The Law and Economics of Costly Contracting. **AU** Schwartz, Alan; Watson, Joel. **AA** Schwartz: Yale University. Watson: University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/21; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 38. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C72, D74, K12, L14. **KW** Costly Contracting. Renegotiation. Legal Rules. Contracts.

AB We analyze contractual relationships in an environment in which contracts are costly to form and renegotiate and in which the contracting parties can influence these costs. We find that: (i) The efficiency and complexity of parties' initial contract are decreasing in the contract-writing cost. Hence, the best mechanism design contracts can be too costly to write. (ii) When parties use the simpler contract forms, they require renegotiation to capture ex post surplus and to create efficient investment incentives. In some cases, parties want low renegotiation costs. In other cases, parties have a strict preference for moderate renegotiation costs. (iii) The effect of Contract Law on contract form is significant but has been overlooked. The law's interpretive rules raise the cost of enforcing complex contracts, and thus induce parties to use simple contracts. Worse, the law also lowers renegotiation costs, which further undermines complex contracts and is even inappropriate for some simpler contracts.

Schwartz, Gerd

TI Mexico: Experiences with Pro-Poor Expenditure Policies. **AU** Corbacho, Ana; Schwartz, Gerd.

Schwartz, Warren F.

TI A Neglected Interdependency in Liability Theory: Bilateral Accidents Where One Party's Precaution Shifts the Other's Cost of Care. **AU** Dharmapala, Dhammika; Hoffmann, Sandra A.; Schwartz, Warren F.

Schwert, G. William

TI IPO Market Cycles: Bubbles or Sequential Learning? **AU** Lowry, Michelle; Schwert, G. William.

Scotchmer, Suzanne

TI Damages and Injunctions in Protecting Proprietary Research Tools. **AU** Schankerman, Mark; Scotchmer, Suzanne.

Scott, C. D.

PD May 1999. **TI** The Economics of Non-Governmental Organisations. **AU** Scott, C. D.; Hopkins, R. **AA** Scott: London School of Economics. Hopkins: Queen Mary and Westfield College. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/15; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 32. **PR** no charge. **JE** D64, L31, O12, O17. **KW** Economic Development. Institutional Arrangements. Non-Profit Institutions. Altruism. NGOs.

AB The purpose of this paper is to identify the organizational comparative advantage of Non-Governmental Organizations (NGOs), and to develop a model that explains the set of circumstances under which they emerge and dominate other types of firms. It is argued that the potential superiority of NGOs derives from two features: (1) the creation of an institutional environment within the firm which selectively attracts altruists, who have a lower supply price of effective labor than egotists, and (2) the ability to develop efficient technologies for converting the revelatory and productive effort of their staff into local outputs which are highly valued by the target group of beneficiaries.

Scott, John T.

TI Universities as Research Partners. **AU** Hall, Bronwyn H.; Scott, John T.; Link, Albert N.

Sedjo, Roger A.

PD April 2001. **TI** Estimating Carbon Supply Curves for Global Forests and Other Land Uses. **AU** Sedjo, Roger A.; Sohngen, Brent; Mendelsohn, Robert. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/19; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 10. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** Q15, Q21, Q23, Q24. **KW** Carbon Supply Curves. Sequestration. Price Path. Forests. Global Warming.

AB This study develops cumulative carbon sequestration "supply curves" for global forests utilizing a dynamic timber supply model. The curves are not traditional Marshallian supply curves or steady-state supply curves, but the research estimates a number of long-term, cumulative, carbon quasi-supply curves under different price scenarios and for different time periods. The curves trace out the relationship between an intertemporal price path for carbon and the cumulative carbon sequestered from the initiation of the shadow prices, set at 2000, to a selected future year (2010, 2050, 2100). The timber supply model demonstrates that cumulative carbon quasi-supply curves that can be generated through forestry significantly depend on initial carbon prices and expectations regarding the time profile of future carbon prices. The long-run quasi-supply curves generated from a constant price will have somewhat different characteristics from quasi-supply curves generated with an expectation of rising carbon prices through time.

PD July 2001. **TI** Can Carbon Sinks Be Operational? **RFF** Workshop Proceedings. **AU** Sedjo, Roger A.; Toman, Michael A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/26; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 44. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** Q15, Q21, Q23, Q24. **KW** Carbon. Sinks. Global Warming. Sequestration. Forests.

AB A Resources for the Future (RFF) Workshop brought together experts from around the world to assess the feasibility of using biological sinks to sequester carbon as part of a global atmospheric mitigation effort. The chapters of this proceeding are a result of that effort. Although it was not the intent of the workshop to generate a consensus, a number of studies suggest that sinks could be a relatively inexpensive and effective carbon management tool. The chapters cover a variety of aspects and topics related to the monitoring and measurement of carbon in biological systems. They tend to support the view that carbon sequestration using biological systems is technically feasible with relatively good precision and at relatively low cost. Thus, carbon sinks can be operational.

PD August 2001. **TI** Forest Carbon Sequestration: Some Issues for Forest Investments. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/34; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 21. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** Q15, Q21, Q23, Q24. **KW** Carbon. Sinks. Sequestration. Forestry. Kyoto Protocol.

AB A major problem being faced by human society is that the global temperature is believed to be rising due to human activity that releases carbon dioxide into the atmosphere, i.e., global warming. The problem of increasing atmospheric carbon dioxide can be addressed in a number of ways. One of these is forestry and forest management. This paper examines a number of current issues related to mitigating the global warming problem through forestry. A major focus is the means by which forests and forest management can contribute to the sequestration of carbon. A number of alternative approaches to utilizing forestry and forest management for carbon sequestration are examined. Studies examining the costs of carbon sequestration using forestry are also discussed. The recent Kyoto Protocol explicitly recognizes certain forestry activities as "certifiable" for sequestration credits. But some definitions and aspects of carbon sequestration through forestry were left incomplete or inadequately defined. Further clarification is necessary to understand the full potential and set of opportunities from forestry. Alternative types of vehicles for sequestration credits are discussed. Finally, some ongoing real-world activities utilizing forestry specifically to sequester carbon are discussed.

PD November 2001. **TI** Biotechnology's Potential Contribution to Global Wood Supply and Forest Conservation. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/51; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 37. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** L73, O32, Q16, Q21, Q23. **KW** Biotechnology. Forestry. Tree Plantations. Timber. Wood.

AB Over the past 30 years, industrial plantation forests have become a major supplier of industrial wood. There are several

reasons for this, including the improved economics of planted forests due to biotechnological innovations, the increases in natural forest wood costs due to increasing inaccessibility, and rising wood costs from natural forests due to new environmental restrictions related to logging. Forestry today is on the threshold of the widespread introduction of biotechnology into its operational practices. In many cases, the biotechnology likely to be introduced is simply an extension of that being utilized in agriculture, such as herbicide-tolerant genes. However, biotechnology in forestry also is developing applications unique to forestry, including genes for fiber modification, lignin reduction and extraction, and for the promotion of straight stems and reduced branching.

Senhadji, Abdelhak

TI Lending Booms, Real Estate Bubbles, and The Asian Crisis. **AU** Collins, Charles; Senhadji, Abdelhak.

Serven, Luis

TI Verifiability and the Vanishing Intermediate Exchange Rate Regime. **AU** Frankel, Jeffrey; Schmukler, Sergio; Serven, Luis.

Shachmurove, Yochanan

PD July 2001. **TI** A Moving Average Comparison of the Tel-Aviv 25 and S&P 500 Stock Indices. **AU** Shachmurove, Yochanan; BenZion, Uri; Klein, Paul; Yagil, Joseph. **AA** Shachmurove: City University of New York and University of Pennsylvania. BenZion and Klein: Ben-Gurion University. Yagil: Haifa University and Columbia University. **SR** University of Pennsylvania, CARESS Working Paper: 01/17; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 35. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** F39, G12, G14, G15, O53. **KW** Moving Average. Tel-Aviv Stock Exchange. Stock Market Indices. Technical Analysis. Efficient Markets.

AB Random Walk and Efficient Market Hypotheses are central ideas in explaining financial market efficiencies. The assumption that market behavior embodies and reflects relevant information has a great impact on securities prices. Any change in the relevant information causes price adjustment. In contrast, technical analysts argue that prices gradually adjust to new information. Thus, historical analysis is useful in diagnosing the repeated pattern behaviors leading to active investment strategies that generate better-than-market returns.

PD July 2001. **TI** Dynamic Co-Movements of Stock Indices: The Emerging Middle Eastern and the United States Markets. **AA** City University of New York and University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/18; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 44. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** C32, F36, G14, G15, O53. **KW** Middle East. Stock Market Indices. Vector Autoregression. Bayesian VAR. Dynamic Linkages.

AB The Middle East Stock exchanges are becoming attractive due to the unprecedented decrease of information costs. This paper employs Vector Auto Regression (VAR) and

Bayesian VAR models to trace the dynamic co-movements among the stock indices for the emerging Middle East and the major index of the United States market. The Middle East countries included are: Egypt, Israel, Jordan, Lebanon, Morocco, Oman, and Turkey. Monte Carlo simulations trace the effects of transmission of innovations from one market to the others. The dynamic linkages among these stock markets are relatively small, suggesting benefits to investors who would like to improve on their portfolio.

PD July 2001. **TI** Tests of Financial Markets' Efficiency for Thirteen Small European Countries. **AA** City University of New York and University of Pennsylvania. **SR** University of Pennsylvania, CARESS Working Paper: 01/20; CARESS, University of Pennsylvania, 3718 Locust Walk, McNeil Building, Philadelphia, PA 19104-6297. Website: www.ssc.upenn.edu/econ/CARESS/caress-wp.htm. **PG** 38. **PR** \$3.00 for U.S. and Canada; \$5.00 for Foreign; make checks payable to University of Pennsylvania. **JE** D83, F39, G14, G15, O52. **KW** Financial Market Efficiency. Europe. Overreaction Hypothesis. Uncertain Information. Efficient Markets.

AB This paper studies the characteristics of thirteen small European stock markets, in order to find international support for the presence of efficiency in financial markets. The thirteen bourses are located in Belgium, Denmark, Finland, Greece, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey. The paper tests the Overreaction and Uncertain Information Hypotheses by examining the behavior of these markets over a 60-day period following positive or negative market disruptions. The conclusions are that for this particular time lag most small European stock markets operate under efficient conditions.

TI Chaos Theory and Its Application. **AU** Bau, Haim H.; Shachmurove, Yochanan.

Shackelford, Douglas A.

TI Capital Gains Taxes and Stock Reactions to Quarterly Earnings Announcements. **AU** Blouin, Jennifer L.; Shackelford, Douglas A.; Raedy, Jana Smith.

TI Copycat Funds: Information Disclosure Regulation and the Returns to Active Management in the Mutual Fund Industry. **AU** Myers, Mary Margaret; Poterba, James M.; Shackelford, Douglas A.; Shoven, John B.

TI Copycat Funds: Information Disclosure Regulation and the Returns to Active Management in the Mutual Fund Industry. **AU** Myers, Mary Margaret; Poterba, James M.; Shackelford, Douglas A.; Shoven, John B.

