

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

This section contains abstracts and complete bibliographic information for current working papers, listed alphabetically by primary author. Brief entries appear for secondary authors, cross-referenced to the primary author. For more recent as well as historical information, consult the AWPE DATABASE, available on magnetic media from Cambridge University Press. (Call 212-924-3900)

Abell, Peter

PD February 1995. TI An Exploration of Entry to and Exit From Self-Employment. AU Abell, Peter; Khalaf, Haifa; Smeaton, Deborah. AA Abell and Khalaf: London School of Economics, Smeaton: Surrey University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 224; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 150. PR no charge. JE J62, J63, J49. KW Self-Employment. Unemployment. GDP.

AB The paper reports upon a study of entry to and exit from self-employment in Great Britain between 1975 and 1991. Based upon Labour Force Survey data the effect on the unemployment rate upon entry and exit rates and the individual propensities to enter and exit self-employment are explored.

Abrams, Richard K.

PD March 1995. TI The Design and Printing of Bank Notes: Considerations When Introducing a New Currency. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/26; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE E42, E58. KW Currency. Transitional Countries.

AB Many newly independent or systemically transforming countries feel a pressing need to--or must--introduce their own national currency. Other countries simply wish to enhance the attractiveness, usefulness, durability, and/or security of their currencies. However, it is difficult to find consistent published information on the various aspects of this process. This paper attempts to ameliorate this problem by discussing the main issues in designing, producing, and printing a new currency, in order to help those charged with these tasks to proceed in an orderly and informed manner. Attention is also given to examining the options that may be available when this exercise must be undertaken on an emergency basis, with little or no warning.

Acemoglu, Daron

PD April 1995. TI Search in the Labor Market, Incomplete Contracts and Growth. AA Massachusetts Institute of Technology. SR London School of Economics, Centre for Economic Performance Discussion Paper: 236; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 42. PR no charge. JE J24, J31, O40. KW Search. Human Capital. Wage Discrimination. Incomplete Contracts. Growth.

AB This paper shows that research in the labor market has important effects on accumulation decisions. In a labor market

characterized by search, employment contracts are naturally incomplete and this creates a wedge between the rates of return and marginal products of both human and physical capital. As a result, when a worker invests more in his human capital, he increases the rate of return on physical capital. Provided that these factors are complements in the production function, this will increase the desired level of investment for firms. Then, because physical capital is not being paid its marginal product, the rate of return of all human capital goes up. Thus in this model there are pecuniary increasing returns to scale in human capital accumulation in the sense that the more human capital there is, the more profitable it is to accumulate human capital. Applying this argument conversely, the presence of pecuniary increasing returns in physical capital accumulation also follows. These pecuniary increasing returns lead to amplified inefficiencies and to the possibility of multiple equilibria. They also imply that factor distribution of income has an important effect on growth. Finally, the paper derives new links between unemployment and human capital accumulation and shows that when technology choice is endogenized, search introduces a negative wage formation externality which may lead to excessively fast diffusion of new technologies.

PD May 1995. TI Corporate Control and Balance of Powers. AA Massachusetts Institute of Technology. SR London School of Economics, Centre for Economic Performance Discussion Paper: 239; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 44. PR no charge. JE G32. KW Dispersion of Ownership. Managerial Discretion.

AB Most managers enjoy considerable discretion and protection from possible interventions which enables them to look after their own interests. This is often attributed to the dispersion of shareholders and regulations that deter effective outside interventions. This paper presents a model that has empire-building managers who have important effort choices. Because the manager is not the residual claimant of the relevant returns, in order to provide him with the right incentives, he needs to be given sufficient discretion and the opportunity to share some of the rents he creates. To achieve this, equilibrium organizational form separates control from ownership and tries to contain the manager's empire-building incentives using performance contracts and the capital structure rather than more direct methods of control. Nevertheless, owners will often be unable to commit to managerial discretion because ownership of the assets gives them the right to decide to what use that asset will be put and thus the right to fire the manager. In this case, it will be necessary to choose a disperse ownership structure in order to create free-rider effects among shareholders and thus to commit them to be passive. Thus, the

dispersion of ownership, rather than being the cause of the problem, may be a solution to a more serious one. Nevertheless, there will often be benefits to having large shareholders. In this case, the paper shows that an intermediate level of dispersion is the optimum.

Agenor, Pierre-Richard

PD January 1995. TI Wage Contracts, Capital Mobility, and Macroeconomic Policy. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/10; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 19. PR not available. JE E43, E62, F41. KW Exchange Rates. Inflation. Wages. Macroeconomic Policy.

AB This paper examines the long-run effects of macroeconomic policy shocks on the behavior of output, inflation, real wages and the real exchange rate in a small open economy. The analysis is based on a two-sector, three-good optimizing model with imperfect capital mobility, nominal wage contracts with backward- or forward-looking price expectations, and endogenous mark-up pricing in the nontraded goods sector. The effects of a cut in government spending on nontraded goods are shown to be independent of the expectational mechanism embedded in wage contracts. A reduction in the nominal devaluation rate lowers steady-state output in the tradable sector under backward-looking contracts, but exerts an expansionary effect under forward-looking contracts.

PD February 1995. TI Trade Liberalization and Unemployment. AU Agenor, Pierre-Richard; Aizenman, Joshua. AA Aizenman; Dartmouth College and International Monetary Fund. SR International Monetary Fund Working Paper: 95/20; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE E24, F13, J42. KW Trade Reform. Unemployment. Labor.

AB This paper examines the effect of trade reform on wages and unemployment in a two-sector, three-good economy in which labor is imperfectly mobile across sectors. Wages in the export sector are set so as to minimize turnover costs. The analysis shows that a reduction in tariffism coupled with an adjustment in lump-sum taxes to equilibrate the government budget, lowers wages in all production sectors in the short and the medium run but has an ambiguous effect on unemployment. Although employment and production of exportables expand in the medium run, the unemployment rate may rise or fall depending on whether the elasticity of wages in the export sector with respect to wages in the nontraded goods sector is lower or greater than unity. Potentially adverse effects may be mitigated in the long run, however, as a result of induced shifts in the structure of production activities.

PD August 1995. TI Exchange Market Reform, Inflation, and Fiscal Deficits. AU Agenor, Pierre-Richard; Ucer, E. Murat. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/78; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 35. PR not available. JE E31, E62, F31. KW Exchange Markets. Developing Countries.

AB This paper examines the short- and long-run effects of exchange market reform in developing countries. The first part reviews the recent experience of Guyana, India, Jamaica, Kenya, Sierra Leone, and Sri Lanka with exchange market

reform. The second part studies analytically the short-run dynamics of the parallel market premium and the money supply upon unification, when the post-reform regime consists of either a pure float or a managed float. The third part discusses the impact of unification on inflation and quasi-fiscal deficits, and identifies a variety of implicit taxes and subsidies that must be taken into account in assessing the longer-run effects of exchange market reform.

Aghion, Philippe

PD September 1994. TI The Behaviour of State Firms in Eastern Europe, Pre-Privatisation. AU Aghion, Philippe; Blanchard, Olivier; Burgess, Robin. AA Aghion; Nuffield College and European Bank for Reconstruction and Development. Blanchard; Massachusetts Institute of Technology and National Bureau of Economic Research. Burgess; Oxford University and London School of Economics. SR London School of Economics, Programme of Research into Economic Transformation and Public Finance: EF/10; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 34. PR no charge. JE D21, L23, L32. KW Eastern Europe. State Firms. Industrial Restructuring.

AB In this paper we explore the behavior of state firms pre-privatization, the incentives and the constraints facing managers, and the nature and power of the coalitions within the firms. We show that managers on low incentive payment schemes with little formal stake in privatization and who face possible redundancy have little incentive to embark on restructuring. Hardened budget constraints, career concerns, and potential stakes in the privatized form, however, may strengthen managerial incentives to restructure. We then introduce an "influence" function which captures how the distribution of winners and losers within the firm and size of their loss and gain affects the probability of restructuring. The function illustrates how strong opposition coming from large concentrated losses is likely to dominate diffuse support from small, widely distributed gains. Government measures such as hardening budget constraints, financing of severance payments, and selective debt write-downs affect the distribution of gainers and losers and may be used to overcome blocking coalitions and increase support for restructuring. Examination of a range of enterprise case studies vindicates our hypothesis that the structure of control and production strongly affect incentives to restructure. Centralized management structures, the presence of non-performing units, and a functional division of activities have all acted as serious constraints on the unbundling/restructuring process while the removal of state subsidies has been critical in forcing firms to rationalize production and unbundle activities.

Aitken, Brian

PD December 1994. TI Spillovers, Foreign Investment, and Export Behavior. AU Aitken, Brian; Hanson, Gordon H.; Harrison, Ann E. AA Aitken; International Monetary Fund. Hanson; University of Texas. Harrison; Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4967; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR \$5.00. JE C25, F23. KW Foreign Market Access. Information Externality. Multinational.

AB Case studies of export behavior suggest that firms who

penetrate foreign markets reduce entry costs for other potential exporters, either through learning by doing or through establishing buyer-supplier linkages. We pursue the idea that spillovers associated with one firm's export activity reduce the cost of foreign market access for other firms. We identify two potential sources of spillovers: export activity in general and the specific activities of multinational enterprises. We use a simple model of export behavior to derive a logit specification for the probability a firm exports. Using panel data on Mexican manufacturing plants, we find evidence consistent with spillovers from the export activity of multinational enterprises but not with general export activity.

Aizenman, Joshua

TI Trade Liberalization and Unemployment. AU Agenor, Pierre-Richard; Aizenman, Joshua.

PD February 1995. TI Investment In New Activities and the Welfare Cost of Uncertainty. AA Dartmouth College and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5041; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 14. PR \$5.00. JE E22, O49. KW First Order Cost. Growth. Investment. Uncertainty. AB Recent literature has highlighted the importance of new activities in development and growth. It was shown that trade distortions such as tariffs are associated with first-order costs stemming from the induced drop in the formation of new activities. This paper demonstrates that uncertainty may induce similar costs. This argument is illustrated in the context of Paul Romer's model of a dependent economy, where foreign direct investment is needed to enable the importation of capital goods and intermediate products used in domestic production. The present paper shows that uncertainty acts as an implicit tax on new activities, whose incidence is (in a certain sense) worse than that of a tariff in Romer's framework. As with a tariff, uncertainty inhibits the formation of new activities. Unlike the tariff, however, uncertainty does not benefit the government with revenue. The welfare cost of uncertainty applies also for a closed economy. The paper shows that uncertainty-averse entrepreneurs discount using a "hurdle rate" that exceeds the risk-free interest rate. The gap between the two rates increases with the uncertainty embodied in the investment, being determined by the vagueness of the information and by the range of possible outcomes. Hence, growth may be inhibited by business uncertainty, where the "rules of the game" for new activities are vague.

Alesina, Alberto

PD January 1995. TI Economic Risk and Political Risk in Fiscal Unions. AU Alesina, Alberto; Perotti, Roberto. AA Alesina: Harvard University and National Bureau of Economic Research. Perotti: Columbia University. SR National Bureau of Economic Research Working Paper: 4992; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR \$5.00. JE D61, D73, D78. KW Fiscal Union. Political Risk. Social Insurance.

AB A fiscal program that redistributes income from rich to poor individuals indirectly redistributes tax revenues from regions hit by a favorable shock to regions hit by an unfavorable one. Centralized fiscal redistribution has therefore been advocated as a way to insure individuals against region-specific shocks. In this paper, we argue that a centralized fiscal

policy, while reducing the uncertainty on the tax base, creates uncertainty on the tax rate. This occurs because regions hit by different shocks have contrasting interests on the choice of the policy instrument. Using a simple model with two regions and linear taxes, we show that the higher uncertainty on the policy instrument might more than offset the lower uncertainty on the tax base, thus making a majority of agents in each region worse off in a centralized regime. The model is a special case of a more general idea. Heterogeneous entities can reap numerous advantages from integration: mutual insurance (on which we focus), economies of scale, more bargaining power are only a few of them. However, at the same time the same process of integration can increase the unpredictability of any endogenous policy, because more diverse entities participate in the decision-making process, and therefore the opportunities for disagreement increase. In principle, this second effect might offset the advantages of integration.