Shapiro, Joel

PD April 2001. **TI** Income Maintenance Programs and Multidimensional Screening. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 544; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 31. **PR** Papers available for free on the web; no hardcopies. **JE** D82, H21, H53. **KW** Welfare. Programs. Optimal Taxation. Multidimensional Screening.

AB This paper examines properties of optimal poverty assistance programs under different informational environments using an income maintenance framework. To that end, we make

both the income generating ability and the disutility of labor of individuals unobservable, and compare the resulting benefit schedules with those of programs found in the United States since Welfare Reform (1996). We find that optimal programs closely resemble a Negative Income Tax with a Benefit Reduction rate that depends on the distribution of population characteristics. A policy of workfare (unpaid public sector work) is inefficient when disutility of labor is unobservable, but minimum work requirements (for paid work) may be used in that same environment. The distortions to work incentives and the presence of minimum work requirements depend on the observability and relative importance of the population's characteristics.

Shea, Dennis F.

TI The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior. **AU** Madrian, Brigitte C.; Shea, Dennis F.

Sheppard, Kevin

TI Theoretical and Empirical Properties of Dynamic Conditional Correlation Multivariate GARCH. **AU** Engle, Robert F.; Sheppard, Kevin.

Shih, Jih-Shyang

TI Modeling the Costs and Environmental Benefits of Disposal Options for End-of-Life Electronic Equipment: The Case of Used Computer Monitors. **AU** Macauley, Molly K.; Palmer, Karen; Shih, Jih-Shyang; Cline, Sarah; Holsinger, Heather.

Shin, Hyun

TI Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. **AU** Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song.

Shoven, John B.

TI Tax Externalities of Equity Mutual Funds. **AU** Dickson, Joel M.; Shoven, John B.; Sialm, Clemens.

TI Exchange Traded Funds: A New Investment Option for Taxable Investors. **AU** Poterba, James M.; Shoven, John B.

Sialm, Clemens

TI Tax Externalities of Equity Mutual Funds. **AU** Dickson, Joel M.; Shoven, John B.; Sialm, Clemens.

Sibert, Anne

PD December 1999. **TI** Monetary Policy Committees: Individual and Collective Reputations. **AA** Birkbeck College and CEPR. **SR** CEPR Discussion Paper: 2328; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** D71, E52, E58. **KW** Reputation. Collective Decision-Making. Central Banks. Monetary Policy Committee.

AB This paper looks at how the reputation of a monetary policy-making committee is jointly determined with the reputations of its individual members. I ask whether individuals have more or less incentive to gain a reputation for being tough on inflation when they are part of a group. I examine the effect of increased transparency -- in the form of publishing the votes of individual members -- on individuals' incentives to appear

hard-nosed. I look at how other institutional features of central banks affect the policy making body's incentive to refrain from inflation.

Siconolfi, Paolo

TI Optimal Debt Contracts and Moral Hazard Along the Business Cycle. **AU** Reichlin, Pietro; Siconolfi, Paolo.

Siebert, Ralph

TI Strategic Choice of Partners: Research Joint Ventures and Market Power. **AU** Roller, Lars-Hendrik; Siebert, Ralph; Tombak, Mihkel.

Sieg, Holger

PD October 2000. **TI** Using Locational Equilibrium Models to Evaluate Housing Price Indexes. **AU** Sieg, Holger; Smith, V. Kerry; Banzhaf, Spencer; Walsh, Randy. **AA** Sieg: Duke University and NBER. Smith: North Carolina State University. Banzhaf and Walsh: Duke University. **SR** National Bureau of Economic Research Working Paper: 7934; 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** C43, H73, R21. **KW** Housing. Price Indices. Locational Equilibrium.

AB This paper analyzes how the properties of locational equilibrium models can be used to evaluate approaches for constructing price indexes for heterogeneous houses. Housing markets play a key role in locational equilibrium models. Prices for houses determine that implicit costs that households bear when locating in a given community. We evaluate a variety of price indexes all relying on hedonic models for predicting interjurisdictional housing prices. The application uses a unique panel data set of housing transactions in Southern California. The rank predictions of different models are robust with respect to the hedonic model and the composite commodity definition used in aggregation. They do not depend significantly on the spatial or temporal definitions used to define the choice set of local housing markets. Finally, housing price estimates are strongly correlated with education and environmental amenities.

Simpson, R. David

PD April 2001. **TI** A Note on the Valuation of Ecosystem Services in Production. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/16; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 7. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D24, Q29. **KW** Ecosystem Services. Returns to Scale. Production Input Valuation.

AB There has been considerable recent interest in the valuation of ecosystem services. We focus here on the value of such services in the production of market goods. Although the conceptual basis for conducting such exercises is straightforward, the data with which to implement them empirically is generally not available. An upper bound on the value of ecosystem services arises when the production technology exhibits constant returns to scale in ecosystem services and market inputs jointly. There are compelling reasons to suppose that the existence of fixed factors of production would imply that production technologies exhibit decreasing returns to scale. Under these circumstances, no

general conclusions can be drawn. We show in an illustrative example that a range of outcomes is possible, depending on the substitutability between ecosystem services and other inputs and the scarcity of ecosystem services relative to other factors of production.

PD August 2001. **TI** Externalities, Decreasing Returns, and Common Ownership. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/41; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 14. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D62, L23, Q15, Q24. **KW** Externalities. Mergers. Returns to Scale. Regulation. **AB** Placing production units under common ownership is often suggested as a solution to the problem of externalities. This will not always be true when there are decreasing returns to scale. An atomistic industry could be more efficient than a monopoly in some instances. Even when the "optimal" industry configuration would involve a finite number of producers, no two may have appropriate incentives to combine. An omniscient and benign regulator can always assure a more efficient outcome than would result from the combination of private producers. Whether real-world regulators should be called upon, however, is less clear.

Sinai, Todd

PD September 2000. **TI** The Asset Price Incidence of Capital Gains Taxes: Evidence from the Taxpayer Relief Act of 1997 and Publicly-Traded Real Estate Firms. **AU** Sinai, Todd; Gyourko, Joseph. **AA** Sinai: University of Pennsylvania and NBER. Gyourko: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 7893; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** G12, G14, G32, H25, L85. **KW** Capital Gains Taxes. Real Estate Industry. Asset Prices. Taxes.

AB We provide new evidence that corporate-level investment subsidies can be substantially capitalized into asset prices by examining the relative stock price performance of publicly traded real estate companies that should have been differentially affected by the capital gains tax rate reduction enacted in the Taxpayer Relief Act of 1997. By comparing real estate firms that have an organizational structure which allows property sellers to defer capital gains taxes and plan to use them to acquire property, with firms that do not, we isolate the effect of the tax cut from industry trends and firm-level heterogeneity. When we examine the time period surrounding the reduction in the capital gains tax rate, our results suggest the tax change was substantially capitalized into lower share prices for the firms that allowed tax deferral, and that the benefit of the seller's capital gains tax deferral accrued mainly to the buyer of an appreciated property. The validity of our estimation strategy is supported by further tests showing that these firms did not experience any relative movement in share prices during the previous year when capital gains tax rates did not change.

Slof, Eric J.

TI New Opportunities for Farm Accounting. **AU** Argiles, Josep M.; Slof, Eric J.

Slok, Torsten

TI Exchange Rates and Capital Flows. **AU** Brooks, Robin; Edison, Hali J.; Kumar, Manmohan S.; Slok, Torsten.

TI The Impact of Changes in Stock Prices and House Prices on Consumption in OECD Countries. **AU** Ludwig, Alexander; Slok, Torsten.

Slunge, Daniel

PD September 2001. **TI** Implementation of Policy Instruments for Chlorinated Solvents: A Comparison of Design Standards, Bans, and Taxes to Phase Out Trichloroethylene. **AU** Slunge, Daniel; Sterner, Thomas. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/32; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 19. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D62, K32, L51, Q28. **KW** Hazardous Chemicals. Regulation Instruments. Environmental Policy.

AB This paper studies the Swedish prohibition of the hazardous solvent Trichloroethylene (TCE). Sweden is alone in completely prohibiting its use. The ban has been at best a partial success and illustrates the dilemmas of policymaking. Use has declined but not stopped, largely because the decision to ban TCE was challenged in the courts. Recently, the European Union Court of Justice decided in favor of Sweden's right to have a ban. This article analyzes abatement cost data to show that the cost of replacing TCE is low for most plants, although there appear to be a few firms for which it may be quite high. A cross-country comparison indicates that the Swedish ban was less effective than the very strict technical requirements in Germany or the tax used in Norway. A tax (or deposit refund scheme) would be a good mechanism to achieve a swift phaseout.

Smith, V. Kerry

TI Using Locational Equilibrium Models to Evaluate Housing Price Indexes. **AU** Sieg, Holger; Smith, V. Kerry; Banzhaf, Spencer; Walsh, Randy.

Snower, Dennis J.

PD December 1999. **TI** Inequality of Earnings. **AA** Birkbeck College, London. **SR** CEPR Discussion Paper: 2321; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 68. **PR** 5 pounds, \$8 or 8 euros. **JE** D23, D24, D30, D63, J31. **KW** Inequality. Income Distribution. Earnings Inequality. Wage Rigidities. Organizational Change.

AB This paper surveys major empirical regularities concerning changes in earnings inequality in Europe and the US over the past 25 years. Next, it indicates which of these regularities can be explained within the competitive demand-supply framework of analysis, and which are left unexplained. Finally, it considers the implications of organizational change as a possible rationale for recent inequality developments.

Sohngen, Brent

TI Estimating Carbon Supply Curves for Global Forests and Other Land Uses. **AU** Sedjo, Roger A.; Sohngen, Brent; Mendelsohn, Robert.

Soloaga, Isidro

TI What's Behind Mercosur's CET? **AU** Olarreaga, Marcelo; Winters, L. Alan; Soloaga, Isidro.

Sonin, Constantin

PD November 1999. **TI** Inequality, Property Rights Protection, and Economic Growth in Transition Economies: Theory and Russian Evidence. **AA** New Economic School. **SR** CEPR Discussion Paper: 2300; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, H41, O34, O41, P27. **KW** Transition Economics. Property Rights. Political Economy. Growth.

AB For economies in transition, the issues of property rights protection provided by the state and the resulting implications for economic performance are very important. The paper develops an endogenous growth theory model with incomplete capital markets and the level of public protection of property rights determined by voting (possibly different from majority voting), and verifies the implications using cross-section data on Russian regions. During transition (since 1992), Russian regions demonstrated enormous differences in growth rates. It is found that these differences may be explained by initial conditions and effectiveness of institutions. Also, positive impact of inequality on the level of public protection of property rights is found, and a theoretical explanation for this phenomenon in the framework of the model is provided.

Sonora Robert J.

TI Price Level Convergence Among United States Cities: Lessons for the European Central Bank. **AU** Cecchetti, Stephen G.; Mark, Nelson C.; Sonora Robert J.

Sorensen, Bent E.

TI Output Fluctuations and Fiscal Policy: US State and Local Governments 1978-1994. **AU** Yosha, Oved; Sorensen, Bent E.; Wu, L.

TI Risk Sharing and Industrial Specialization: Regional and International Evidence. **AU** Yosha, Oved; Sorensen, Bent E.; Kalemli-Ozcan, S.

Spilimbergo, Antonio

PD February 2002. **TI** A Model of Multiple Equilibria in Geographic Labor Mobility. **AU** Spilimbergo, Antonio; Ubeda, Luis. **AA** Spilimbergo: IMF. Ubeda: Universida Carlos III de Madrid. **SR** International Monetary Fund Policy Working Paper: WP/02/31; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** E24, J61, R23. **KW** Migration. Multiple Equilibria. Labor Mobility. Matching Model.

AB We develop a model of double matching in the labor market and the social environment in order to explain different migration patterns in response to local economic shocks. This approach explains the different behaviors of workers in different groups, regions, or countries in an endogenous way by showing the existence of multiple equilibria, rather than in an exogenous manner by introducing ex-ante regulations or unemployment benefits. This model can also explain why individuals from some communities form 'sister' communities in some cases and not in others.

Stadtmann, Georg

TI The Effects of Capital Controls on Exchange Rate Volatility and Output. **AU** Frenkel, Michael; Nickel, Christiane; Schmidt, Gunter; Stadtmann, Georg.

Starr, Ross M.

PD October 2001. **TI** Why Is There Money? Endogenous Derivation of "Money" as the Most Liquid Asset: A Class of Examples. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/25R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 36. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D51, E42. **KW** Money. Commodity Money. Liquid. Bid/Ask Spread.

AB The monetary character of trade, the existence of a common medium of exchange, is derived as an outcome of the economic general equilibrium in a class of examples. Two constructs are added to an Arrow-Debreu general equilibrium model: market segmentation with multiple budget constraints (one at each transaction) and transaction costs. The multiplicity of budget constraints creates a demand for a carrier of value between transactions. A common medium of exchange, money, arises endogenously as the most liquid (lowest transaction cost) asset. Government-issued fiat money has a positive equilibrium value due to its acceptability in payment of taxes. Scale economies in transaction cost account for uniqueness of the (fiat or commodity) money in equilibrium. The monetary structure of trade and the uniqueness of money in equilibrium can thus be derived from elementary price theory.

PD January 2002. **TI** General Equilibrium in a Segmented Market Economy with Convex Transaction Cost: Existence, Efficiency, Commodity and Fiat Money. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/01; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 19. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C62, E42. **KW** Commodity Money. Fiat Money. Quasi-Equilibrium. General Equilibrium. Transaction Costs.

AB This study derives the monetary structure of transactions, the use of commodity or fiat money, endogenously from transaction costs in a segmented market general equilibrium model. Market segmentation means there are separate budget constraints for each transaction: budgets balance in each transaction separately. Transaction costs imply differing bid and ask (selling and buying) prices. The most liquid instruments are those with the lowest proportionate bid/ask spread in equilibrium. Existence of general equilibrium is demonstrated under conventional assumptions, including convexity of the transaction technology. The structure of payment for purchases in equilibrium results from market segmentation and transaction costs. If a lowest-transaction-cost commodity is available, it becomes the common medium of exchange, commodity money. General equilibrium may not be Pareto efficient, but if a zero-transaction-cost instrument is available as the common medium of exchange then the equilibrium allocation is Pareto efficient. Fiat money is characterized as an

otherwise worthless government-issued instrument of low transaction cost acceptable in payment of required taxes. Fiat money equilibrium with positively valued fiat money can then be shown to exist.

Stasavage, David

PD July 2000. **TI** Private Investment and Political Uncertainty. **AA** London School of Economics. **SR** London School of Economics and Political Science, STICERD Development Economics Discussion Paper: DEDPS/25; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. **PG** 39. **PR** no charge. **JE** C33, E22, O16, O38, P16. **KW** Political Institutions. Private Investment. Credible Commitment. Quantile Regression. Investment.

AB Recent theoretical and empirical work has demonstrated a clear negative link between macroeconomic and political uncertainty and levels of private investment across countries. This result raises the question of what institutions might help reduce this uncertainty, in particular by allowing host governments to limit their own possibilities to act opportunistically with respect to investors. Some have argued that governments might benefit from joining a multilateral investment agreement, but there remain doubts both about the enforceability and the desirability of such an accord. An alternative possibility, proposed in a seminal article by North and Weingast (1989), is that political institutions characterized by checks and balances can allow governments to credibly commit not to engage in *ex post* opportunism with respect to investors. In this paper I propose a modified version of this hypothesis and test it using new cross-country data on political institutions. I also use a quantile regression technique that allows the estimated effect of political institutions to vary across countries and over time.

Stavins, Robert N.

TI National Environmental Policy During the Clinton Years. **AU** Cavanagh, Sheila M.; Hahn, Robert W.; Stavins, Robert N.

PD November 2001. **TI** Lessons from the American Experiment with Market-Based Environmental Policies. **AA** Harvard University, Belfer Center for Science and International Affairs, and Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/53; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 14. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D63, D78, Q28. **KW** Environmental Policy. Market-Based Policy. Emissions Trading. Tradable Permits.

AB This paper examines U.S. experience with market-based environmental policies, such as pollution charges, tradable permits, market friction reductions, and government subsidy reductions. The paper considers both normative and positive lessons from the U.S. experience.

PD November 2001. **TI** Experience with Market-Based Environmental Policy Instruments. **AA** Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/58; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 46. **PR** Domestic First Class \$10; Domestic Book Rate

\$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D63, D78, Q28. **KW** Market-Based Policy. Incentives. Tradable Permits. Environmental Policy. Policy Instruments.

AB Environmental policies typically combine the identification of a goal with some means to achieve that goal. This chapter for the forthcoming Handbook of Environmental Economics focuses exclusively on the second component, the means -- the "instruments" -- of environmental policy, and considers, in particular, experience around the world with the relatively new breed of economic-incentive or market-based policy instruments. I define these instruments broadly, and consider them within four categories: charge systems; tradable permits; market friction reductions; and government subsidy reductions. By defining market-based instruments broadly, I cast a large net for this review of applications. But this should not leave the impression that market-based instruments have replaced, or have come close to replacing, the conventional command-and-control approach to environmental protection. Further, even where these approaches have been used in their purest form and with some success, such as in the case of tradable permit systems in the United States, they have not always performed as anticipated. In the final part of the paper, I ask what lessons can be learned from our experiences. In particular, I consider normative lessons for design and implementation, analysis of prospective and adopted systems, and identification of new applications.

Stein, Jeremy C.

TI Forecasting Crashes: Trading Volume, Past Returns and Conditional Skewness in Stock Prices. **AU** Chen, Joseph; Hong, Harrison; Stein, Jeremy C.

Steiner, Roberto

TI Credit Stagnation in Latin America. **AU** Barajas, Adolfo; Steiner, Roberto.

Stephan, A.

TI A Political Economy Model of Infrastructure Allocation: An Empirical Assessment. **AU** Cadot, Olivier; Roller, O.; Stephan, A.

Stern, Scott

PD September 2000. **TI** The Determinants of National Innovative Capacity. **AU** Stern, Scott; Porter, Michael E.; Furman, Jeffrey L. **AA** Stern: MIT and NBER. Porter: Harvard University. Furman: MIT. **SR** National Bureau of Economic Research Working Paper: 7876; 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** O32, O34, O38, O57. **KW** Innovation. Patents. Research and Development.

AB Motivated by differences in research and development (R&D) productivity across advanced economies, this paper presents an empirical examination of the determinants of country-level production of international patents. We introduce a novel framework based on the concept of national innovative capacity. National innovative capacity is the ability of a country to produce and commercialize a flow of innovative technology over the long term. National innovative capacity depends on the strength of a nation's common innovation infrastructure (cross-cutting factors which contribute broadly to innovativeness throughout the economy), the environment for

innovation in its leading industrial clusters, and the strength of linkages between these two areas. We use this framework to guide our empirical exploration into the determinants of country-level R&D productivity, specifically examining the relationship between international patenting (patenting by foreign countries in the United States) and variables associated with the national innovative capacity framework.

TI The Impact of Information Technology on Emergency Health Care Outcomes. **AU** Athey, Susan; Stern, Scott.

TI Measuring the "Ideas" Production Function: Evidence from International Patent Output. **AU** Porter, Michael E.; Stern, Scott.

Sterner, Thomas

TI Implementation of Policy Instruments for Chlorinated Solvents: A Comparison of Design Standards, Bans, and Taxes to Phase Out Trichloroethylene. **AU** Slunge, Daniel; Sterner, Thomas.

Stevens, David

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

Stoughton, Neal M.

PD December 1999. **TI** Optimal Capital Allocation Using RAROC and EVA. **AU** Stoughton, Neal M.; Zechner, Josef. **AA** Stoughton: University of California. Zechner: Universitat Wien. **SR** CEPR Discussion Paper: 2344; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** D81, G21, G28, G31, G32. **KW** Capital Allocation. Banking. Financial Institutions. Risk-Adjusted Return. Capital Returns.

AB This paper analyzes financial institutions' capital allocation decisions when their required equity capital depends on the risk of their chosen projects. We discuss the relevance of strict position limits against discretionary trading through the use of an optimal compensation function. We show that (under full information) the first- best investment decision can be delegated through an economic value-added (EVA) compensation contract and solve for the optimal capital allocation rules. We demonstrate how the concept of incremental Value at Risk must be used to deal with the multidivisional firm. The results are extended to deal with asymmetric information on the part of the trading division(s). The analysis defines precisely the notion of risk-adjusted return on capital (RAROC) and how it can be used as a performance measure.

Strobl, Gunter

TI Bank Capital Regulation with Random Audits. **AU** Bhattacharya, Sudipto; Plank, Manfred; Strobl, Gunter; Zechner, Josef.

Stromberg, Per

TI Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts. **AU** Kaplan, Steven N.; Stromberg, Per.

Strulik, Holger

TI Growth and Convergence in a Two-Region Model: The

Hypothetical Case of Korean Unification. **AU** Funke, Michael; Strulik, Holger.

Strumpf, Koleman S.

TI A Historical Test of the Tiebout Hypothesis: Local Heterogeneity from 1850 to 1990. **AU** Rhode, Paul W.; Strumpf, Koleman S.

Sturm, Daniel

PD January 2001. **TI** Product Standards, Trade Disputes and Protectionism. **AA** CEP and University of Munich. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 486; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 36. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F13, Q28. **KW** Product Standards. Trade Policy. Environmental Policy. Political Economy.

AB Trade disputes over national product standards are a growing source of tension in the international trading system. The usual pattern is that a country introduces a new product standard for all sales of a good in its local market, which is justified as necessary for consumer or environmental protection. Importers into the local market, however, challenge the standard as a "disguised barrier to trade" or "green protectionism". This paper develops a two-country political economy model to explain such disputes. It is shown how the political process can lead to a "political failure," which takes the form of either too many or too few product standards, and disagreement between politicians in different countries over the optimal policy. The model is also used to evaluate whether two common proposals to settle or avoid such disputes, mutual recognition of standards and harmonization, can improve the political process.