Altonji, Joseph G.

PD December 1994. TI An Intergenerational Model of Wages, Hours and Earnings. AU Altonji, Joseph G.; Dunn, Thomas A. AA Altonji: Northwestern University and National Bureau of Economic Research. Dunn: Syracuse University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4950; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE J13, J16, J31. KW Earnings. Family Factor. Wage.

AB In this paper we develop and estimate a factor model of the earnings, labor supply, and wages of young men and women, their parents and their siblings. We estimate the model using data on matched sibling and parent-child pairs from the National Longitudinal Survey of Labor Market Experience. We measure the extent to which a set of unobserved parental and family factors that drive wage rates and work hours independently of wage rates lead to similarities among family members in labor market outcomes. We find strong family similarities in work hours that run along gender lines. These similarities are primarily due to preferences rather than to labor supply responses to family similarities in wages. The wage factors of the father and mother influence the wages of both sons and daughters. A "sibling" wage factor also plays an important role in wage determination. We find that intergenerational correlations in wages substantially overestimate the direct influence of fathers, and especially mothers, on wages. This is because the father's and mother's wage factors are positively correlated. The relative importance for the variance in earnings of the direct effect of wages, the labor supply response induced by wages, and effect of hours preferences varies by gender, and by age in the case of women. For all groups most of the effect of wages on earnings is direct rather than through a labor supply response.

Amann, Erwin

PD December 1994. TI The Robustness of a Sophisticated Mutant in an Evolutionary Model of Cooperation. AU Amann, Erwin; Yang, Chun-Lei. AA Amann: Dortmund University. Yang: Boston University. SR Boston University, Industry Study Program Discussion Paper: 54; Department of Economics, Boston University, 270 Bay State Road, Boston, MA 02215. PG 16. PR no charge. JE C73, D83. KW Evolution. Mutation.

Replicator Dynamic. Asymptotic Stability.

AB In a formal model the effect of mutation in a prisoners' dilemma game is analyzed. It is shown that in an evolutionary model information allows for cooperation to persist in a symbiotic equilibrium in the long run and that this result is robust against further mutation.

Amiel, Yoram

PD June 1994. **TI** Inequality Among the Kibbutzim. **AU** Amiel, Yoram; Cowell, Frank; Polovin, Avraham. **AA** Amiel and Polovin: Ruppin Institute and London School of Economics. Cowell: London School of Economics. **SR** London School of Economics, Development Economics Research Programme: DEP/56; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. **PG** 53. **PR** no charge. **JE** D31, D63. **KW** Income Distribution. Wealth Distribution. Inequality.

AB Using a new longitudinal data set we examine the distribution of well-being and changes in the distribution of well-being among the Israeli kibbutzim in 1989 and 1990. We examine the theoretical and practical implications of a variety of definitions of consumption, income, and wealth of each kibbutz. Although in many cases the mean value of the relevant income or wealth concept is negative we show that inequality is, generally, increasing and welfare decreasing. Moreover, those kibbutzim with the lowest net worth experienced the greatest deterioration of their net worth.

PD October 1994. **TI** The Measurement of Poverty: An Experimental Questionnaire Investigation. **AU** Amiel, Yoram; Cowell, Frank. **AA** London School of Economics. **SR** London School of Economics, Distributional Analysis Research Programme: DARP/5; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. **PG** 30. **PR** no charge. **JE** D63, I32. **KW** Poverty. Inequality. Transfer Principle. Monotonicity.

AB We re-examine some of the standard axioms used in the literature on poverty measurement. Using a sample of 486 students from Australia, Israel, and the USA we investigate the extent to which perceptions of poverty correspond to the axioms.

TI Monotonicity, Dominance and the Pareto Principle. **AU** Cowell, Frank; Amiel, Yoram.

Amiti, Mary

PD April 1995. **TI** Economic Integration, Industrial Structure and Trade Patterns. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 225; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 36. **PR** no charge. **JE** F12, F15, F17, F20. **KW** Economic Integration. Industrial Structure. Factor Intensities. Intra-Industry Trade.

AB This paper considers the effects of economic integration on the industrial structure and trade patterns of two countries which differ only in size. In a general equilibrium model on intra-industry trade, each country has two imperfectly competitive industries which can differ in three respects: relative factor intensities, level of transport costs and demand elasticities. With positive transport costs and increasing returns to scale, each firm prefers to locate in the larger country due to the 'market access' effect. But the increase in demand for

factors in the large country induces a rise in relative wages to maintain factor market equilibrium. The tension between the market access effect and production cost effect determines which industry will concentrate in which country. We show that economic integration leads to some degree of specialization, with the large country becoming a net exporter in goods which are relatively intensive in mobile factor, capital; goods which are subject to relatively higher transport costs; and a changing pattern of net exports when demand elasticities differ.

Anderson, Patricia M.

PD December 1994. **TI** The Effects of Unemployment Insurance Taxes and Benefits on Layoffs Using Firm and Individual Data. **AU** Anderson, Patricia M.; Meyer, Bruce D. **AA** Anderson: Dartmouth University and National Bureau of Economic Research. Meyer: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4960; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$5.00. **JE** J23, J65. **KW** Labor Demand. Layoff. Taxation. Unemployment Insurance.

AB We examine the effects of unemployment insurance (UI) experience rating on layoffs using high quality firm and individual data. Our preferred estimates imply that incomplete experience rating is responsible for over twenty percent of temporary layoffs. The results are more mixed regarding the predictions of the alternative models of UI as a firm adjustment cost or a component of the worker compensation package. While the evidence favors the adjustment cost model, some of the predictions of each of these models are rejected by at least one of our specifications. Using our new data, we also confirm the correlation between experience rating proxies and layoffs found in past studies. However, the differences between these proxies and state average firm tax costs and the anomalous instrumental variables estimates that we find suggest that it may be inappropriate to causally interpret this correlation.

PD January 1995. **TI** Empirical Matching Functions: Estimation and Interpretation Using Disaggregate Data. **AU** Anderson, Patricia M.; Burgess, Simon M. **AA** Anderson: Dartmouth College and National Bureau of Economic Research. Burgess: University of Bristol. **SR** National Bureau of Economic Research Working Paper: 5001; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** \$5.00. **JE** Aggregation. Employment. Matching Function. Return to Scale. **KW** C43, C52, C72, C78.

AB In this paper, we estimate matching functions using disaggregate data. We find strong support for the matching approach, with most specifications implying slightly increasing returns to scale. This finding does not appear to arise from our inclusion of additional controls or from the level of disaggregation, and so we conclude that earlier findings of constant returns in the US may be due to the various approximations needed to construct an aggregate time series. We also find evidence of endogenous job competition between the employed and non-employed, so that the estimated parameters from a matching function cannot be interpreted as structural parameters.

Andres, J.

PD July 1995. **TI** Dynamics of the Income Distribution Across OECD Countries. **AU** Andres, J.; Lamo, Ana.

AA Andres: University of Valencia and London School of Economics. Lamo: London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 252; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 81. PR no charge. JE C21, C22, C23, O41. KW Convergence. Conditioning Growth. Stochastic Kernel.

AB In this paper we test the convergence hypothesis among OECD economies from 1960 to 1990. The empirical growth literature has found in the OECD the best example of a homogenous group of countries in which the convergence proposition of the constant returns growth model is likely to hold. We analyze the dynamics of the cross-section distribution of incomes and we find that neither absolute nor conditional convergence, in the sense of all economies approaching the OECD average, has taken place along the whole period. In fact, there is substantial inertia in the incomes ranking as well as a group of economies persistently at the bottom of the distribution all through the sample period. Our results indicate that convergence, taken as a single economy property whereby per capita income in each country is stationary around its long-run path, has taken place. However, this result does not tell us very much about whether the economies are approaching each other in the long-run.

Anjaria, Shailendra J.

PD February 1995. TI Working Paper Summaries. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/15; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 82. PR not available. JE B41. KW IMF. Summary.

AB This compilation of summaries of Working Papers released during July-December 1994 is being issued as part of the Working Paper series. It is designed to provide the reader with an overview of the research work performed by the staff during the period. Authors of Working Papers are normally staff members of the Fund or consultants, although on occasion outside authors may collaborate with a staff member in writing a paper. The views expressed in the Working Papers or their summaries are, however, those of the authors and should not necessarily be interpreted as representing the views of the Fund.

PD August 1995. TI Working Paper Summaries, January-June 1995. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/80; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 60. PR not available. JE B41. KW IMF. Summary.

AB This compilation of summaries of Working Papers released during January-June 1995 is being issued as a part of the Working Paper series. It is designed to provide the reader with an overview of the research work performed by the staff during the period.

Armendariz de Aghion, Beatriz

PD July 1994. TI On the Design of a Credit Agreement with Peer Monitoring. AA London School of Economics. SR London School of Economics, Development Economics Research Programme: DEP/55; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 38. PR no charge. JE G21, G28, O12, O16. KW Credit. Joint Responsibility. Peer Monitoring.

AB This paper develops a simple model of collective credit agreements with joint responsibility that generates peer monitoring among participant borrowers. Our main findings can be summarized as follows: (a) peer monitoring agreements potentially dominate standard credit contracts to the extent that they reduce the incidence of (costly) strategic defaults. Less frequent defaults result in lower interest rates and greater insurance against losing access to future refinancing. These benefits may potentially offset the costs of such agreements in terms of additional (peer-repayment) obligations and additional monitoring costs. (b) The relative benefits of peer-monitoring agreements tend to decrease when risks are positively correlated, the population of borrowers is heterogeneous, borrowing requirements are high, the population of borrowers is large, or peer-monitoring structures are "inadequate".

Armstrong, Mark

PD November 1995. TI The Access Pricing Problem: A Synthesis. AU Armstrong, Mark; Doyle, Chris; Vickers, John. AA Armstrong: University of Southampton. Doyle: University of Cambridge. Vickers: University of Oxford. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9532; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 24. PR no charge. JE L12, L43, L51, L90. KW Regulation. Access Pricing.

AB The Baumol-Willig efficient component pricing rule states that it is efficient for the price of access to an essential facility to be set equal to the direct cost of access plus the opportunity cost (lost profit) to the integrated access provider. We analyze the relevant notion of "opportunity cost" under various assumptions about demand and supply conditions, including product differentiation, bypass and substitution possibilities, all of which are shown to reduce opportunity cost compared to the benchmark case. Our analysis shows that the Ramsey approach to access pricing developed by Laffont and Tirole (1994) is closely related to the ECPR provided that opportunity cost is correctly interpreted.

Asea, Patrick

TI Do Taxes Matter for Long-Run Growth? Harberger's Superneutrality Conjecture. AU Mendoza, Enrique G.; Milesi-Ferretti, Gian Maria; Asea, Patrick.

Atkinson, A. B.

PD September 1994. TI Seeking to Explain the Distribution of Income. AA Nuffield College. SR London School of Economics, Welfare State Programme: WSP/106; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 47. PR no charge. JE D31, D33, J24, J31. KW Income Distribution. Wages. Capital.

AB The distribution of income is central to our understanding of the working of the economy, but economic theory does not at present provide an adequate basis to explain the rise in income inequality observed in recent years in the UK and other countries. The paper sets out six major reasons why theories of factor incomes (wages, profit, and rent) do not provide a theory of personal distribution: heterogeneity of incomes, human capital, diversity of sources, intervening institutions, income from abroad, and the impact of the state budget. It goes on to examine in detail three areas. The first is inequality of earnings, treating the changing skill differential, deindustrialization, and the influence of labor market institutions. The second is the

impact of rising real interest rates and share prices, discussing the behavior of companies, pension funds, and other intervening institutions. The third is the distributional role of the government budget and public choice explanations. The paper concludes that the existing literature provides valuable insights but that we lack at present an overall framework to relate the different parts of the income distribution story.

Auerbach, Alan J.