Stutzle, Thomas

TI Iterated Local Search. **AU** Lourenco, Helena R.; Martin, Olivier C.; Stutzle, Thomas.

Suarez, Maria Jose

TI Female Labor Supply in Spain: The Importance of Behavioral Assumptions and Unobserved Heterogeneity Specification. **AU** Garcia, Jaume; Suarez, Maria Jose.

Svejnar, Jan

PD December 1999. **TI** Returns to Human Capital Under the Communist Wage Grid and During the Transition to a Market Economy. **AU** Svejnar, Jan; Terrell, Katherine; Munich, Daniel. **AA** Svejnar: University of Michigan and CERGE-EI, Prague. Terrell: University of Michigan. Munich: CERGE-EI. **SR** CEPR Discussion Paper: 2332; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 64. **PR** 5 pounds, \$8 or 8 euros. **JE** J24, J31, O15, P23. **KW** Human Capital. Transition Economy. Communism. Wages. Labor.

AB Under communism, workers had their wages set according to a centrally-determined wage grid. In this paper we use new micro data on men to estimate returns to human capital under the communist wage grid and during the transition to a market economy. We use data from the Czech Republic because it is a leading transition economy in which the

communist grid remained intact until the very end of the communist regime. We demonstrate that for decades the communist wage grid maintained an extremely low rate of return on education, but that the return increased dramatically and equally in all ownership categories of firms during the transition. Our estimates also indicate that men's wage-experience profile was concave in both regimes and on average it did not change from the communist to the transition period. However, the de novo private firms display a more concave profile than state owned enterprises (SOEs) and public administration. Contrary to earlier studies, we show that men's inter-industry wage structure changed substantially between 1989 and 1996.

Svensson, Lars E. O.

PD September 2000. **TI** The Zero Bound in an Open Economy: A Foolproof Way of Escaping from a Liquidity Trap. **AA** Princeton University and CEPR. **SR** CEPR Discussion Paper: 2566; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E52, F31, F33, F41. **KW** Deflation. Liquidity Trap. Interest Rates. Exchange Rates. Inflation Targeting.

AB The paper examines the transmission mechanism of monetary policy in an open economy with and without a binding zero bound on nominal interest rates. In particular, a foolproof way of escaping from a liquidity trap is suggested, consisting of a price-level target path, a devaluation of the currency, and a temporary exchange rate peg, which is later abandoned in favor of price-level or inflation targeting when the price-level target has been reached. This will jump-start the economy and escape deflation by a real depreciation of the domestic currency, a lower long real interest rate, and increased inflation expectations. The abandonment of the exchange-rate peg and the shift to price-level or inflation targeting will avoid the risk of overheating. Some conclusions for Japan are included.

PD October 2000. **TI** Indicator Variables for Optimal Policy. **AU** Svensson, Lars E. O.; Woodford, Michael. **AA** Svensson: Stockholm University, NBER, and CEPR. Woodford: Princeton University and NBER. **SR** National Bureau of Economic Research Working Paper: 7953; 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** E37, E47, E52, E58. **KW** Indicator Models. Potential Output.

AB The optimal weights on indicators in models with partial information about the state of the economy and forward-looking variables are derived and interpreted, both for equilibria under discretion and under commitment. An example of optimal monetary policy with a partially observable potential output and a forward-looking indicator is examined. The optimal response to the optimal estimate of potential output displays certainty-equivalence, whereas the optimal response to the imperfect observation of output depend on the noise in this observation.

PD October 2000. **TI** The Zero Bound in an Open Economy: A Foolproof Way of Escaping from a Liquidity Trap. **AA** Stockholm University, NBER, and CEPR. **SR** National Bureau of Economic Research Working Paper:

7957; 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** E52, F31, F33, F41. **KW** Liquidity Trap. Zero Bound. Devaluation.

AB See the abstract for Svensson, Lars E. O. September 2000, "The Zero Bound in an Open Economy: A Foolproof Way of Escaping from a Liquidity Trap". CEPR Discussion Paper: 2566; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org.

PD December 1999. **TI** How Should Monetary Policy Be Conducted in an Era of Price Stability? **AA** Princeton University, CEPR, and NBER. **SR** CEPR Discussion Paper: 2342; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 60. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E42, E52, E58. **KW** Credibility. Inflation Targeting. Liquidity Trap. Price-Level Targeting. Monetary Policy.

AB The paper discusses several issues related to how monetary policy should be conducted in an era of price stability. Low inflation (with base drift in the price level) and price-level stability (without such base drift) are compared, and a suitable loss function (corresponding to flexible inflation targeting) is discussed, including the index and level for the inflation target. Three ways of maintaining price stability are examined, namely: (1) a commitment to a simple instrument rule; (2) "forecast targeting;" and (3) monetary targeting. Both (1) and (3) are found to be inferior to forecast targeting. The benefits of credibility (private inflation expectations coinciding with the inflation target) are discussed. Credibility improves the tradeoff between inflation variability, output-gap variability, and instrument variability, and makes it easier for the central bank to meet its inflation target. The threat of deflation and a liquidity trap is examined. Transparent inflation targeting and a contingency plan with emergency measures, including a coordinated fiscal and monetary expansion, are likely to avoid a liquidity trap, but also contribute to escaping from one if already trapped.

Swagel, Phillip

TI Sources of Inflation in Developing Countries. **AU** Loungani, Prakash; Swagel, Phillip.

Symeonidis, George

PD November 1999. **TI** In Which Industries Is Collusion More Likely? **AA** University of Essex. **SR** CEPR Discussion Paper: 2301; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** D43, L11, L13, L60, M37. **KW** Cartels. Collusion. United Kingdom Industries. Price Fixing.

AB This paper provides an analysis of factors facilitating or hindering collusion using data on the occurrence of price-fixing across UK manufacturing industries in the 1950s. The econometric results suggest that collusion is more likely the higher the degree of capital intensity and less likely in advertising-intensive than in low- advertising industries, while the relationship between market growth and the likelihood of collusion is non-monotonic. Less clear results are obtained with respect to research and development intensity and

concentration.

PD December 1999. **TI** Price Competition and Market Structure: The Impact of Cartel Policy on Concentration in the UK. **AA** University of Essex. **SR** CEPR Discussion Paper: 2308; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** L11, L60. **KW** Price Competition. Market Structure. Sunk Costs. Cartels. United Kingdom Industries.

AB This paper examines the impact of firms' conduct on market structure. It studies the evolution of concentration in UK manufacturing following the abolition of cartels, using a theoretical framework based on Sutton's theory of market structure and a panel data set of four-digit industries over 1958-1977. The econometric results suggest that the intensity of price competition has a positive impact on concentration in exogenous sunk cost industries as well as in advertising-intensive and research and development (R&D)-intensive industries. The concentration-market size relationship, while negative in exogenous sunk cost industries, breaks down in industries with high advertising or R&D intensity.

Symons, James

TI Education and Italian Regional Development. **AU** Di Liberto, Adriana; Symons, James.

TI Minimum Wages and Employment. **AU** Keil, Manfred; Robertson, Donald; Symons, James.

Talluri, Kalyan

PD September 2000. **TI** A Discrete Choice Model of Yield Management. **AU** Talluri, Kalyan; van Ryzin, Garrett. **AA** Talluri: Universitat Pompeu Fabra. van Ryzin: University of Columbia. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 533; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 20. **PR** Papers available for free on the web; no hardcopies. **JE** C13, C14. **KW** Yield Management. Revenue Management. Discrete Choice. Airlines. Dynamic Programming.

AB Customer choice behavior, such as "buy-up" and "buy-down", is an important phenomenon in a wide range of industries. Yet there are few models or methodologies available to exploit this phenomenon within yield management systems. We make some progress on filling this void. Specifically, we develop a model of yield management in which the buyers' behavior is modeled explicitly using a multi-nomial logit model of demand. The control problem is to decide which subset of fare classes to offer at each point in time. We formulate a dynamic program to determine the optimal control policy and show that it reduces to a dynamic nested allocation policy.

Tan, Ling Hui

TI Quantity Controls, License Transferability, and the Level of Investment. **AU** Krishna, Kala; Tan, Ling Hui; Ranjan, Ram.

Tanner, Evan

PD January 2002. **TI** Fiscal Sustainability and Monetary versus Fiscal Dominance: Evidence from Brazil, 1991-2000. **AU** Tanner, Evan; Ramos, Alberto M. **AA** International

Monetary Fund. **SR** International Monetary Fund Working Paper: WP/02/05; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** E62, H60, O54. **KW** Intertemporal Solvency. Monetary Dominance. Fiscal Dominance. Vector Autoregression. Brazil.

AB Under a monetary dominant (MD) regime, the primary surplus adjusts to limit debt growth, permitting monetary policy to be conducted independently of fiscal financing requirements. In Brazil, some evidence favors an MD regime for 1995-97, but not for the decade of the 1990s as a whole. While fiscal adjustments of 1999 yielded a primary surplus of about 3 percent of gross domestic product, consistent with solvency, a credible MD regime would require further adjustments of the primary surplus if debt increases, growth falls, or interest rates rise.

PD January 2002. **TI** Exchange Market Pressure, Currency Crises, and Monetary Policy: Additional Evidence from Emerging Markets. **AA** IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/14; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 53. **PR** not available. **JE** E43, E51, E52, F31, F41. **KW** Currency Crises. Monetary Policy. Exchange Market Pressure. Credit. Exchange Rates.

AB This paper extends previous work by examining the relationship between monetary policy and exchange market pressure (EMP) in 32 emerging market countries. EMP is a gauge of the severity of crises, and part of this paper specifically analyzes crisis periods. Two variables gauge the stance of monetary policy: the growth of central bank domestic credit and the interest differential (domestic versus U.S. dollar). Evidence suggests that monetary policy plays an important role in currency crises. And, in most countries the shocks to monetary policy affect EMP in the direction predicted by traditional approaches: tighter money reduces EMP.

Taylor, M. Scott

TI Free Trade and Global Warming: A Trade Theory View of the Kyoto Protocol. **AU** Copeland, Brian R.; Taylor, M. Scott.

Taylor, Mark P.

TI International Capital Crunches: The Time-Varying Role of International Asymmetries. **AU** Mody, Ashoka; Taylor, Mark P.

Taylor, Michael R.

PD May 2001. **TI** Redesigning Food Safety: Using Risk Analysis to Build a Better Food Safety System. **AU** Taylor, Michael R.; Hoffmann, Sandra A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/24; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 10. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** D81, I12, I18, L66, Q18. **KW** Food Safety. Risk Analysis.

AB We consider issues in the U.S. food safety system, and call for a greater role in using risk analysis to improve the system.

Taylor, Michael W.

TI Regulatory and Supervisory Independence and Financial Stability. AU Quintyn, Marc; Taylor, Michael W.

Tekin, Erdal

TI The Demand for Medical Care in Urban China. AU Mocan, H. Naci; Tekin, Erdal; Zax, Jeffrey S.

Terrell, Katherine

TI Returns to Human Capital Under the Communist Wage Grid and During the Transition to a Market Economy. AU Svejnar, Jan; Terrell, Katherine; Munich, Daniel.

Thaler, Richard H.

TI Behavioral Economics. AU Mullainathan, Sendhil; Thaler, Richard H.

Thisse, Jacques-Francois

TI Local Labor Markets, Job Matching and Urban Location. AU Brueckner, Jan; Thisse, Jacques-Francois; Zenou, Yves.

Timmermann, Allan

TI Optimal Forecast Combinations Under General Loss Functions and Forecast Error Distributions. AU Elliott, Graham; Timmermann, Allan.

Tobias, Justin L.

TI Simple Estimators for Treatment Parameters in a Latent Variable Framework with an Application to Estimating the Returns to Schooling. AU Heckman, James; Tobias, Justin L.; Vytlacil, Edward.

Toman, Michael A.

TI Can Carbon Sinks Be Operational? RFF Workshop Proceedings. AU Sedjo, Roger A.; Toman, Michael A.

TI The Economics of Sustainability: A Review of Journal Articles. AU Pezzey, John C. V.; Toman, Michael A.

Tombak, Mihkel

TI Strategic Choice of Partners: Research Joint Ventures and Market Power. AU Roller, Lars-Hendrik; Siebert, Ralph; Tombak, Mihkel.

Tong, Jian

PD July 2000. TI Quality Competition, Market Structure and Endogenous Growth. AA LSE and STICERD. SR London School of Economics and Political Science, STICERD Economics of Industry Group Discussion Paper: EI/25; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 28. PR no charge. JE L13, L16, O31, O41. KW Endogenous Growth. Quality Competition. Entry Barriers. Credit Constraints. Innovation Incentives.

AB This paper studies the role of quality competition in endogenous growth, and institutional factors that can affect growth through affecting quality competition. The research and development (R&D)-based growth literature attributes the incentives for innovations to monopolist market structure, and regards the driving force of growth being the "rent-pull." This paper presents a "competition-push" theory of growth by

considering an environment where firms can coexist and compete in quality within the same markets. Quality competition takes the form of vertical product differentiation or cost-reducing process innovation, which requires endogenous fixed R&D costs. Due to the nonrival and excludable features of "quality," and the consequent nonconvexity, market concentration naturally occurs in a manner such that R&D intensity and market structure are determined simultaneously in equilibrium. The main conclusions are: quality competition suffices to provide incentives for innovation at the industry level, and through knowledge spillovers it also drives aggregate technical progress; institutional restriction on free entry into quality competition may be desirable to some degree, but monopolization is usually not optimal; a credit constraint which limits quality competition is detrimental to growth.

PD November 2000. TI Submarkets, Shakeouts and Industry Life-Cycle. AA LSE and STICERD. SR London School of Economics and Political Science, STICERD Economics of Industry Group Discussion Paper: EI/26; STICERD, Room Q280, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom. Website: sticerd.lse.ac.uk. PG 26. PR no charge. JE D43, L13. KW Industry Life-Cycle. Market Structure. Shakeouts. Quality Competition.

AB Some recent empirical findings suggest that there are intrinsic links between the statistical regularities regarding cohort survival patterns, the persistence of firm turnover, and shakeout during an industry life-cycle. This paper presents a theoretical model that explains these regularities and the links between them. The analysis begins by treating the market as comprising a number of strategically independent submarkets, so as to separate the strategic interaction effect at the submarket level and the independence effects that operate across these independent submarkets at the aggregate level. The analysis reveals that within each submarket a "selection process" in quality competition induces market concentration over time, and this leads to a certain shakeout pattern at the disaggregate level. The study also finds that the dynamics of the emergence of submarkets in a conventionally defined industry plays a crucial role in shaping the aggregate pattern of the industry life-cycle.

Tournas, Yanni

TI In-House Competition, Organizational Slack and the Business Cycle. AU Kerschbamer, Rudolf; Tournas, Yanni.

TI Idiosyncratic Investments, Outside Opportunities and the Boundaries of the Firm. AU Kerschbamer, Rudolf; Maderner, Nina; Tournas, Yanni.

Trefler, Daniel

TI Increasing Returns and All That: A View from Trade. AU Antweiler, Werner; Trefler, Daniel.

Trindade, Vitor

TI Information and Globalization: Wage Co-Movements, Labor Demand Elasticity, and Conventional Trade Liberalization. AU Rauch, James E.; Trindade, Vitor.

Tudela, Maria Mercedes

PD January 2001. TI Explaining Currency Crises: A Duration Model Approach. AA CEP and London School of Economics. SR London School of Economics, Centre for

Economic Performance Discussion Paper: 487; Publications Unit, Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 57. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE C41, E44, F31. KW Currency Crises. Speculative Attacks. Exchange Rates. Hazard Functions. Duration Models.

AB This paper is an empirical investigation into the duration of exchange rate episodes characterized by the absence of speculative attacks. We estimate a duration model for Organization for Economic Cooperation and Development (OECD) countries during the 1970-1997 period. Specifically, we use semiparametric methods to estimate a model with unrestricted base-line hazards. The use of duration models allows us to account for duration dependence among the determinants of the likelihood of speculative attacks. We can test if the length of the time already spent on the peg is a determinant of the probability of exit into a currency crisis state. We find factors which predict a decrease in the probability of exit into a currency crisis state, as well as factors which contribute positively to the likelihood of an occurrence of a crisis. We also find existence of a highly significant negative duration dependence. The highest probability of exit into a currency crash state is given at the initial of the peg, decreasing afterwards. This suggests the existence of a political cost of realignment that changes over the duration of the spell; growing credibility surrounding an exchange-rate-based stabilization program reduces the probability that the peg will be abandoned.

Tufano, Peter

TI Selling Company Shares to Reluctant Employees: France Telecom's Experience. AU DeGeorge, Francois; Jenter, Dirk; Moel, Alberto; Tufano, Peter.

Tyran, Jean-Robert

TI Does Money Illusion Matter? An Experimental Approach. AU Fehr, Ernst; Tyran, Jean-Robert.

Ubeda, Luis

TI A Model of Multiple Equilibria in Geographic Labor Mobility. AU Spilimbergo, Antonio; Ubeda, Luis.

Ubide, Angel

TI Mind the Gap: What is the Best Measure of Slack in the Euro Area? AU Ross, Kevin; Ubide, Angel.

Ueda, Masako

PD November 2000. **TI** Bank versus Venture Capital. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 522; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 34. **PR** Papers available for free on the web; no hardcopies. **JE** G21, G24, K11. **KW** Collateral. Intellectual-Property. Venture-Capital.

AB Why do some start-up firms raise funds from banks and others from venture capitalists? To answer this question, I develop a model of start-up financing when intellectual property rights are not well protected. The upside of VC financing is that the VC understands the business better than a bank. The downside, however, is that the VC may steal the idea

and use it himself. The results of the model are consistent with empirical regularities on start-up financing. The model implies that the characteristics of the firms financing from venture capitalists are low-collateral, high-growth and high-profitability. The model also suggests that the tighter protection of intellectual property.

Uhlig, Harald

PD September 2000. **TI** Should We Be Afraid of Friedman's Rule? **AA** Humboldt University and CEPR. **SR** CEPR Discussion Paper: 2548; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** E31, E41, E51, E52. **KW** Baby-Sitting Coop. Cash in Advance. Deflation. Friedman Rule.

AB Should one think of zero nominal interest rates as an undesirable liquidity trap or as the desirable Friedman rule? I use three different frameworks to discuss this issue. First, I restate Cole and Kocherlakota's (1998) analysis of Friedman's rule: short run increases in the money stock -- whether through issuing spending coupons, open market operations or foreign exchange intervention -- change nothing as long as the money stock shrinks in the long run. Second, two simple "Keynesian" models of the inflationary process with a zero lower bound on nominal interest rates imply either that deflationary spirals should be common or that a policy close to the Friedman rule, and thus some deflation, is optimal. Finally, a formal "baby-sitting coop" model implies multiple equilibria, but does not support the injection of liquidity to restore the good equilibrium, in contrast to Krugman (1998).

Urga, G.

PD January 2000. **TI** A Time Varying Parameter Model to Test for Predictability and Integration in Stock Markets of Transition Economies. **AU** Urga, G.; Rockinger, M. **AA** Urga: City University Business School. Rockinger: HEC. **SR** CEPR Discussion Paper: 2346; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** C22, F36, G14, G15, P34. **KW** Eastern Europe. Stock Markets. Predictability. Market Integration. Emerging Markets.

AB This paper introduces a model, based on the Kalman filter framework, which allows for time-varying parameters, latent factors, and a general GARCH (Generalized Autoregressive Conditional Heteroskedasticity) structure for the residuals. With this extension of the Bekaert and Harvey (1997) model it is possible to test if an emerging stock market becomes more efficient over time and more integrated with other already established markets in situations where no macroeconomic conditioning variables are available. We apply this model to the Czech, Polish, Hungarian, and Russian stock markets. We use data at daily frequency running from April 7th, 1994 to July 10th, 1997. A latent factor captures macroeconomic expectations. We give efficiency results for these markets, and also give results on the degree and effects of market integration between these countries and the US, UK, and Germany. We show that for the transition economies under investigation stock returns exhibit significant asymmetric GARCH effects where bad news generates greater volatility. The exception to this rule is Hungary, where good news causes greater volatility.

This leads us to formulate a liquidity hypothesis.

Uribe, Martin

TI The Perils of Taylor Rules. AU Benhabib, Jess.; Schmitt-Grohe, Stephanie; Uribe, Martin.

TI Monetary Policy and Multiple Equilibria. AU Benhabib, Jess.; Schmitt-Grohe, Stephanie; Uribe, Martin.

Valdes, Rodrigo O.

TI Controls on Capital Inflows: Do They Work? AU De Gregorio, Jose; Valdes, Rodrigo O.; Edwards, Sebastian.

Valletti, Tommaso

PD December 1999. TI Location Choice and Price Discrimination in a Duopoly. AA London School of Economics and CEPR. SR CEPR Discussion Paper: 2322; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 44. PR 5 pounds, \$8 or 8 euros. JE D43, L13. KW Firm Location. Price Discrimination. Horizontal Differentiation. Vertical Differentiation. Duopoly.

AB This paper analyzes the problem of price discrimination in a market where consumers have heterogeneous preferences over both a horizontal parameter (brand) and a vertical one (quality). A model with two firms competing over locations and non-linear contracts is analyzed. Discriminatory contracts are first characterized at each location. It is then shown that locations have a big impact on the firms' discriminatory ability, and that equilibrium locations are non-monotonic in consumer types; however, firms never locate too far away from the first and third quartiles.