PD February 1995. TI Tax Projections and the Budget: Lessons From the 1980s. AA University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5009; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 10. PR \$5.00. JE E62, H25, H32. KW Corporate Income Tax. Excise. Tax Rate. Tax Revenue.

AB Some economists have argued that the disincentive effects of marginal tax rate increases in the 1980s caused revenue to rise by less than had been anticipated. To evaluate the hypothesis, this paper considers OMB revenue forecasts and forecast errors for the period 1982-93. If the revenue gains from tax increases, and the revenue losses from tax cuts, were overstated because of inadequate allowance for behavioral responses, then the forecast errors should be negatively related to the initial revenue estimates of the effect of policy changes. For excise taxes and corporate income taxes, the results suggest that the systematic overprediction of revenues during the period can be explained in part by an underestimate of behavioral responses to taxation.

Bachmann, Reinhard

TI Risk, Trust and Power: The Social Constitution of Supplier Relations in Britain and Germany. AU Lane, Christel; Bachmann, Reinhard.

TI Cooperation in Vertical Inter-Firm Relations in Britain and Germany: The Role of Social Institutions. AU Lane, Christel; Bachmann, Reinhard.

Bakoup, Ferdinand

PD February 1995. TI Regional Integration in Eastern and Southern Africa: The Cross-Border Initiative and its Fiscal Implications. AU Bakoup, Ferdinand; Bessaha, Abdelrahmi; Errico, Luca. AA Bakoup: University of Auvergne and International Monetary Fund. Bessaha and Errico: International Monetary Fund. SR International Monetary Fund Working Paper: 95/23; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 29. PR not available. JE F15, F36, F47. KW Trade. Investment. Economic Integration. Africa.

AB New integration initiatives are flourishing in almost every part of the African continent. The latest initiative in this regard is the Cross-Border Initiative to promote trade, investment, and payments in Eastern and Southern Africa and the Indian Ocean region. In this paper the potential effects of regional integration are empirically discussed and the fiscal implications of the integration measures are addressed, referring to the cases of Burundi, Kenya, Tanzania, and Uganda. Estimates of the revenue loss from the regional integration-oriented tariff reform are provided and the fiscal reforms to offset this negative revenue effect are discussed.

Baldwin, Robert E.

PD February 1995. TI The Effects of Trade and Foreign Direct Investment on Employment and Relative Wages. AA University of Wisconsin and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5037; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 50. PR \$5.00. JE F21, F23, F32. KW Foreign Direct Investment. OECD. Wage Effect.

AB This paper summarizes and assesses recent studies on the effect of current trends in trade and direct investment on employment and wages in OECD countries. The general conclusion is that such factors as changes in labor supplies, technology and demand are more important than changes in trading patterns in accounting for changes in employment and shifts in relative wages. However, further studies are needed to understand better the employment and wage effect of foreign direct investment.

Ball, Laurence

PD February 1995. TI The Deficit Gamble. AU Ball, Laurence; Mankiw, N. Gregory; Elmendorf, Douglas W. AA Ball: Johns Hopkins University and National Bureau of Economic Research. Mankiw: Harvard University and National Bureau of Economic Research. Elmendorf: U.S. Congress. SR National Bureau of Economic Research Working Paper: 5015; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 36. PR \$5.00. JE E62. KW Capital Accumulation. Deficit. Growth. Interest Rate. Rollover.

AB The historical behavior of interest rates and growth rates in U.S. data suggests that the government can, with a high probability, run temporary budget deficits and then roll over the resulting government debt forever. The purpose of this paper is to document this finding and to examine its implications. Using a standard overlapping-generations model of capital accumulation, we show that whenever a perpetual rollover of debt succeeds, policy can make every generation better off. This conclusion does not imply that deficits are good policy, for an attempt to roll over debt forever might fail. But the adverse effects of deficits, rather than being inevitable, occur with only a small probability.

Bamberger, Gustavo E.

TI Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?. AU Carlton, Dennis W.; Epstein, Roy J.; Bamberger, Gustavo E.

Bame, Jack

PD September 1995. TI The Identification of Capital Transfers in the Balance of Payments. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/93; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 14. PR not available. JE B41, F35. KW Balance of Payments. Investment. Capital Transfers.

AB The separate identification of current and capital transfers was introduced for the first time in the fifth edition of the Fund's Balance of Payments Manual (Manual), thus harmonizing with the treatment of transfers in the 1993 System of National Accounts (1993 SNA). Capital transfers are now recorded in the capital account component of the balance of payments and include debt forgiveness, migrants' transfers, and

other transfers, of which investment grants is a significant category. This paper presents the criteria for defining capital transfers and provides sources and methods of compilation, and examples of treatment, as illustrated in the Fund's Balance of Payments Compilation Guide and Balance of Payments Textbook.

PD September 1995. **TI** The Measurement of Reinvested Earnings in the Balance of Payments. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/94; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 13. **PR** not available. **JE** B41, F21, F23. **KW** Balance of Payments.

AB This paper notes that, for the first time, the concept and treatment of reinvested earnings in the Fund's Balance of Payments Manual and the 1993 System of National Accounts are fully harmonized. The paper presents the conceptual basis for the measurement of reinvested earnings and illustrative examples as to recording, from the Fund's Balance of Payments Compilation Guide and Balance of Payments Textbook. Highlighted are the recommended time of recording of reinvested earnings, the calculation of earnings on a current operating basis, and the calculation of depreciation at replacement cost, notwithstanding possible practical difficulties in implementation.

Bank, Roy J.

TI Sex Discrimination in Restaurant Hiring: An Audit Study. **AU** Neumark, David; Bank, Roy J.; Van Nort, Kyle D.

Bartolini, Leonardo

PD March 1995. **TI** Fiscal Restructuring in the Group of Seven Major Industrial Countries in the 1990s: Macroeconomic Effects. **AU** Bartolini, Leonardo; Razin, Assaf; Symansky, Steve. **AA** Razin: Tel Aviv University, National Bureau of Economic Research, Centre for Economic Policy Research, and International Monetary Fund. Bartolini and Symansky: International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/35; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** E62, H62. **KW** Labor Market. Fiscal Policy. Taxation.

AB This paper studies the fiscal restructuring of the first half of the 1990s in the major industrial countries. It presents and calibrates a simple model of the labor market and integrates it into a multi-country macroeconomic model that takes into account the effects of distortionary taxes. It then uses the resulting framework to simulate the effects of recent and prospective changes in fiscal policies in the group of seven major industrial countries. The analysis suggests that in the long run the impact on output is likely to be positive in those countries that relied relatively more on expenditure cuts or indirect tax increases (such as Canada, France, Japan, and the United Kingdom), while the effect of the fiscal restructuring on output is estimated to be negative in those countries that relied primarily on labor and capital taxes (Germany, Italy, and the United States).

PD August 1995. **TI** Are Exchange Rates Excessively Volatile? And What Does "Excessively Volatile" Mean, Anyway? **AU** Bartolini, Leonardo; Bodnar, Gordon M. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/85; International Monetary

Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** F31, E41, E51. **KW** Exchange Rates. Asset Prices. Volatility.

AB Using data for the major currencies from 1973 to 1994, we apply recent tests of asset price volatility to re-examine whether exchange rates have been excessively volatile with respect to the predictions of the monetary model of the exchange rate and of standard extensions that allow for sticky prices, sluggish money adjustment, and time-varying risk premia. Consistent with previous evidence from regression-based tests, most of the models that we examine are rejected by our volatility-based tests. In general, however, we find that exchange rates have not been excessively volatile relative to movements of their determinants, with respect to the predictions of even the most restrictive version of the monetary model. Alternative measures of "volatility", however, may disguise the cause of rejection as excessive exchange rate volatility.

Baxter, Marianne

PD December 1994. **TI** Business Cycles and the Asset Structure of Foreign Trade. **AU** Baxter, Marianne; Crucini, Mario J. **AA** Baxter: University of Virginia and National Bureau of Economic Research. Crucini: Ohio State University. **SR** National Bureau of Economic Research Working Paper: 4975; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** \$5.00. **JE** E32, E44, F15, F36. **KW** Business Cycle. Financial Market Integration.

AB International financial market linkages are widely believed to be important for the international transmission of business cycles, since these govern the extent to which individuals can smooth consumption in the presence of country-specific shocks to income. This paper develops a two-country, general equilibrium model with restricted asset trade and provides a detailed analysis of the channels through which these financial linkages affect international business cycles. Our central finding is that the absence of complete financial integration may not be important if the shocks to national economies are of low persistence, or are transmitted rapidly across countries over time. However, if shocks are highly persistent or are not transmitted internationally, the extent of financial integration is central to the international transmission of business cycles.

PD February 1995. **TI** The International Diversification Puzzle is Worse Than You Think. **AU** Baxter, Marianne; Jermann, Urban J. **AA** Baxter: University of Virginia and National Bureau of Economic Research. Jermann: Wharton University. **SR** National Bureau of Economic Research Working Paper: 5019; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** \$5.00. **JE** E22, F21, F36, G11, G15. **KW** Domestic Asset. Foreign Asset. Human Capital. International Diversification.

AB Although international financial markets are highly integrated across the more well-developed countries, investors nevertheless hold portfolios that consist nearly exclusively of domestic assets. This violation of the predictions of standard theories of portfolio choice is known as the "international diversification puzzle." In this paper, we show that the presence of nontraded risk associated with variations in the return to human capital has dramatic implications for the optimal fraction of domestic assets in an individual's portfolio. Our

analysis suggests that the returns to human capital are highly correlated with the returns to domestic financial assets. Hedging the risk associated with nontraded human capital involves a short position in national equities in an amount approximately 1.5 times the value of the national stock market. Thus optimal and value-weighted portfolios very likely involve a short position in domestic marketable assets.

PD February 1995. **TI** Measuring Business Cycles Approximate Band-Pass Filters for Economic Time Series. **AU** Baxter, Marianne; King, Robert G. **AA** University of Virginia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5022; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$5.00. **JE** C22, E32. **KW** Business Cycle. Detrending. Filter. Time Series.

AB This paper develops a set of approximate band-pass filters designed for use in a wide range of economic applications. In particular, we design and implement a specific band-pass filter which isolates business-cycle fluctuations in macroeconomic time series. This filter was designed to isolate fluctuations in the data which persist for periods of two through eight years. This filter also "detrends" the data, in the sense that it will render stationary time series that are integrated of order two or less, or that contain deterministic time trends. We apply our filter to several of the key macroeconomic time series, and describe the picture of the U.S. postwar business cycle that emerges from our analysis. We also provide detailed comparisons with several alternative detrending methods.

PD February 1995. **TI** International Trade and Business Cycle. **AA** University of Virginia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5025; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$5.00. **JE** E22, E32, F21, F32. **KW** Business Cycle. Capital Accumulation. Capital Flow.

AB Virtually all economies experience recurrent fluctuations in economic activity that persist for periods of several quarters to several years. Further, there is a definite tendency for the business cycles of developed countries to move together--there is a world component to business cycles. This paper argues that capital accumulation and international capital flows are central to understanding world trade and business cycles. In particular, fluctuations in net exports and the current account are shown to be dominated by trade in capital goods. The paper develops a two country model of international trade within which capital accumulation and international investment flows play a central role. We explore the channels by which technology shocks and fiscal shocks are transmitted to the domestic and foreign economies, and discuss the extent to which these results are sensitive to individuals' opportunities for international trade in financial assets. Overall, we find that the models capture many of the salient features of international business cycles. However, it has proven consistently difficult to generate sufficient comovement across countries in labor input and investment. The paper concludes with a discussion of fruitful directions for future research.

Bayoumi, Tamim

PD April 1995. **TI** Who Needs Bands? Exchange Rate Policy Before EMU. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/43;

International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 13. **PR** not available. **JE** F33, F36. **KW** Exchange Rates. Currency. Germany.