Vallverdu, Josep

PD November 2000. TI An Attempt to Go Beyond Conventional Financial Accounting Information. AA Universitat Pompeu Fabra. SR Universitat Pompeu Fabra, Economics and Business Working Paper: 515; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. PG 22. PR Papers available for free on the web; no hardcopies. JE J24, J28, M14, M41. KW Social Accounting. Externalities. Social Costs. Human Resources. Social Responsibility.

AB Conventional financial accounting information is slanted in favor of certain economic interests. This paper argues in favor of accounting information capturing and showing relevant aspects of the economic-social situation, and of decision-making based on it allowing for decisions to be taken with economic-social, and not purely economic-weighted, awareness.

van Leeuwen, I.

TI Price Discovery on Foreign Exchange Markets. AU de Jong, Franck; van Leeuwen, I.; Schotman, Peter C.; Mahieu, Ronald J.

Van Nieuwerburgh, Stijn

TI A Fiscal Theory of the Currency Risk Premium and of Sterilized Intervention. AU Kumhof, Michael; Van Nieuwerburgh, Stijn.

van Ours, Jan C.

TI Gender Wage Differentials in a Competitive Labor Market: The Household Interaction Effect. AU Francois, Patrick; van Ours, Jan C.

Van Reenen, John

TI Technological Innovation and Economic Performance in the United Kingdom. AU Nickell, Stephen; Van Reenen, John.

TI Measuring the Cost Effectiveness of an R&D Tax Credit for the UK. AU Griffith, Rachel; Redding, Stephen; Van Reenen, John.

van Ryzin, Garrett

TI A Discrete Choice Model of Yield Management. AU Talluri, Kalyan; van Ryzin, Garrett.

Vandenbussche, Hylke

TI Undertakings and Antidumping Jumping FDI in Europe. AU Veugelers, Reinhilde; Vandenbussche, Hylke; Belderbos, Rene.

Vassilatos, Vanghelis

TI Is Tax Policy Coordination Necessary? AU Kollintzas, Tryphon; Philippopoulos, Apostolis; Vassilatos, Vanghelis.

Venables, Anthony J.

TI Economic Geography and International Inequality. AU Redding, Stephen; Venables, Anthony J.

TI Comparative Advantage and Economic Geography: Estimating the Location of Production in the EU. AU Midelfart Knarvik, Karen-Helene; Overman, Henry G.; Venables, Anthony J.

TI Economic Geography and International Inequality. AU Redding, Stephen; Venables, Anthony J.

TI The Economic Geography of Trade, Production, and Income: A Survey of Empirics. AU Overman, Henry G.; Redding, Stephen; Venables, Anthony J.

PD December 1999. TI Geographical Disadvantage: A Heckscher-Ohlin-Von Thunen Model of International Specialization. AU Venables, Anthony J.; Limao, N. AA Venables: London School of Economics. Limao: Columbia University. SR CEPR Discussion Paper: 2305; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 40. PR 5 pounds, \$8 or 8 euros. JE F11, F12. KW Trade. Specialization. Transport Costs.

AB We analyze the trade and production patterns of countries located at varying distances from an economic center. Exports and imports of final and intermediate goods bear transport costs that increase with distance. We show how production and trade depend both on factor endowments and factor intensities, and on distance and the transport intensities of different goods. Countries divide into zones with different trade patterns, some export oriented and others import substituting. We study the implications of distance for factor prices and real incomes, the effects of changes in transport costs, and the locational choice of new activities.

Venti, Steven F.

PD September 2000. **TI** Aging and Housing Equity. **AU** Venti, Steven F.; Wise, David A. **AA** Venti: Dartmouth College and NBER. Wise: NBER and Harvard University. **SR** National Bureau of Economic Research Working Paper: 7882; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 23. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D12, I31, J14, J26. **KW** Aging. Housing Equity. Retirement.

AB Housing equity is the principle asset of a large fraction of older Americans. Indeed many retired persons have essentially no financial assets other than Social Security, and, for some, employer-provided pension benefits. Yet we find that housing wealth is typically not used to support non-housing consumption during retirement. Based on data from the Survey of Income and Program Participation, and the Asset and Health Dynamics Among the Oldest Old, we consider the change in home equity as families age. The results are based in large part on families aged 70 and older. We find that, barring changes in household structure, most elderly families are unlikely to move. Home equity is typically not liquidated to support general non-housing consumption needs. The implication is that when considering whether families have saved enough to maintain their pre-retirement standard of living after retirement, housing equity should not be counted on to support general non-housing consumption.

Ventura, Jaume

TI Trade Integration and Risk Sharing. **AU** Kraay, Aart; Ventura, Jaume.

TI Current Accounts in the Long and Short Run. **AU** Kraay, Aart; Ventura, Jaume.

Vera-Martin, Mercedes

TI Factor Endowments and Production in European Regions. **AU** Redding, Stephen; Vera-Martin, Mercedes.

Verner, D.

TI Will the Euro Create a Bonanza for Africa? **AU** Cohen, Daniel; Kristensen, N.; Verner, D.

Vettas, Nikolaos

TI Foreign Direct Investment and Exports with Growing Demand. **AU** Rob, Rafael; Vettas, Nikolaos.

Veugelers, Reinhilde

TI Endogeneizing Know-How Flows through the Nature of R&D Investments. **AU** Cassiman, Bruno; Perez-Castrillo, David; Veugelers, Reinhilde.

PD December 1999. **TI** Undertakings and Antidumping Jumping FDI in Europe. **AU** Veugelers, Reinhilde; Vandebussche, Hylke; Belderbos, Rene. **AA** Veugelers and Vandebussche: Katholieke Universiteit Leuven. Belderbos: Maastricht University. **SR** CEPR Discussion Paper: 2320; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** F13, F23, L13. **KW** Trade Policy. Foreign Direct Investment. Antidumping.

AB This paper studies the effects of European Union (EU) antidumping policy when foreign firms have the possibility to

"jump" antidumping measures by engaging in foreign direct investment (FDI) in the EU. Using a multi-stage framework, we study the EU administration's choice between an antidumping duty and a price-undertaking, taking into account the effect of these measures on the location decision of the foreign firm and the subsequent price competition between local and foreign firms. Our findings suggest that the EU administration, acting purely in the EU industry's interest, prefers a price-undertaking to a duty, if the latter leads to "duty jumping" FDI. FDI toughens price competition in the EU market and leaves local firms worse off. Antidumping jumping FDI will only occur under certain conditions, which we discuss. If foreign firms are able to act strategically taking into account EU antidumping policy, the presence of antidumping law can also discourage FDI that would have taken place under free trade conditions.

PD December 1999. **TI** R&D Cooperation and Spillovers: Some Empirical Evidence. **AU** Veugelers, Reinhilde; Cassiman, Bruno. **AA** Veugelers: Katholieke Universiteit Leuven. Cassiman: Universitat Pompeu Fabra. **SR** CEPR Discussion Paper: 2330; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** D21, L13, O31, O32. **KW** Research and Development. Cooperation. Spillovers. Appropriability. Innovation.

AB Our results on the relationship between research and development (R&D) spillovers and cooperation in R&D suggest that it is necessary to distinguish different aspects of external information flows. We construct firm-specific measures of incoming spillovers and appropriability from survey data on Belgian manufacturing firms. Incoming spillovers measure the importance of publicly available information for the innovation process of the firm. Appropriability is defined as the effectiveness of several protection mechanisms for appropriating the benefits of successful innovations. The decision to cooperate with research institutes is mainly affected by the level of incoming spillovers, while appropriability plays an important role for cooperating with suppliers or customers. Furthermore, we analyze what determines the levels of incoming spillovers and appropriability, including a possible simultaneous relation with cooperative agreements in R&D.

PD December 1999. **TI** Importance of International Linkages for Local Know-How Flows: Some Econometric Evidence from Belgium. **AU** Veugelers, Reinhilde; Cassiman, Bruno. **AA** Veugelers: Katholieke Universiteit Leuven. Cassiman: Universitat Pompeu Fabra. **SR** CEPR Discussion Paper: 2337; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 28. **PR** 5 pounds, \$8 or 8 euros. **JE** D21, F23, L16, O32. **KW** Technology Transfers. Multinational Firms. Innovation. International Technology.

AB External knowledge is an important input for the innovation process of firms. Increasingly, this knowledge is likely to originate from outside of their national borders. This explains the preoccupation of policymakers with stimulating local technology transfers coming from international firms. We find that firms that have access to the international technology market are more likely to transfer technology to the local economy. In doing so, we qualify the traditional assertion that multinational firms are more likely to transfer technology to the local economy. Once controlled for the superior access to the

international technology market that multinationals enjoy, we find that these firms are not more likely to transfer technology to the local economy compared to exporting or local firms that have access to the international technology market. In summary, the main result of this paper is that it is not so much the international character of the firms, but rather their access to the international technology market that is important for generating external knowledge transfers to the local economy.

Vielle, Marc

TI Is There a Rationale for Rebating Environmental Levies?
AU Bernard, Alain L.; Fischer, Carolyn; Vielle, Marc.

von Hagen, Jurgen

TI Monetary Union and Fiscal Federalism. **AU** Kletzer, Kenneth M.; von Hagen, Jurgen.

Voth, Hans-Joachim

PD November 2000. **TI** With a Bang, Not a Whimper: Pricking Germany's "Stock Market Bubble" in 1927 and the Slide Into Depression. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 516; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 41. **PR** Papers available for free on the web; no hardcopies. **JE** E31, E43, E44, N14, N24. **KW** Stock Market. Foreign Lending. Fixed Exchange Rates. Asset Prices. Bubbles. Germany. Monetary Policy.

AB In May 1927, the German central bank intervened indirectly to reduce lending to equity investors. The crash that followed ended the only stock market boom during Germany's relative stabilization 1924-28. This paper examines the factors that lead to the intervention as well as its consequences. We argue that genuine concern about the "exuberant" level of the stock market, in addition to worries about an inflow of foreign funds, tipped the scales in favor of intervention. The evidence strongly suggests that the German central bank under Hjalmar Schacht was wrong to be concerned about stock prices—there was no bubble. Also, the Reichsbank was mistaken in its belief that a fall in the market would reduce the importance of short-term foreign borrowing, and help to ease conditions in the money market. The misguided intervention had important real effects. Investment suffered, helping to tip Germany into depression.

PD March 2001. **TI** Inflation, Political Instability and Stockmarket Volatility in Interwar Germany. **AA** Universitat Pompeu Fabra. **SR** Universitat Pompeu Fabra, Economics and Business Working Paper: 535; Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain. Website: www.econ.upf.es. **PG** 19. **PR** Papers available for free on the web; no hardcopies. **JE** G14, G15, E31, E44, N14, N24. **KW** Inflation. Stock Returns. Asset Return Volatility. Political Uncertainty. Interwar Germany.

AB What determined the volatility of asset prices in Germany between the wars? This paper argues that the influence of political factors has been overstated. The majority of events increasing political uncertainty had little or no effect on the value of German assets and the volatility of returns on them. Instead, it was inflation (and the fear of it) that is largely responsible for most of the variability in asset returns.