AB Two issues are discussed. The first is which countries might benefit from entry into EMU before the millennium. Germany and her immediate neighbors appear the most likely to gain; however, our knowledge is too uncertain to say whether all, some, or no countries would reap net economic benefits. The second issue is how to avoid exchange rate instability in the transition to EMU. Experience from earlier exchange rate regimes suggests that an early announcement of the parities at which different currencies would enter EMU could reduce such instability if governments were willing to accept the required limitations on domestic policies.

TI International Evidence on the Determinants of Private Saving. **AU** Masson, Paul R.; Bayoumi, Tamim; Samiei, Hossein.

PD September 1995. **TI** The Stability of the Gold Standard and the Evolution of the International Monetary System. **AU** Bayoumi, Tamim; Eichengreen, Barry. **AA** Bayoumi: International Monetary Fund. Eichengreen: University of California of Berkeley. **SR** International Monetary Fund Working Paper: 95/89; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** F33, N11, N13. **KW** Gold Standard. Output. Employment.

AB This paper examines some popular explanations for the smooth operation of the pre-1914 gold standard. We find that the rapid adjustment of economies to underlying disturbances played an important role in stabilizing output and employment under the gold standard system, but no evidence that this success also reflected relatively small underlying disturbances. Finally, the paper also suggests an explanation for the evolution of the international monetary system based on growing nominal inertia over time.

Bean, Charles R.

PD November 1995. **TI** The Role of Demand Management Policies in Reducing Unemployment. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 222; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 36. **PR** no charge. **JE** E24. **KW** Demand Management. Macroeconomic Policy. Monetary Union. Unemployment.

AB This paper considers the scope for demand management policies to reduce the present high levels of European unemployment. While the evidence suggests that contractionary demand shocks are partly to blame, the presence of endogenous persistence mechanisms limit the scope for effective activist policies. Furthermore, in isolation they can do nothing to tackle the significant fraction due to adverse supply, or structural, developments. However, if appropriate supply-side policies are introduced, supportive demand management policies can speed the reduction in unemployment. The paper considers what such supportive demand management policies should look like and argues that in some cases a mild, although temporary, increase in inflation may be appropriate. The implications of uncertainty about the equilibrium rate of unemployment are also considered. The paper argues that such supportive policies are probably best sustained through

monetary rather than fiscal policies and are likely to require changes in intra-European real exchange rates. Consequently a rapid move to full monetary union may be ill advised. Finally a potential role for temporary incomes policies is also identified.

Bekaert, Geert

PD January 1995. TI Diversification, Integration and Emerging Market Closed-End Funds. AU Bekaert, Geert; Urias, Michael S. AA Bekaert: Stanford University and National Bureau of Economic Research. Urias: Stanford University. SR National Bureau of Economic Research Working Paper: 4990; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE F15, F36, G11. KW Diversification. Emerging Market. Investment Restriction.

AB Using an extensive new data set on U.S. and U.K.-traded closed-end funds, we examine the diversification benefits from emerging equity markets and the extent of their integration with global capital markets. To measure diversification benefits, we exploit the duality between Hansen-Jagannathan bounds [1991] and mean-standard deviation frontiers. We find significant diversification benefits for the U.K. country funds, but not for the U.S. funds. The difference appears to relate to differences in portfolio holdings. To investigate global market integration, we compute the reduction in expected returns an investor would be willing to accept to avoid investment barriers in six countries. We find evidence of investment restriction for Indonesia, Taiwan and Thailand, but not for Korea, the Philippines or Turkey.

Belka, Marek

PD April 1995. TI Enterprise Adjustment in Poland: Evidence from a Survey of 200 Private, Privatized, and State-Owned Firms. AU Belka, Marek; Estrin, Saul; Schaffer, Mark E.; Singh, I.J. AA Belka: Polish Academy of Sciences. Estin: London Business School. Schaffer: London School of Economics. Singh: World Bank. SR London School of Economics, Centre for Economic Performance Discussion Paper: 233; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 49. PR no charge. JE D21, L20, P10, P42, P51. KW Enterprise Adjustment. Poland. Privatization.

AB This paper reports the main findings from a survey of some 200 Polish firms carried out at the end of 1993. The central focus is on the relationship between different emerging forms of ownership and the extent and nature of enterprise level adjustments taking place. Four broad categories of enterprises that distinguish the main ownership forms that characterize Polish industry were included in the survey: (a) traditional state-owned enterprises, (b) corporatized state-owned enterprises that have been converted into joint stock companies but whose shares are now owned by the State Treasury; (c) former state-owned firms that have been privatized; and (d) privately-owned firms which were established de novo. Some of the main findings from the survey are as follows. Growth and investment in 1993 were widely diffused through the economy, but rather more concentrated in the private sector and especially in de novo private firms, while financial distress as revealed by low profit margins was concentrated in the state-owned sector. The survey suggests that all firms in Poland have experienced a considerable increase in competition, and have faced the need radically to restructure their patterns of input purchases and marketing strategy. In general, de novo private

firms have led the way, and changes have been fewer and less deep in the state-owned sector. Developments on the labor side in our sample are rather modest, and to be heavily oriented to satisfy the preferences of insiders, especially workers. Overmanning remains rife in both the state-owned and privatized sector, and differences between the two groups of firms in wage determination appear to stem more from the operation of the excess wage tax than from differences in motivation. Behavior in the de novo private firms is, however, clearly different, with a concern to hire not fire, and with lower employee influence. With respect to finance, we find that privatized and especially de novo private firms are financially relatively healthy, with higher profits and fewer bad debts than the state-owned firms. Although almost half of private sector firms hold no bank debt, bank credit is flowing fastest to these firms and in general they report the fewest problems in servicing it. Overdue trade credit is common among all ownership groups but more so among state firms; however, the flow problem is not serious, and volumes of total and overdue trade credit are comparable to West European levels. The main method by which severely financially-distressed firms, nearly all of which are state-owned, financed their losses is by running up tax arrears; financing by banks and by trade credit is much less significant.

Benhabib, Jess

PD December 1994. TI Indeterminacy and Sector-Specific Externalities. AU Benhabib, Jess; Farmer, Roger E.A. AA University of California, Los Angeles. SR University of California, Los Angeles Working Paper Series: 722; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 19. PR \$5.00. JE E13, E32. KW Business Cycle. Returns to Scale. Externality.

AB We introduce, into a version of the Real Business Cycle model, mild increasing returns-to-scale. These increasing returns-to-scale occur as a consequence of sector specific externalities, that is externalities where the output of the consumption and investment sectors have external effects on the output of firms within their own sector. Keeping the production technologies for both sectors identical for expositional simplicity, we show that indeterminacy can easily occur for parameter values typically used in the real business cycle literature, and in contrast to some earlier literature on indeterminacies, for externalities mild enough so that labor demand curves are downward sloping.

Berk, Gerald

PD November 1995. TI Communities of Competitors: Open Price Associations and the American State, 1911-1929. AA University of Oregon. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP20; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 34. PR \$10.00. JE K20, L40, L50, N42. KW Business Associations. Cooperation. Price Regulation. US Manufacturing.

AB This paper looks at two successful efforts to 'regulate competition' in the United States during the 1920s: open price associations and the Federal Trade Commission's experiments in trade practice conferences. The author argues that business associations made more progress in the United States than is commonly thought. This is demonstrated by showing that (1) counter to the conventional wisdom, one strain of antitrust

practice was supportive of price regulation by association, and (2) open price associations were more capable of generating cooperation and economic progress than game theoretic interpretations of business associations in the United States suggest.

Besley, Timothy

PD December 1994. TI Unnatural Experiments? Estimating the Incidence of Endogenous Policies. AU Besley, Timothy; Case, Anne. AA Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4956; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR \$5.00. JE C51, C82. KW Policy Endogeneity. Policy Exogeneity. Policy Incidence.

AB The US federal system provides great potential for estimating the effects of policy on behavior. These are numerous empirical studies that exploit variation in policies over space and time. In pursuing this line of inquiry, the issue of policy endogeneity is central. If state policy making is purposeful action, responsive to economic and political conditions within the state, then it may be necessary to identify and control for the forces that lead policies to change if one wishes to obtain unbiased estimates of a policy's incidence. The aim of this paper is to investigate how recognition of policy endogeneity affects attempts to analyze policy incidence. Throughout, we take a specific context-- workers' compensation benefits. We contrast the use of differences-in-differences estimation, where a comparison is made between a group affected by the policy change and a control group, with instrumental variables estimation when political variables are used as instruments. Although conclusions drawn must be confined to the example at hand, we believe that the analysis illustrates why it may be important to consider the implications of policy endogeneity more generally.

PD January 1995. TI An Economic Model of Representative Democracy. AU Besley, Timothy; Coate, Stephen. AA Besley: Princeton University. Coate: University of Pennsylvania. SR Princeton University, Woodrow Wilson School of Public and International Affairs Discussion Papers in Economics: 177; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. PG 61. PR no charge. JE D72, D78, H11. KW Representative Democracy. Politics. Efficiency.

AB This paper develops a new approach to the study of democratic policy making where politicians are selected by the people from those citizens who present themselves as candidates for public office. Participation in the policy making process is, therefore, derived endogenously. The approach has a number of attractive features. First, it is a conceptualization of a pure form of representative democracy in which government is by, as well as of, the people. Second, the model is analytically tractable, being able to handle multidimensional issue and policy spaces very naturally. Third, it provides a vehicle for answering questions about the achievements of representative democracy. We study, in particular, whether representative democracy produces efficient outcomes.

Bessaha, Abdelrahmi

TI Regional Integration in Eastern and Southern Africa: The Cross-Border Initiative and its Fiscal Implications. AU Bakoup, Ferdinand; Bessaha, Abdelrahmi; Errico, Luca.

Bevan, David

PD May 1995. TI Fiscal Implications of Trade Liberalization. AA St. John's College, University of Oxford, and International Monetary Fund. SR International Monetary Fund Working Paper: 95/50; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE D58, E63, F13, F41. KW Foreign Exchange. Trade Liberalization. Budget Deficit.

AB This paper examines the relationship between trade liberalization and the budget deficit, which depends on the specifics of a country's economic structure, and the trade regime which is being liberalized. It relates some popular but incomplete approaches to assessing this issue (such as analysis of the foreign exchange budget) to a more comprehensive approach using an applied general equilibrium model. The argument is illustrated using data from the most recent of a sequence of abortive planned liberalizations in Kenya, as well as a number of stylized illustrations. The conclusions are not only that liberalization may be budget enhancing, but that in certain circumstances it may be strongly so.

Binmore, Ken

PD April 1995. TI Mudding Through Noisy Equilibrium Selection. AU Binmore, Ken; Samuelson, Larry. AA Binmore: University College London. Samuelson: University of Wisconsin. SR University College London Discussion Paper: 95/05; Department of Economics, University College London, Gower Street, London WC1E, England. PG 37. PR 3.00 pounds. JE C71, D83. KW Equilibrium Selection. Mutation. Risk Dominance. Evolutionary Games.

AB We examine an evolutionary model in which the primary source of "noise" that moves the model between equilibria is not random, arbitrarily improbable mutations but mistakes in learning. We find conditions under which the risk-dominant equilibrium in a 2 * 2 game is selected by the model as well as conditions under which the payoff-dominant equilibrium is selected. We also find that waiting times until the limiting distribution is reached can be shorter than in a mutation-driven model. We present comparative static results as well as a "two-tiered" evolutionary model in which the rules by which agents learn to play the game are themselves subject to evolutionary pressure.

Bjorklund, Anders

PD March 1995. TI Generating Equality and Eliminating Poverty the Swedish Way. AU Bjorklund, Anders; Freeman, Richard. AA Bjorklund: Stockholm University. Freeman: Harvard University and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 228; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 69. PR no charge. JE J30, J60. KW Sweden. Income Distribution. Transfer Programs. Benefits. Disability. Reform.

AB Sweden has a remarkable record in reducing inequality and virtually eliminating poverty. This paper shows that: 1) Sweden achieved its egalitarian income distribution and eliminated poverty largely because of its system of earnings and income determination, not because of homogeneity of the population nor of its educational system. 2) In the job market Sweden is distinguished by a relatively egalitarian distribution of hours of work among those employed, which may be an

interrelated part of the Swedish economic system, and until the recent recession, by a high employment rate. 3) Tax and transfer policies contribute substantially to Sweden's overall distribution record. In contrast to many social welfare systems, Sweden's is largely a workfare system, providing benefits for those with some work activity. 4) Part of Sweden's historic success in maintaining jobs for low wage workers while raising their wages resulted from policies that directly or indirectly buttress demand for low skill workers, notably through public sector employment. 5) Sweden's tax and transfer policies have maintained the position of lower income workers and families, including those with children, during its recent economic decline.

Blackorby, Charles

PD April 1994. TI The Aggregation and Disaggregation of Efficiency Indices. AU Blackorby, Charles; Russell, R. Robert. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/12; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG not available. PR not available. JE C81, D21, D24. KW Efficiency Indices. Aggregation.

AB Empirical papers measuring technical efficiency, based primarily on the conceptual approach of Debreu [1951], as first implemented by Farrell [1957], now number in the hundreds. These studies are applied at many levels of aggregation--at the individual branch, plant, division, or district level; at the company-or organization-wide level; at the industry or sectoral level; or at the economy-wide level. The question we address in this note is the extent to which these studies at various levels of aggregation can be consistent with one another--that is, the extent to which efficiency indices can be consistently aggregated (say, across plants to obtain a company-wide index) or disaggregated (from the company level down to the plant level). The practical implications of our result for consistent aggregation and disaggregation of efficiency indices are discouraging. The indices must be functionally equivalent to each other and to a linear function. The form of the efficiency index depends not just on the measurement rule, but also on the form of the technology.

PD April 1994. TI Two Notes on Budgeting. AU Blackorby, Charles; Russell, R. Robert. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/13; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG not available. PR not available. JE H11, H61, D21. KW Budget. Decentralization. Proportional Budgeting.

AB Governments, universities, and other not-for-profit organizations frequently employ two-potentially incongruent-budgeting procedures: proportional budgeting and decentralization. The former entails allocating budget increments or decrements uniformly across divisions or sectors of the organization. The latter requires each division to spend its allocation optimally from the point of view of the organization as a whole. Given an organization with a well-behaved objective function facing parametric prices, the necessary and sufficient conditions for the optimality of each of these procedures (separately) have long been known. The first of these notes provides necessary and sufficient conditions for the joint optimality of proportional budgeting and decentralization. The second note extends Gorman's [1959] classic result on two-stage budgeting to encompass the two-group cases that he assumed away. The proof, which exploits

unpublished and recently published results not available to Gorman in 1959, makes it apparent that the entire structure needed for two-stage budgeting is, in fact, embedded in the two-group case.

PD June 1994. TI Variable-Population Bargaining Problems: Single-Series and Single-Parameter Gini Solutions. AU Blackorby, Charles; Bossert, Walter; Donaldson, David. AA Blackorby and Donaldson: University of British Columbia. Bossert: University of Waterloo. SR University of British Columbia, Department of Economics: 94/18; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 20. PR not available. JE C78. KW Bargaining. Gini Orderings. Variable Population.

AB On the basis of variable-population considerations, we characterized multi-valued bargaining solutions that are rationalized by special cases of the generalized Gini orderings. In addition to some fixed-population axioms, we use versions of the well-known consistency principle to characterize the single-series Gini bargaining solutions and some of their subclasses (including the utilitarian solution). By adding a replication invariance condition, we provide a characterization of the single-parameter Gini solutions.

PD September 1994. TI Leximin Population Ethics. AU Blackorby, Charles; Bossert, Walter; Donaldson, David. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/30; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 22. PR not available. JE D63, D71. KW Leximin. Population Ethics. Social Evaluation.

AB This paper provides characterizations of the Critical-Level Leximin and Positional-Extension Leximin principles for social-evaluation in an intertemporal framework. These rules generalize fixed-population Leximin and can compare social alternatives with different population sizes. The main axioms used in our characterizations are Hammond equity together with independence of the utilities of the dead (a plausible intertemporal consistency requirement) for the Critical-Level Leximin principles, and positional leximin consistency (an axiom that allows non-constant critical levels) for the Positional-Extension Leximin principle. The performance of these principles is compared in the pure population problem and we argue that the Critical-Level Leximin principles are ethically more attractive than Positional-Extension Leximin.

Blanchard, Olivier

TI The Behaviour of State Firms in Eastern Europe, Pre-Privatisation. AU Aghion, Philippe; Blanchard, Olivier; Burgess, Robin.

Blendell, Richard

PD February 1995. TI Individual Effects and Dynamics in Count Data Models. AU Blendell, Richard; Griffith, Rachel. AA University College London. SR University College London Discussion Paper: 95/03; Department of Economics, University College London, Gower Street, London WC1E, England. PG 30. PR 3.00 pounds. JE C23, C25, O31. KW Panel Data. Autoregressive Models. Patents. R&D.

AB The aim of this paper is to examine the properties of dynamic count data models. We propose the use of a linear feedback model (LFM), based on the Integer Valued Autoregressive (INAR) class, for panel data application with

weakly exogenous regressors. In these models the conditional mean is modeled linearly in the history of the process with a log-link in the exogenous variables and the individual effect. We explore the quasi-differencing GMM approach to eliminating fixed effects as well as a method which exploits the availability of unbalanced out-of-sample information to approximate the fixed effects. These ideas are illustrated using panel data on US R&D expenditures and patents. It is found that modeling the dynamics through an integer AR component, rather than a distributed lag in R&D, indicates a slower impact of R&D investment on patents than had previously been found.

Bodart, Vincent

PD August 1995. TI Labor Market Representation in Quantitative Macroeconomic Models for Developing Countries: An Application to Cote d'Ivoire. AU Bodart, Vincent; Le Dem, Jean. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/87; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 30. PR not available. JE O17, O18, J21. KW Labor Market. Developing Countries. Cote d'Ivoire.

AB This paper presents a quantitative macroeconomic model that accounts for key features of the labor market in developing countries. Primarily inspired by Cote d'Ivoire, the model contrasts a formal urban sector, where wages are rigidly fixed and employment is submitted to firms' profit-seeking behavior, to urban and rural informal sectors, where wages are flexible and employment is affected by fluctuations in formal sector employment. Dynamic simulations assess the impact on key macroeconomic variables of a terms of trade improvement, a public wage decrease, and an exchange rate adjustment, highlighting the roles of rural-urban migrations and capital accumulation in the informal urban sector.

Bodnar, Gordon M.

TI Are Exchange Rates Excessively Volatile? And What Does "Excessively Volatile" Mean, Anyway? AU Bartolini, Leonardo; Bodnar, Gordon M.

Bonin, John P.

PD April 1995. TI Banks, Firms, Bad Debts and Bankruptcy in Hungary 1991-94. AU Bonin, John P.; Schaffer, Mark E. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 234; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 89. PR no charge. JE G21, G33, P10, P42, P51. KW Bank. Bankruptcy. Bureaucracy. Hungary. Privatization.

AB The paper examines Hungary's experience with banking and bankruptcy reform in the period 1992-94. The first part of the paper uses enterprise-level data to show that in 1992, the same year in which the amount of classified loans in the state-owned commercial banks grew enormously, the proportion of total bank credit held by highly-unprofitable firms hardly changed. The inference from this is that the rapid growth of bad debt in 1992 was not the result of a "flow problem" (new bad lending) but rather represented the emergence of an inherited "stock problem" (pre-existing loans to inherited troubled clients). The paper then considers Hungary's 1992 bankruptcy reform, and in particular the novel "automatic trigger" which required firms to file for bankruptcy if they had a payable of any size, owed to anybody, overdue 90 days or more. The paper

argues that the bankruptcy experiment was flawed on two counts. First, one of the key motivations for introducing the automatic trigger--a perceived problem with financial discipline and with interenterprise credit in particular--was largely unfounded. Second, the automatic trigger experiment was costly because the effect on firms which were forced to file for bankruptcy led to chains of disrupted trade relations which rippled through the economy. Evidence from a 1994 survey of 200 manufacturing firms shows that a majority of the surveyed firms had been involved in bankruptcies as creditors, and had lost not only sales but also suppliers as a result. The last part of the paper looks at the Hungarian government's bank recapitalization and enterprise bailout programs, arguing that they were poorly structured, overly bureaucratic, and susceptible to lobbying by firms looking to be "rescued". The paper concludes with a number of lessons: don't "shake things up" without being sure of the possible consequences; don't overestimate the capacities of bureaucratic procedures and undeveloped asset markets when designing debt workout programs; and don't underestimate the ability of market agents (banks and firms) to enforce financial discipline of each other if incentives are properly structured.

Border, Kim C.

PD April 1995. TI Preferences Over Solutions to the Bargaining Problem. AU Border, Kim C.; Segal, Uzi. AA Border: California Institute of Technology. Segal: University of Western Ontario. SR Caltech Social Science Working Paper: 923; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 21. PR no charge. JE C72, C78. KW Bargaining. Nash Bargaining Solution. Mixture Symmetry.

AB There are several solutions to the Nash bargaining problem in the literature. Since various authors have expressed preferences for one solution over another, we find it useful to study preferences over solutions in their own right. We identify two sets of appealing axioms on such preferences that lead to unanimity in the choice of solution. Thus bargainers may be able to reach agreement on which solution to employ. Under the first set of axioms, the Nash solution is preferred to any other solution, while under the second set, a new solution, which we call the weighted linear solution, is best.

Borenstein, Severin

PD February 1995. TI Do Airplanes in Chapter 11 Harm Their Rivals?: Bankruptcy and Pricing Behavior in U.S. Airline Markets. AU Borenstein, Severin; Rose, Nancy L. AA Borenstein: U.C. Energy Institute and National Bureau of Economic Research. Rose: Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5047; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 20. PR \$5.00. JE D49, K39. KW Airline. Bankruptcy. Chapter 11.

AB The behavior of firms in financial distress has attracted considerable academic and policy interest in recent years. The turmoil in the U.S. airline industry has triggered much of the public policy discussion, as some observers have argued that airlines in financial distress, particularly those operating under Chapter 11 bankruptcy protection, reduce prices to the point of harming themselves and their competitors. This study

investigates the pricing strategies of bankrupt airlines and their rivals. The data suggest that an airline's prices typically decline somewhat before it files for bankruptcy protection and remain slightly depressed over the subsequent two or three quarters. We find no evidence that competitors of the bankrupt airline lower their prices, however, nor that they lose passengers to their bankrupt rival. These results indicate that bankrupt carriers do not harm the financial health of their competitors.

Borjas, George J.

PD December 1994. TI *The Economic Benefits from Immigration*. AA University of California, San Diego and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4955; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$5.00. JE F22. KW Immigration. Benefit to Natives. Production Complementarity.

AB Natives benefit from immigration mainly because of production complementarities between immigrant workers and other factors of production, and these benefits are larger when immigrants are sufficiently "different" from the stock of native productive inputs. The available evidence suggests that the economic benefits from immigration for the United States are small, on the order of \$6 billion and almost certainly less than \$20 billion annually. These gains, however, could be increased considerably if the United States pursued an immigration policy which attracted a more skilled immigration flow.

Bossert, Walter

TI *Variable-Population Bargaining Problems: Single-Series and Single-Parameter Gini Solutions*. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI *Leximin Population Ethics*. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

Bound, John

TI *The Illusion of Failure: Trends in the Self-Reported Health of the U.S. Elderly*. AU Waidmann, Timothy; Bound, John; Schoenbaum, Michael.

Boyd, John H.

PD February 1995. TI *Are Banks Dead? Or Are The Reports Greatly Exaggerated?*. AU Boyd, John H.; Gertler, Mark. AA Boyd: Federal Reserve Bank of Minneapolis. Gertler: New York University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5045; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE G11, G21, G24. KW Balance Sheet. Bank. Commercial Bank.