PD February 2002. **TI** Why Was Stock Market Volatility So High During the Great Depression? Evidence from 10 Countries During the Interwar Period. **AA** MIT and Universitat Pompeu Fabra. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/09; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 35. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** G12, G14, N22, N24, P16. **KW** Stock Price Volatility. Political Uncertainty. Worker Militancy. Great Depression.

AB The extreme levels of stock price volatility found during the Great Depression have often been attributed to political uncertainty. This paper performs an explicit test of the Merton/Schwert hypothesis that doubts about the survival of the capitalist system were partly responsible. It does so by using a panel data set on political unrest, demonstrations, and other indicators of instability in a set of 10 developed countries during the interwar period. Fear of worker militancy and a possible revolution can explain a substantial part of the increase in stock market volatility during the Great Depression.

Vytlacil, Edward

TI Simple Estimators for Treatment Parameters in a Latent Variable Framework with an Application to Estimating the Returns to Schooling. **AU** Heckman, James; Tobias, Justin L.; Vytlacil, Edward.

Wagner, Helmut

PD November 2001. **TI** Implications of Globalization for Monetary Policy. **AA** University of Hagen. **SR** International Monetary Fund Working Paper: WP/01/184; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 48. **PR** not available. **JE** E50, F00, F41, F42. **KW** Globalization. Monetary Policy.

AB This paper argues that the implications of globalization for monetary policy come mainly through two channels: On the one hand, the many structural changes that are associated with the globalization process cause an increase in the uncertainty surrounding monetary policy. This includes an increase in uncertainty about how to interpret macroeconomic data/indicators and about the monetary transmission mechanism. On the other hand, by strengthening the process of global economic integration, globalization increases international competition, thereby forcing market players to make structural adjustments or reforms that change the conditions or constraints under which monetary policy is implemented.

Waldfoegel, Joel

TI Who Benefits Whom in Daily Newspaper Markets?
AU George, Lisa; Waldfoegel, Joel.

Wallner, Klaus

TI Club Enlargement: Early Versus Late Admittance.
AU Burkart, Mike; Wallner, Klaus.

Walsh, Randy

TI Using Locational Equilibrium Models to Evaluate Housing Price Indexes. **AU** Sieg, Holger; Smith, V. Kerry; Banzhaf, Spencer; Walsh, Randy.

Wang, Ping

PD January 2002. **TI** Activation of a Modern Industry. **AU** Wang, Ping; Xie, Danyang. **AA** Wang: Vanderbilt University. Xie: IMF. **SR** International Monetary Fund Policy Working Paper: WP/02/15; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 16. **PR** not available. **JE** D24, D31, D33, O14, O15. **KW** Industrial Transformation. Spillovers. Subsistence.

AB This paper constructs an integrated framework to disentangle the underlying economic mechanism of industrial transformation. We consider three essential elements for the analysis: skill requirements, industry-wide spillovers, and degrees of consumption subsistence. We find that human and nonhuman resources, production factor matching, and industrial coordination are all important for activating a modern industry. In the process of industrial transformation, job destruction may exceed job creation, and income distribution may get worse immediately following the activation of a modern industry. An array of policy prescriptions for advancing a poor country is provided.

Wang, Qing

TI Fiscal Expenditure Policy and Non-Oil Economic Growth: Evidence from GCC Countries. **AU** Fasano, Ugo; Wang, Qing.

PD December 2001. **TI** Import-Reducing Effect of Trade Barriers: A Cross-Country Investigation. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/216; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 53. **PR** not available. **JE** C51, F12, F13, F14. **KW** Trade Barriers. Tariffs. Imports.

AB A comprehensive empirical investigation is carried out to ascertain the import-reducing effect of trade protection barriers. We first present a statistical summary of the status of global trade protection. Then, based on a monopolistic competition trade model and 1994 cross-country data on trade barriers, trade flows, and production, we estimate the import-reducing effect of trade barriers including both tariffs and non-tariff barriers (NTBs). We use disaggregated cross-country, cross-industry data on manufactured goods and, unlike previous studies, our sample covers a broad range of countries -- more than 70 in total -- including countries from the most developed ones like those in the Group of Seven to the least developed one, Bangladesh. We specify an empirical model that captures the stylized facts well and helps generate sensible estimates. Our econometric framework is designed to control for the simultaneous determination of trade flows, trade barriers, and production. We find that both tariffs and NTBs are quite significant in restricting imports.

Warnock, Francis E.

TI A Simple Measure of the Intensity of Capital Controls. **AU** Edison, Hali J.; Warnock, Francis E.

Watson, Joel

TI Entrepreneurship in International Trade. **AU** Rauch, James E.; Watson, Joel.

TI The Law and Economics of Costly Contracting. **AU** Schwartz, Alan; Watson, Joel.

PD January 2002. **TI** Contract, Mechanism Design, and Technological Detail. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2002/04; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. **PG** 32. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C72, D74, K12. **KW** Renegotiation. Institutions. Contracts. Durability. Trading Opportunity. Reversible Decisions.

AB This paper develops a theoretical framework for studying contract and enforcement in setting of complete, but unverifiable, information. The main point of the paper is that the consideration of renegotiation necessitates formal examination of other technological constraints, especially those having to do with the timing and nature of inalienable productive decisions. The main technical contributions include (a) results that characterize the sets of implementable state-contingent payoffs under various assumptions about renegotiation opportunities, and (b) a result establishing conditions under which, when trading opportunities are durable and trade decisions are reversible, stationary contracts are optimal. The analysis refutes the validity of the "mechanism design with ex post renegotiation" program, it demonstrates the validity of other mechanism design models in dynamic environments, and it highlights the need for a more structured game-theoretic framework.

TI The Renegotiation-Proofness Principle and Costly Renegotiation. **AU** Brennan, Jim; Watson, Joel.

Weber, Shlomo

TI The Art of Making Everybody Happy: How to Prevent a Secession. **AU** Le Breton, Michel; Weber, Shlomo.

TI Regional Disparities and Transfer Policies in Russia: Theory and Evidence. **AU** Dabla-Norris, Era; Weber, Shlomo.

Wei, Shang-Jin

TI Limiting Currency Volatility to Stimulate Goods Market Integration: A Price-Based Approach. **AU** Parsley, David; Wei, Shang-Jin.

Wernstedt, Kris

TI Gauging the Vulnerability of Local Water Utilities to Extreme Weather Events. **AU** Hersh, Robert; Wernstedt, Kris.

PD November 2001. **TI** When ENSO Reigns, it Pours: Climate Forecasts in Flood Planning. **AU** Wernstedt, Kris; Hersh, Robert. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/56; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 24. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** Q25. **KW** Flooding. Climate Forecasts. ENSO. Water Management.

AB Recent scientific and technical advances have increased the potential use of long-term seasonal climate forecasts for improving water resource management. This paper examines the role that forecasts, in particular those based on the El Niño-Southern Oscillation (ENSO) cycle, can play in flood planning in the Pacific Northwest. While strong evidence of an

association between ENSO signals and flooding in the region exists, this association is open to more than one interpretation depending on: a) the metric used to test the strength of the association; b) the definition of critical flood events; c) site-specific features of watersheds; and d) the characteristics of flood management institutions. A better understanding and appreciation of such ambiguities, both institutional and statistical, is needed to facilitate the use of climate forecast information for flood planning and response.

PD January 2002. **TI** Environmental Management in the Russian Federation: A Next Generation Enigma. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 02/04; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 26. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** L31, P29, P31, Q20. **KW** Russia. Environmental Management. Water Quality. Siberia. Transition Countries.

AB Environmental managers in Russia face severe problems, both from Soviet-era and continuing environmental degradation, and due to the weakness of current institutions with responsibilities for environmental protection. This paper draws on surveys, a case study of water pollution, and workshops on Russian environmental decisionmaking to explore prospects for environmental improvements. Using concepts from the regulatory reform literature on next-generation environmental policies, it focuses on the use of market incentives, the construction of a civil society, and community involvement, and emphasizes that Russian non-governmental organizations may have a particularly important role to play in improving environmental management. Solidifying their legal base, coalition-building skills, and capability to conduct interdependent, pragmatic policy analyses would enhance their contribution.

Whalley, John

TI Demand Side Considerations and the Trade and Wages Debate. **AU** Abrego, Lisandro; Whalley, John.

Wheelock, David C.

TI Aggregate Price Shocks and Financial Instability: An Historical Analysis. **AU** Bordo, Michael D.; Wheelock, David C.; Dueker, Michael J.

White, Halbert

TI Maximum Likelihood and the Bootstrap for Nonlinear Dynamic Models. **AU** Goncalves, Silvia; White, Halbert.

TI Asymptotic Properties of Some Projection-Based Robbins-Monro Procedures in a Hilbert Space. **AU** Chen, Xiaohong; White, Halbert.

TI Estimation, Inference, and Specification Testing for Possibly Misspecified Quantile Regression. **AU** Kim, Tae-Hwan; White, Halbert.

Whitmore, Diane

TI The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR. **AU** Krueger, Alan; Whitmore, Diane.

Willen, Paul

TI Occupation-Level Income Shocks and Asset Returns: Their Covariance and Implications for Portfolio Choice. **AU** Davis, Steven J.; Willen, Paul.

Wilson, James D.

PD April 2001. **TI** Advanced Methods for Dose-Response Assessment: Bayesian Approaches - - Final Report. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 01/15; Resources for the Future, 1616 P Street, NW, Washington D.C. 20036. Website: www.rff.org. **PG** 6. **PR** Domestic First Class \$10; Domestic Book Rate \$6; Foreign Air Mail \$15 Foreign Surface Mail \$8. **JE** C11, D81, Q28. **KW** Bayesian Analysis. Dose-Response. Regulation. Risk Assessment. Arsenic.

AB Resources for the Future (RFF), in conjunction with the U.S. Environmental Protection Agency, the Society for Risk Analysis, and the Electric Power Research Institute, held a workshop Sept. 18-20, 2000, at the RFF Conference Center in Washington, DC. The intent was to discuss how Bayesian approaches could be useful in improving techniques for estimating exposure-response functions. Ten distinguished scholars from a range of fields (medical biostatistics, decision sciences, environmental engineering, and toxicology) served as faculty. Approximately 80 people attended the workshop.

Winter-Ebmer, R.

PD December 1999. **TI** Are Austrian Returns to Education Falling Over Time? **AU** Winter-Ebmer, R.; Fersterer, J. **AA** University of Linz. **SR** CEPR Discussion Paper: 2313; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** I21, J31. **KW** Education Returns. Quartile Regression. Sample Selection. Austria.

AB In this paper we make a systematic presentation of returns to education in Austria for the period 1981-1997. We use consistent cross-sections from the Mikrozensus and find falling returns over time. These falling returns are not caused by changes in the sample design and reduced willingness to reveal personal incomes in the survey. Moreover, it is shown that in particular returns to university education have fallen. If the focus is not on mean returns, but instead we apply quartile regression techniques, interesting patterns emerge: returns are falling the most in the lowest quartiles, but remain almost constant in the highest quartiles. The overall picture of falling returns is consistent with a rise in the supply of well-educated workers in the past two decades.