AB This paper reexamines the conventional wisdom that commercial banking is an industry in severe decline. We find that a careful reading of the evidence does not justify this conclusion. It is true that on-balance sheet assets held by commercial banks have declined as a share of total intermediary assets. But this measure overstates any drop in banking, for three reasons. First, it ignores the rapid growth in commercial banks' off-balance sheet activities. Second, it fails to take account of the substantial growth in off-shore C&I lending by foreign banks. Third, it ignores the fact that over the last several decades financial intermediation has grown rapidly

relative to the rest of the economy. We find that after adjusting the measure of bank assets to account for these considerations there is no clear evidence of secular decline. To corroborate these findings, we also construct an alternative measure of the importance of banking, using data from the national income accounts. Again, we find no clear evidence of a sustained decline. At most the industry may have suffered a slight loss of market share over the last decade. But as we discuss, this loss may reflect a transitory response to a series of adverse shocks and the phasing in of new regulatory requirements, rather than the beginning of a permanent decline.

Brander, James A.

PD August 1994. TI *International Trade and Open Access Renewable Resources: The Small Open Economy Case*. AU Brander, James A.; Taylor, M. Scott. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/25; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 36. PR not available. JE F11, F12, Q21. KW Trade. Environment. Sustainability. Natural Resources.

AB This paper develops a two-sector general equilibrium model of an economy with an open access renewable resource. We characterize the autarkic steady state, showing that autarky prices (and "comparative advantage") are determined by the ratio of intrinsic resource growth to labor. Under free trade, steady state trade and production patterns for a small open economy are determined by whether the resource good's world price exceeds its autarky price. Strikingly, if the small country exports the resource good while remaining diversified, then steady-state utility is lower than in autarky, and increases in the world price of exports are welfare-reducing.

PD February 1995. TI *Strategic Trade Policy*. AA University of British Columbia and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5020; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 69. PR \$5.00. JE F12, F13. KW Mercantilism. Reciprocal Market. Strategic Trade.

AB This paper reviews the literature on strategic trade policy. *Strategic trade policy* is defined as trade policy that conditions or alters a strategic relationship between firms, implying that strategic trade policy focuses primarily on trade policy in the presence of oligopoly. The key point is that strategic relationships between firms introduce additional motives for trade policy, over and above terms of trade and other effects that arise in all market structures. I demonstrate this general point using a simple game theoretic framework, then present the major results of strategic trade policy using two models: the "third market" model, in which oligopolistic firms in two exporting nations export the good in question exclusively to a third country; and the "reciprocal markets" model, in which firms in two countries compete in each others' markets. The paper makes the well-known point that slight differences in model structure can give rise to strikingly different trade policy implications, but also seeks to emphasize the robust general points that emerge from the literature.

PD February 1995. TI *International Trade and Open Access Renewable Resources: The Small Open Economy Case*. AU Brander, James A.; Taylor, M. Scott. AA Brander: University of British Columbia and National Bureau of Economic Research. Taylor: University of British Columbia.

SR National Bureau of Economic Research Working Paper: 5021; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 35. PR \$5.00. JE F13. KW Autarky. Mercantilism. Open Economy. Renewable Resource.

AB This paper develops a two-sector general equilibrium model of an economy with an open access renewable resource. We characterize the autarkic steady state, showing that autarky prices (and "comparative advantage") are determined by the ratio of intrinsic resource growth to labor. Under free trade, steady state trade and production patterns for a small open economy are determined by whether the resource good's world price exceeds its autarky price. Strikingly, if the small country exports the resource good while remaining diversified, then steady-state utility is lower than in autarky, and increases in the world price of exports are welfare-reducing.

Brock, William A.

PD January 1995. TI A Dynamic Structural Model for Stock Return Volatility and Trading Volume. AU Brock, William A.; LeBaron, Blake D. AA Brock: University of Wisconsin, Madison. LeBaron: University of Wisconsin, Madison and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4988; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR \$5.00. JE C22, G15. KW Stock Return Volatility. Trading Volume.

AB This paper seeks to develop a structural model that can let data on asset returns and trading volume speak to whether volatility autocorrelation comes from the fundamental that the trading process is pricing, or is caused by the trading process itself. Returns and volume data argue, in the context of our model, that persistent volatility is caused by traders experimenting with different belief systems based upon past profit experience and their estimates of future profit experience. A major theme of our paper is to introduce adaptive agents in the spirit of Sargent (1993) but have them adapt their strategies on a time scale that is lower than the time scale on which the trading process takes place. This will lead to positive autocorrelation in volatility and volume on the time scale of the trading process which generates the returns and volume data. Positive autocorrelation of volatility and volume is caused by persistence of strategy patterns that are associated with high volatility and high volume. At a rough level, the model is able to qualitatively reproduce the following features seen in the data: (i) The autocorrelation function of a measure of volatility such as squared returns or absolute value of returns is positive with a slowly decaying tail. (ii) The autocorrelation function of a measure of trading activity such as volume or turnover is positive with a slowly decaying tail. (iii) The cross correlation function of a measure of volatility such as squared returns is approximately zero for squared returns with past and future volumes and is positive for squared returns with current volumes. (iv) Abrupt changes in prices and returns occur which are hard to attach to "news." The last feature is obtained by a version of the model where the Law of Large Numbers fails in the large economy limit.

Buckberg, Elaine

PD August 1995. TI Wage Dispersion in the 1980s: Resurrecting the Role of Trade Through the Effects of Durable Employment Changes. AU Buckberg, Elaine; Thomas, Alun.

AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/88; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 17. PR not available. JE J31. KW Employment. Investment. Wage Dispersion.

AB This paper finds that changes in durable manufacturing employment and investment in computer equipment can explain rising wage dispersion in the United States, measured in terms of the education premium. Reduced employment opportunities in durables production drive down the average wage for workers with only a high school education, thereby increasing the wage premium for college education. An innovation in this paper is the inclusion of investment in equipment as a proxy for skill-biased technical change. The rise in the technical skill premium could alone explain all of the rise in the college premium since 1979 were there no offsetting effects.

Buiter, Willem H.

PD April 1995. TI Generational Accounts, Aggregate Saving and Intergenerational Distribution. AA University of Cambridge and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 237; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 39. PR no charge. JE E62, E44, E21, H62. KW Generational Accounts. Intergenerational Redistribution. Saving. Public Debt.

AB Are generational accounts informative about the effect of the budget on the intergenerational distribution of resources and (when augmented with generation-specific propensities to consume out of life-time resources) on aggregate consumption and saving? The paper makes three points. First, the usefulness of generational accounts lives or dies with the strict life-cycle model of household consumption. Voluntary intergenerational gifts or liquidity constraints may therefore adversely affect or even destroy their informativeness. Second, even when the life-cycle model holds, generational accounts only measure the effect of the budget on the life-time consumption of private goods and services. They ignore the intergenerational (re-)distribution associated with the government's provision of public goods and services. Third, generational accounting ignores the effect of the budget on before-tax and before-transfer quantities and prices, including before-tax and -transfer distribution of life-time resources across generations and intertemporal relative prices. That is, it does not handle incidence or general equilibrium repercussions very well. That is, it does useful, generational accounts should therefore carry the label "handle with great care".

PD May 1995. TI Capital Mobility, Fiscal Policy and Growth Under Self-Financing of Human Capital Formation. AU Buiter, Willem H.; Kletzer, Kenneth. AA Buiter: University of Cambridge, London School of Economics, Centre for Economic Policy Research, and National Bureau of Economic Research. Kletzer: University of California, Santa Cruz. SR London School of Economics, Centre for Economic Performance Discussion Paper: 245; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 41. PR no charge. JE E62, F43, O40. KW Endogenous Growth. Capital Mobility. Convergence. Borrowing Constraints.

AB This paper considers the effects of fiscal and financial policy on economic growth in open and closed economies,

when human capital formation by young households is constrained by the illiquidity of human wealth. Both endogenous and exogenous growth versions of the basic OLG model are analyzed. We find that intergenerational redistribution policies that discourage physical capital formation may encourage human capital formation. Despite common technologies and perfect international mobility of financial capital, the non-tradedness of human capital and the illiquidity of human wealth make for persistent differences in productivity growth rates (in the endogenous growth version of the model) or in their levels (in the exogenous growth version). We also consider the productivity growth (or level) effects of public spending on education and of the distortionary taxation of financial asset income.

PD June 1995. TI A Center-Periphery Model of Monetary Coordination and Exchange Rate Crisis. AU Buitier, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo. AA Buitier: University of Cambridge, London School of Economics, Centre for Economic Policy Research, and National Bureau of Economic Research. SR London School of Economics, Centre for Economic Performance Discussion Paper: 246; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 34. PR no charge. JE F21, F31, F32, F33. KW Inflation. Pegged Exchange Rate. Periphery Country.

AB This paper analyzes the modalities and consequences of a breakdown of cooperation between monetary authorities of inflation-prone Periphery Countries that use an exchange rate peg as an anti-inflationary device, when the Center is hit by an aggregate demand shock. Cooperation in the Periphery is constrained to be symmetric: costs and benefits must be equal for all. Our model suggests that there are at least two ways in which a generalized crisis of the exchange rate system may emerge. The first is when the constrained cooperative response of the Periphery is a moderate common devaluation while the non-cooperative equilibrium has large devaluations by a few countries. An exchange rate crisis emerges if Periphery countries give in to their individual incentives to renege on the cooperative agreement. In the second case, the Center shock is not large enough to trigger a general devaluation in the constrained cooperative equilibrium; yet some of the Periphery countries would devalue in the Nash equilibrium, making the monetary stance in the system more expansionary. In this case, reversion to Nash is collectively rational. We offer this model as a useful parable for interpreting the collapse of ERM in 1992-93.

PD June 1995. TI Budgetary Aspects of Stabilization and Structural Adjustment in India: The Painful Road to a Sustainable Fiscal-Financial-Monetary Plan. AU Buitier, Willem H.; Patel, Urjit. AA Buitier: Cambridge University and London School of Economics. Patel: International Monetary Fund. SR London School of Economics, Centre for Economic Performance Discussion Paper: 247; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 69. PR no charge. JE H60, E62. KW India. Fiscal Adjustment. Domestic Debt. Stabilization.

AB This study updates and extends to the period 88/89-92-93 our earlier analysis of the public finances of India. With the collapse of the communist regimes in the former Soviet Union and Eastern Europe, India found itself, by early 1991, in the unenviable position of having possibly the most over-regulated economic system in the world. In addition, there has been,

during the eighties, a break with India's long tradition of fiscal prudence. Following the foreign exchange crisis of 1991, the government implemented a package of restrictive fiscal and monetary measures and a, by Indian standards, ambitious program of structural adjustment and reform of the Union budget, of regulation and licensing, of the domestic financial sector and of international trade and international financial relations. As regards the magnitude of the fiscal corrections that were undertaken, our conclusion is that it was insufficient. Continuations of past and present expenditure and revenue patterns would result in a steady increase in the public debt-GDP ratio and in the discounted value of the public debt. Inflationary financing of the "primary" gap is not a viable option. We calculate that a further permanent increase in the public sector primary surplus of about four and a half points of GDP is needed to achieve the modest objective of stabilizing the public debt-GDP ratio. On the revenue side, this necessary increase in the primary surplus is best achieved by expanding the direct and indirect tax bases and improving tax administration, collection and enforcement. On the expenditure side, reductions in the general government wage bill (by reductions in employment rather than by public sector wage cuts), in fertilizer subsidies, in some (but not all) food subsidies and in operating and capital subsidies to public sector enterprises are recommended. For efficiency reasons and to support the proposed expenditure cuts, the overwhelming majority of the public sector enterprises should be cut off from further government subsidies and be privatized or corporatized.

PD August 1995. TI Macroeconomic Policy During a Transition to Monetary Union. AA University of Cambridge, London School of Economics, Centre for Economic Policy Research, and National Bureau of Economic Research. SR London School of Economics, Centre for Economic Performance Discussion Paper: 261; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 54. PR no charge. JE F30, E52, G15, E42, E63. KW Monetary Union. Optimal Currency Area. European Union.

AB The main conclusions of the paper are the following: 1) In order to minimize switching costs, the name of the new EU currency should be the D-mark. 2) Differential national requirements for seigniorage revenue provide a weak case for retaining national monetary independence. 3) From the point of view of adjustment to asymmetric shocks, nominal exchange rate flexibility is at best a limited blessing and at worst a limited curse. 4) Inter-state labor mobility in the USA does not compensate for the absence of state-level exchange rate flexibility. 5) The absence of significant inter-member fiscal redistribution mechanisms in the EU is not an obstacle to monetary union. 6) Convergence or divergence in real economic performance is irrelevant for monetary union. 7) A common currency is the logical implication of unrestricted international mobility of financial capital. 8) The Maastricht criteria are unlikely to hinder monetary union. 9) There are no convincing economic objections left to monetary union in the EU.

Bulii, Ales

PD August 1995. TI Inflation and Income Distribution: Further Evidence on Empirical Links. AU Bulii, Ales; Gulde, Anne-Marie. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/86; International Monetary Fund, 700 19th Street, Washington, DC

20431. PG 16. PR not available. JE D31, E25, E31, O15. KW Inflation. Income Distribution. Financial Instability.

AB This paper examines the effects of inflation and associated financial instability on income distribution. Using both pooled cross country and single country time series models, the level of inflation, inflation variability, and the variability of the nominal exchange rate are shown to impact negatively on overall income equality. Looking at disaggregate measures of income distribution, the issue as to whether inflation is a progressive or regressive tax is found to be negatively correlated with the level of development and the sophistication of the financial structure. The paper argues that these results point towards financial variables as a partial way of rectifying the generally poor explanatory power of both cross-country and time series models of income distribution.

Burgess, Robin

TI The Behaviour of State Firms in Eastern Europe, Pre-Privatisation. AU Aghion, Philippe; Blanchard, Olivier; Burgess, Robin.

PD January 1995. TI Chinese Rural Household Expenditure Analysis. AU Burgess, Robin; Ping, Wang Ping. AA Burgess: Oxford University and London School of Economics. Ping: London School of Economics and State Statistical Bureau, China. SR London School of Economics, Programme of Research into Economic Transformation and Public Finance: EF/13; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 60. PR no charge. JE C14, C21, D12, O12. KW China. Expenditure Analysis. Consumption Behavior.

AB We use household data for three Chinese provinces--Sichuan, Liaoning and Jiangsu--for the years 1988-1990 to examine the pattern and determinants of consumption behavior of Chinese rural households. These provinces differ strongly in terms of location, per capita income and expenditure, and degree of rural industrialization and degree of inequality. Patterns of change of mean budget shares for ten key categories of expenditure both across years and living standard (per capita expenditure) deciles are first examined. Nonparametric density regression analysis is then employed to examine underlying distributions and to relate budget shares to proxies of household living standard. Food is found to constitute the main item of expenditure with average food shares lying above fifty percent for all provinces. Nonparametric regression analysis reveals a clear pattern of substitution away from food expenditure towards housing expenditure as living standards rise. In the final part we use Working-Leser type parametric Engel curves to examine how both living standards and household composition affect demands for different types of goods. The demographic composition of households is found to be an important determinant of consumption behavior in Chinese rural households.

Burgess, Simon M.

TI Empirical Matching Functions: Estimation and Interpretation Using Disaggregate Data. AU Anderson, Patricia M.; Burgess, Simon M.

Caballero, Ricardo J.

PD February 1995. TI Aggregate Employment Dynamics: Building From Microeconomic Evidence. AU Caballero, Ricardo J.; Engel, Eduardo M.R.A.;

Haltiwanger, John. AA Caballero: Massachusetts Institute of Technology and National Bureau of Economic Research. Engel: National Bureau of Economic Research. Haltiwanger: University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5042; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$5.00. JE E24, E32, J23. KW Adjustment Cost. Employment. Non-Convexity. Non-Linearity.

AB This paper studies quarterly employment flows of approximately 10,000 large U.S. manufacturing establishments during 1972:1-1980:4. After estimating the extent of short run microeconomic substitution between employment and hours per worker (hours-week), we construct measures of the path of the deviation between actual and desired employment based on the observed behavior of establishments' hours-week. These deviations are then used as the state variables upon which units decide their employment adjustments (microeconomic policy). Using this framework we obtain the following conclusions: (i) Microeconomic employment adjustment policies are non-linear, with firms adjusting to large deviations proportionally more than to small ones. (ii) Employment adjustments are often either large or nil, suggesting the presence of non-convexities in the adjustment cost technologies. (iii) Between 60 and 90 percent of aggregate employment fluctuations is due to change in the cross sectional distribution of employment deviations, while the remainder is due to changes in microeconomic policies. (iv) The bulk of net aggregate employment fluctuations due to changes in the cross sectional distribution is accounted for by aggregate shocks. This holds in spite of significant fluctuations in the distribution is accounted for by aggregate shocks. This holds in spite of significant fluctuations in the distribution of idiosyncratic shocks and the marked countercyclical nature of their second moment (i.e. reallocation shocks). (v) Similarly, the bulk of net aggregate employment fluctuations due to change in microeconomic policies is accounted for by aggregate shocks. (vi) Aggregate shocks are also the dominant source of job destruction, but account for less than half of the fluctuations in job creation. (vii) A simple parametric version of the aggregate model suggested by the microeconomic nonlinearities described above has a mean square error 50 percent lower than that of its linear counterpart.

Calcott, Paul E.

PD November 1994. TI Health Plan Competition and the Costs of Employer Provided Health Insurance. AA University of California, Los Angeles. SR University of California, Los Angeles Working Paper Series: 721; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 17. PR \$5.00. JE I11. KW Health Insurance. Employer. Managed Competition.

AB Some employers offer their employees a choice of competing health plans. This might foster competition and keep their health insurance premiums down. Alternatively it could lead to duplication of administration costs and to biased selection, resulting in increased costs. The effect of employee choice on health insurance premiums is estimated using data from the Health Insurance Association of America and the Bureau of Health Professions. The estimation accounts for selection bias with Heckman two-step methods. The results suggest that employee choice reduces premiums of conventional plans, at least for large employers, but not premiums of Health Maintenance Organizations.

Calvo, Guillermo A.

PD May 1995. TI Capital Flows in Central and Eastern Europe: Evidence and Policy Options. AU Calvo, Guillermo A.; Sahay, Ratna; Vegh, Carlos A. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/57; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 32. PR not available. JE F41, G12, G15. KW Exchange Rates. Capital Flows. Europe.

AB This paper examines the nature and composition of capital flows in selected countries in Central and Eastern Europe during 1987-93. The data show that there was a remarkable turnaround in the capital account in 1992-93. This improvement was accompanied by widening current account deficits, an increase in real consumption, and real exchange rate appreciation. In light of these developments, the paper discusses the main macroeconomic concerns raised by capital inflows and lays out the principal policy options relevant for the transition economies.

Campbell, John Y.

PD January 1995. TI By Force of Habit: A Consumption-Based Explanation of Aggregate Stock Market Behavior. AU Campbell, John Y.; Cochrane, John H. AA Campbell: Harvard University and National Bureau of Economic Research. Cochrane: University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4995; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 46. PR \$5.00. JE G12, G13, G14, G15. KW Consumption, Habit Persistence, Stock Market.

AB We present a consumption-based model that explains the procyclical variation of stock prices, the long-horizon predictability of excess stock returns, and the countercyclical variation of stock market volatility. Our model has an i.i.d. consumption growth driving process, and adds a slow-moving external habit to the standard power utility function. The latter feature produces cyclical variation in risk aversion, and hence in the prices of risky assets. Our model also predicts many of the difficulties that beset the standard power utility model, including Euler equation rejections, no correlation between mean consumption growth and interest rates, very high estimates of risk aversion, and pricing errors that are larger than those of the static CAPM. Our model captures much of the history of stock prices, given only consumption data. Since our model captures the equity premium, it implies that fluctuations have important welfare costs. Unlike many habit-persistence models, our model does not necessarily produce cyclical variation in the risk free interest rate, nor does it produce an extremely skewed distribution or negative realizations of the marginal rate of substitution.

PD February 1995. TI Some Lessons From the Yield Curve. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5031; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 20. PR \$5.00. JE E43, G12, H63. KW Expectations Hypothesis. Term Structure. Yield Curve.

AB This paper reviews the literature on the relation between short- and long-term interest rates. It summarizes the mixed evidence on the expectations hypothesis of the term structure: when long rates are high relative to short rates, short rates tend

to rise as implied by expectations hypothesis, but long rates tend to fall which is contrary to the expectations hypothesis. The paper discusses the response of the U.S. bond market to shifts in monetary policy in the spring of 1994, and reviews the debated over the optimal maturity structure of the U.S. government debt.

Campbell, Thomas J.

PD January 1995. TI The Causes and Effects of Liability Reform: Some Empirical Evidence. AU Campbell, Thomas J.; Kessler, Daniel P.; Shepherd, George B. AA Campbell and Shepherd: Stanford University. Kessler: Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4989; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR \$5.00. JE D72, K13, O31. KW Conservatism. Employment. Liability. Productivity.

AB We provide empirical evidence both on the caused and the effects of liability reforms. Using a newly collected data set of state tort laws and a panel data set containing industry-level data by state for the years 1969-1990, we (1) identify the characteristics of states that are associated with liability reforms and (2) examine whether liability reforms influence productivity and employment. We present two central findings. First, reductions in liability levels are associated with increases in measured productivity and employment in most industries that we studied. Second, liability reforms that reduce legal liability are generally positively correlated with measures of political conservatism.

Canziani, Patrizia

PD March 1995. TI The Italian Public Pension System: Current Prospects and Reform Options. AU Canziani, Patrizia; Demekas, Dimitri G. AA Canziani: Massachusetts Institute of Technology and International Monetary Fund. Demekas: International Monetary Fund. SR International Monetary Fund Working Paper: 95/33; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE H53, H55. KW Pension Funds. Italy.

AB Public pension expenditure in Italy has been growing rapidly in the last three decades and is now among the highest in industrialized countries. Despite recent reforms, benefits remain generous by international standards and, unless additional measures are taken, the financial situation of the system will deteriorate in the long term. The paper reviews the current system, its history, and its prospects, and examines through simulations the long-run effects of alternative pension reform options.

Carlton, Dennis W.

PD January 1995. TI Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?. AU Carlton, Dennis W.; Epstein, Roy J.; Bamberger, Gustavo E. AA Carlton: University of Chicago and National Bureau of Economics. Epstein: Analysis Group, Inc. Bamberger: Lexecon, Inc. SR National Bureau of Economic Research Working Paper: 4998; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 35. PR \$5.00. JE Antitrust. Education. Non-Profit. Rule of Reason. KW K21, L13, L31, L41, L44.

AB In 1991, the Antitrust Division sued MIT and the eight

schools in the Ivy League under Section 1 of the Sherman Act for engaging in a conspiracy to fix the prices that students pay. The Antitrust Division claimed that the schools conspired on financial aid policies in an effort to reduce aid and raise their revenues. The schools justified their cooperative behavior by explaining that it enabled them to concentrate aid on only those in need and thereby helped the schools to achieve their goals of need-blind admission coupled with financial aid to all needy admittees. This paper analyzes the empirical determinants of tuition and finds that the schools' agreement had no effect on average tuition paid. The paper also analyzes the appropriate application of the antitrust laws to not-for-profit institutions. The Court of Appeals found that it is appropriate for the courts to consider non-profit institutions' justification for collective action (in this case, to enable the poor to attend school) under a Rule of Reason. The Court of Appeals overturned the District Court's opinion against MIT, citing the failure of the District Court to properly apply the Rule of Reason.

Carrasquilla, Alberto

PD April 1995. **TI** Exchange Rate Bands and Shifts in the Stabilization Policy Regime: Issues Suggested by the Experience of Colombia. **AA** Central Bank of Colombia and International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/42; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** F31, F41. **KW** Exchange Rates. Inflation. Colombia.