Winters, L. Alan

TI What's Behind Mercosur's CET? **AU** Olarreaga, Marcelo; Winters, L. Alan; Soloaga, Isidro.

Wise, David A.

TI Aging and Housing Equity. **AU** Venti, Steven F.; Wise, David A.

Woitek, Ulrich

TI Did Monetary Forces Cause the Great Depression? **AU** Ritschl, Albrecht; Woitek, Ulrich.

Woodford, Michael

TI Indicator Variables for Optimal Policy. **AU** Svensson, Lars E. O.; Woodford, Michael.

Wrobel, Andrew J.

TI The Short-Run Approach to LRMC Pricing for Multiple Outputs with Nondifferentiable Costs. **AU** Horsley, Anthony; Wrobel, Andrew J.

TI Efficiency Rents of Pumped-Storage Plants and their Uses for Operation and Investment Decisions. **AU** Horsley, Anthony; Wrobel, Andrew J.

TI Continuity of the Equilibrium Price Density and its Uses in Peak-Load Pricing. **AU** Horsley, Anthony; Wrobel, Andrew J.

TI The Density Form of Equilibrium Prices in Continuous Time and Boiteux's Solution to the Shifting-Peak Problem. **AU** Horsley, Anthony; Wrobel, Andrew J.

TI Efficiency Rents of Storage Plants in Peak-Load Pricing, II: Hydroelectricity. **AU** Horsley, Anthony; Wrobel, Andrew J.

Wu, L.

TI Output Fluctuations and Fiscal Policy: US State and Local Governments 1978-1994. **AU** Yosha, Oved; Sorensen, Bent E.; Wu, L.

Xie, Danyang

TI Activation of a Modern Industry. **AU** Wang, Ping; Xie, Danyang.

PD February 2002. **TI** A Dynamic General Equilibrium Framework of Investment with Financing Constraint. **AU** Xie, Danyang; Yuen, Chi-Wa. **AA** Xie: IMF. Yuen: University of Hong Kong. **SR** International Monetary Fund Policy Working Paper: WP/02/41; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 21. **PR** not available. **JE** C61, D92, G31. **KW** Investment Constraint. Value of the Firm. Firm Value. Financing Constraint.

AB In this paper, we provide a dynamic general equilibrium framework with an explicit investment-financing constraint. The constraint is intended as a reduced form to capture the balance sheet effects, which have been widely regarded as an important determinant of financial crises. We derive a link between the value of the firm and the social welfare, and we find that the value of the firm can be greater with the constraint than without it. Our model also sheds light on how the effects of productivity shocks and bubbles may be amplified by the financing constraint.

Xu, Chenggang

TI Ownership and Managerial Competition: Employee, Customer, or Outside Ownership. **AU** Bolton, Patrick; Xu, Chenggang.

TI Ownership, Incentives, and Monitoring. **AU** Bai, Chong-en; Xu, Chenggang.

Yagil, Joseph

TI A Moving Average Comparison of the Tel-Aviv 25 and S&P 500 Stock Indices. **AU** Shachmurove, Yochanan; BenZion, Uri; Klein, Paul; Yagil, Joseph.

Yildiz, Muhamet

PD October 2001. **TI** Walrasian Bargaining. **AA** MIT. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 02/02; Massachusetts Institute of Technology, Department of Economics, Room E52-251, 50 Memorial Drive, Cambridge, MA 02142. **PG** 18. **PR** \$7.00 U.S., Canada, Mexico; \$10.00 other international. **JE** C73, C78, D41. **KW** Bargaining. Competitive Equilibrium. Coase Conjecture.

AB Given any two-person economy, we consider a simple alternating-offer bargaining game with complete information where the agents offer prices. We provide conditions under which the outcomes of all stationary subgame-perfect equilibria converge to the Walrasian equilibrium (the price and the allocation) as the agents become infinitely patient. Therefore, price-taking behavior can be achieved with only two agents.

Yoon, Gawon

TI Hidden Cointegration. **AU** Granger, Clive W. J.; Yoon, Gawon.

Yosha, Oved

PD November 1999. **TI** Output Fluctuations and Fiscal Policy: US State and Local Governments 1978-1994. **AU** Yosha, Oved; Sorensen, Bent E.; Wu, L. **AA** Yosha: Tel Aviv University. Sorensen: Federal Reserve Bank of Kansas. Wu: Department of Finance. **SR** CEPR Discussion Paper: 2286; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** E32, E62, H59, H71, H72. **KW** State Budgets. Local Budgets. Fiscal Policy. Business Cycles. Consumption Smoothing.

AB What are the cyclical properties of US state and local government fiscal policy? The budget surplus of local and, in particular, state governments is procyclical, smoothing disposable income and consumption of state residents. This happens over both short- and medium-term horizons. Procyclical surpluses are the result of strongly procyclical revenues and weakly procyclical expenditures. The budgets of trust funds and utilities are procyclical. Federal grants are procyclical, exacerbating the cyclical amplitude of state level income movements, although they smooth the idiosyncratic component of shocks to state output. State and local budget surpluses are affected by balanced budget rules at the short- but not at the medium-term horizon. Further, budgets are less procyclical in conservative states.

PD November 1999. **TI** Risk Sharing and Industrial Specialization: Regional and International Evidence. **AU** Yosha, Oved; Sorensen, Bent E.; Kalemli-Ozcan, S. **AA** Yosha: Tel Aviv University. Sorensen: Federal Reserve Bank of Kansas. Kalemli-Ozcan: Brown University. **SR** CEPR Discussion Paper: 2295; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 56. **PR** 5 pounds, \$8 or 8 euros. **JE** E23, F21, F36, G15. **KW** Risk Sharing. Industrial Specialization. Insurance. Capital Mobility. Specialization.

AB We provide empirical evidence that risk sharing enhances specialization in production. To the best of our knowledge, this well-established and important theoretical proposition has not been tested before. Our empirical procedure is summarized as follows. First, we construct a measure of

specialization in production, and calculate an index of specialization for each of the European Community (EC) countries, non-EC Organization for Economic Cooperation and Development (OECD) countries, US states, Canadian provinces, Japanese prefectures, Latin American countries, and regions of Italy, Spain, and the United Kingdom. Then, we separate these regions into groups, and estimate the degree of capital market integration (a measure of risk sharing) within each of these groups of regions. Finally, we perform a regression of the specialization index on the degree of risk sharing, controlling for relevant economic variables. We find a positive and significant relation between the degree of specialization of individual members of a group, and the amount of risk that is shared within the group. These results confirm that risk sharing -- facilitated by a favorable legal environment and a developed financial system -- is a direct causal determinant of industrial specialization.

Yuen, Chi-Wa

TI A Dynamic General Equilibrium Framework of Investment with Financing Constraint. **AU** Xie, Danyang; Yuen, Chi-Wa.

Zax, Jeffrey S.

TI The Demand for Medical Care in Urban China. **AU** Mocan, H. Naci; Tekin, Erdal; Zax, Jeffrey S.

Zechner, Josef

TI Bank Capital Regulation with Random Audits. **AU** Bhattacharya, Sudipto; Plank, Manfred; Strobl, Gunter; Zechner, Josef.

TI Optimal Capital Allocation Using RAROC and EVA. **AU** Stoughton, Neal M.; Zechner, Josef.

Zeira, Joseph

TI The Timing of Purchases and Aggregate Fluctuations. **AU** Leahy, John V.; Zeira, Joseph.

TI Technical Progress and Early Retirement. **AU** Ahituv, Avner; Zeira, Joseph.

Zenou, Yves

TI Local Labor Markets, Job Matching and Urban Location. **AU** Brueckner, Jan; Thisse, Jacques-Francois; Zenou, Yves.

PD December 1999. **TI** Urban Unemployment, Agglomeration and Transportation Policies. **AA** CERAS. **SR** CEPR Discussion Paper: 2309; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** J41, J64, R14, R23, R42. **KW** Efficiency Wages. Spatial Mismatch. Worker Location. Urban Unemployment. Transportation Policy.

AB We study the role of unemployment in the context of the endogenous formation of a monocentric city in which firms set efficiency wages to deter shirking. We first show that, in equilibrium, the employed locate at the vicinity of the city-center, the unemployed reside at the city-edge, and firms set up in the city-center. We then show that there is a "spatial mismatch" between location and jobs, because the further away from jobs the unemployed, the larger the level of unemployment. Finally, we derive some policy implications.

We show that a policy that improves the city transportation network (by subsidizing the commuting costs of all workers) reduces urban unemployment, increasing utilities of all workers but also raising inequality, whereas a policy that supports the transportation of the unemployed only (by subsidizing their commuting costs) increases urban unemployment, not always raising workers' utilities, but reducing inequality.

Zettelmeyer, Jeromin

TI Early Ideas on Sovereign Bankruptcy Reorganization: A Survey. **AU** Rogoff, Kenneth; Zettelmeyer, Jeromin.

Zha, T.

TI Quantifying the Half-Life of Deviations from PPP: The Role of Economic Priors. **AU** Kilian, L.; Zha, T.

Zhang, Xiaoyan

TI Evaluating the Specification Errors of Asset Pricing Models. **AU** Hodrick, Robert J.; Zhang, Xiaoyan.

Zhang, Zhiwei

PD November 2001. **TI** Speculative Attacks in the Asian Crisis. **AA** Bank of Canada. **SR** International Monetary Fund Working Paper: WP/01/189; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** not available. **JE** C41, C51, C52, F31. **KW** ACH. Currency Crises. Duration Analysis.

AB This paper takes the Asian crisis as an example to show that the Autoregressive Conditional Hazard (ACH) model is a powerful tool for studying the time series features of speculative attacks. The ACH model proposes a duration variable to capture the changes in the frequency of attacks, which might be an important factor influencing investors' expectations. The empirical results show that the ACH model explains the crisis far better than the Probit model. The duration variable is highly significant while most fundamentals are not. The contagion effect is tested and accepted under the ACH specification.

Zhuang, Juzhong

TI Modernisation and Son Preference. **AU** Burgess, Robin; Zhuang, Juzhong.

Zingales, Luigi

TI Investment-Cash Flow Sensitivities are not Valid Measures of Financing Constraints. **AU** Kaplan, Steven N.; Zingales, Luigi.

PD September 2000. **TI** In Search of New Foundations. **AA** University of Chicago and CEPR. **SR** CEPR Discussion Paper: 2551; Centre for Economic Policy Research, Discussion Paper Orders, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** G30. **KW** Corporate Finance. Firms.

AB In this paper I argue that corporate finance theory, empirical research, practical applications, and policy recommendations are deeply rooted in an underlying theory of the firm. I also argue that while the existing theories have delivered very important and useful insights, they seem to be quite ineffective in helping us cope with the new type of firms that are emerging. I outline the characteristics that a new theory of the firm should satisfy and how such a theory could change

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the way we approach corporate finance, both theoretically and empirically.

TI The Governance of the New Enterprise. **AU** Rajan, Raghuram G.; Zingales, Luigi.