AB After 25 years, the Colombian authorities decided to abandon the crawling peg exchange rate policy and implement a regime of nominal exchange rate bands. Initial conditions in Colombia contrast sharply with those of other cases in which bands were part of an ongoing effort to reduce high inflation. This paper argues that the change in regime was motivated by a change in policy objectives. Starting from a policy whose rationale implied targeting stable inflation, a simple analytical model of optimal policy is presented; initial results with the new regime suggest that inflation is now considered costlier and that policy implementation has been consistent with this new view.

Case, Anne

TI Unnatural Experiments? Estimating the Incidence of Endogenous Policies. **AU** Besley, Timothy; Case, Anne.

Cashin, Paul

PD March 1995. **TI** Paradise Lost? Growth, Convergence and Migration in the South Pacific. **AU** Cashin, Paul; Loayza, Norman. **AA** Cashin; International Monetary Fund. Loayza; The World Bank and International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/28; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** F22, O47, O56. **KW** Growth. Steady State. Convergence. South Pacific.

AB This paper examines the determinants of growth for nine South Pacific countries during the period 1971-93, using the analytical framework of the Solow-Swan neoclassical growth model. Chamberlain's II-matrix estimator is used to account for unobserved country-specific heterogeneity in the growth process, and to control for errors-in-variables bias in calculations of real per-capita GDP. The speed of convergence of South Pacific countries to their respective steady-state levels of per-capita GDP, after controlling for the important regional

effects of net international migration, is estimated at a relatively fast 4 percent per year. In addition, private and official transfers emanating from regional donor countries have kept the dispersion of real per-capita national disposable income constant over the period, despite a significant widening in the regional dispersion of real per-capita GDP.

PD June 1995. **TI** Informational Efficiency in Developing Equity Markets. **AU** Cashin, Paul; McDermott, C. John. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/58; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 21. **PR** not available. **JE** C52, E21, G12. **KW** Asset Prices. Equity Market. Informational Efficiency.

AB The issue of informational efficiency in the evolution of asset prices is examined using data on equity markets in Jordan, Turkey, and Pakistan over the period 1986-93. The analysis is carried out in two steps. The parameters of agents' dynamic consumption and investment decisions are first estimated, and then the implied equity market price, based on market fundamentals, is compared with the actual evolution of equity market prices. While the informational efficiency of each of the three markets is found to be deficient, the causes of market inefficiency are varied. For Jordan it appears that a large negative shock to economic activity in the late 1980s caused agents to discount market fundamentals. For Turkey and Pakistan it is likely that institutional and legal rigidities in equity and banking markets resulted in these markets being illiquid, although this lack of market depth did reduce in severity for Turkey over the sample period, as liberalization of financial markets occurred.

PD July 1995. **TI** Internal Migration, Center-State Grants and Economic Growth in the States of India. **AU** Cashin, Paul; Sahay, Ratna. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/66; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** O41, O47, O53, R11. **KW** Economic Growth. Convergence. India.

AB This paper examines the growth experience of twenty states of India during the period 1961-91, using cross-sectional estimation and the analytical framework of the Solow-Swan neoclassical growth model. We find evidence of absolute convergence--initially-poor states did indeed grow faster than their initially-rich counterparts. There has also been a widening of the dispersion of real per capita state incomes over the period 1961-91. However, relatively more grants were transferred from the central government to the poor states than to their rich counterparts. Significant barriers to population flows also exist, as net migration from poor to rich states responded only weakly to cross-state income differentials.

Catao, Luis

PD April 1995. **TI** Recession and Recovery in the United Kingdom in the 1990s: A Vector Autoregression Approach. **AU** Catao, Luis; Ramaswamy, Ramana. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/40; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 14. **PR** not available. **JE** E32, C32. **KW** Recession. Demand Shocks. Vector Autoregression.

AB This paper uses a vector autoregression (VAR) approach to identify the causes of the 1990-92 recession in the UK. The VAR approach is shown to be particularly pertinent for

quantifying the relative magnitude of the different demand shocks, and in decomposing them into monetary and expectational factors. The main findings are that the recent recession was precipitated primarily by shocks to consumption and that monetary factors explain just part of this contraction. The VAR model also offers interesting insights about the long run duration of the recession and the nature of the recovery that is currently underway.

Cecchetti, Stephen G.

PD February 1995. **TI** Do Firms Smooth the Seasonal in Production in a Boom? Theory and Evidence. **AU** Cecchetti, Stephen G.; Kashyap, Anil K.; Wilcox, David W. **AA** Cecchetti: Boston College and National Bureau of Economic Research. Kashyap: University of Chicago and National Bureau of Economic Research. Wilcox: Board of Governors of the Federal Reserve. **SR** National Bureau of Economic Research Working Paper: 5011; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** \$5.00. **JE** D21, E32. **KW** Business Cycle. Production. Seasonalization. Smoothing. **AB** Using disaggregated production data we show that the size of seasonal cycles changes significantly over the course of the business cycle. In particular, during periods of high economy-wide activity, some industries smooth seasonal fluctuations while others exaggerate them. We interpret this finding using a simple analytical model that describes the conditions under which seasonal and cyclical fluctuations can be separated. Our model implies that seasonal fluctuations can safely be disentangled from cyclical fluctuations only when the marginal cost of production is linear, and the variation in demand and cost satisfy certain (restrictive) conditions. The model also suggests that inventory movements can be used to isolate the role of demand shifts in generating any interaction between seasonal cycles and business cycles. Thus, the empirical analysis involves studying the variation in seasonally unadjusted patterns of production and inventory accumulation over different phases of the business cycle. Our finding that seasons shrink during booms and that firms carry more inventories into high sales seasons during a boom leads us to conclude that for several industries, marginal cost slopes up at an increasing rate. Conversely, in a couple of industries we find that seasonal swings in production are exaggerated during booms and that inventories are drawn down prior to high sales seasons, suggesting that marginal costs curves flatten as production increases. Overall, we find considerable evidence that there are non-linear interactions between business cycles and seasonal cycles.

Chalkley, Martin

PD May 1995. **TI** Contracting for Health Services with Unmonitored Quality. **AU** Chalkley, Martin; Malcomson, James M. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9510; Department of Economics, University of Southampton, Southampton S09 5NH, England. **PG** 32. **PR** no charge. **JE** I11. **KW** Health. Contracts. Service Quality.

AB Paying for health services by setting a fixed price per treatment has the obvious intuitive appeal of a market mechanism and is administratively simple. This paper shows that fixed price contracts for health services can induce treatment of efficient numbers at efficient quality levels and

with efficient effort to reduce costs, without the need to directly monitor either quality or effort, under more general conditions than those suggested in the existing literature. It also draws attention to the limitations of this result. One limitation is that the result applies only if it is efficient to treat all those who want to be treated. In other circumstances, which will typically apply when patients do not pay directly for treatment, a more complicated contract is required. An efficient outcome can still be achieved if it is possible to reward providers for the number of patients wanting treatment, as well as for the number actually treated. A second and more severe limitation is that, when as in practice there are many aspects to quality, the result only applies if patients value the balance between different dimensions of quality in the same way as the purchaser. There are many reasons why this might not be true, in which case some monitoring of quality would seem essential. The analysis points to the dimensions of quality it is most important to monitor.

PD June 1995. **TI** Contracts and Competition in the NHS. **AU** Chalkley, Martin; Malcomson, James M. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9513; Department of Economics, University of Southampton, Southampton S09 5NH, England. **PG** 21. **PR** no charge. **JE** I11, I18. **KW** Competition. Contracts. Health Services.

AB One key element in the recent reforms of the NHS is the separation of purchasers from providers, with provision of services governed by contracts between them. A second key element is competition between providers. We discuss the potential roles for competition between providers and assess their significance and implications for the NHS. We also discuss how the amount and quality of services provided is influenced by the form of contract used and how competition interacts with this.

PD June 1995. **TI** Contracting for Health Services When Patient Demand Does Not Reflect Quality. **AU** Chalkley, Martin; Malcomson, James M. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9514; Department of Economics, University of Southampton, Southampton S09 5NH, England. **PG** 18. **PR** no charge. **JE** I11, I18. **KW** Health. Contracts. Service Quality.

AB There are many circumstances in which the quality of health services may not be fully reflected in patient demand. This paper analyses contracts to maintain quality and keep down costs under these circumstances. It shows that there is a natural role for forms of contract that have emerged during the reforms of the NHS in Britain that differs from pure fixed price or cost reimbursement contracts. The optimal form depends on whether the provider is entirely self-interested or is benevolent in having genuine concern for the welfare of patients. For a fully benevolent provider there is a role for block and cost and volume contracts. For a partially benevolent provider, some degree of cost sharing is typically optimal.

Chaloupka, Frank J.

PD February 1995. **TI** Price, Tobacco Control Policies and Smoking Among Young Adults. **AU** Chaloupka, Frank J.; Wechsler, Henry. **AA** Chaloupka: University of Illinois at Chicago and National Bureau of Economic Research. Wechsler: Harvard School of Public Health. **SR** National

Bureau of Economic Research Working Paper: 5012; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 25. PR \$5.00. JE D12, I12, I18. KW Cigarettes. Price Control. Smoking. Tobacco.

AB The effects of cigarette prices and tobacco control policies (including restrictions on smoking in public places and limits on the availability of tobacco products to youths) on cigarette smoking among youths and young adults are estimated using data from a nationally representative survey of students in U.S. colleges and universities. Smoking participation rates, the quantity of cigarettes smoked by smokers, and level of smoking equations are estimated using appropriate econometric methods. The estimates indicate that college students are quite sensitive to the price of cigarettes, with an average estimated price elasticity of smoking participation of -0.66 and an overall average estimated price elasticity of cigarette smoking of -1.43. In addition, relatively stringent restrictions on smoking in public places are found to reduce smoking participation rates among college students, while the quantity of cigarettes consumed by smokers is lowered by any restrictions on public smoking. Finally, limits on the availability of tobacco products to underage youths have no effect on college students, almost all of whom can legally purchase these products.

Chand, Sheetal K.

PD March 1995. **TI** Poverty Alleviation in a Financial Programming Framework: An Integrated Approach. **AU** Chand, Sheetal K.; Shome, Parthasarathi. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/29; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 19. **PR** not available. **JE** E31, E62, H62, I31, I38. **KW** Financial Programming. Poverty. Balance of Payments. Inflation.

AB Poverty alleviation is typically addressed in financial programming through additive programs that target vulnerable groups but without modifying the underlying stabilization and adjustment targets. Instead, this paper integrates the poverty alleviation objective into the financial programming framework using a well-known poverty index. In consequence, the assessment of trade-offs between competing objectives is facilitated. A simulation demonstrates how the integrated approach can reduce adverse effects on poverty and improve the balance of payments, although at the cost, temporarily, of a higher fiscal deficit and inflation.

Chick, Victoria

PD December 1994. **TI** Competition and the Future of the European Banking and Financial System. **AU** Chick, Victoria; Dow, Sheila. **AA** Chick: University of College London. Dow: University of Stirling. **SR** University College London Discussion Paper: 94/16; Department of Economics, University College London, Gower Street, London WC1E, England. **PG** 32. **PR** 3.00 pounds. **JE** G21, O52, R11. **KW** European Integration. Banking. Economic Development.

AB This paper considers the consequences of increased competition in European banking. The starting-point is one of diversity both in stage of development and other characteristics of national banking systems. Increased competition is predicted to restructure European banking in such a way as to reduce the local monopoly power of small local banks, but increase the market power of the large money center banks. As

a result, while the banking system as a whole will be more unconstrained in its power to create credit, some constraints on credit availability to certain classes of borrowers will be preserved, and additional constraints introduced. These classes include small firms, particularly in peripheral regions, with the consequence of promoting increased divergence in the regional pattern of economic growth in Europe.

Chipty, Tasneem

PD December 1994. **TI** Economic Effects of Quality Regulations in the Daycare Industry. **AU** Chipty, Tasneem; Witte, Ann Dryden. **AA** Chipty: Ohio State University. Witte: Wellesley College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4953; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 8. **PR** \$5.00. **JE** D45, J13, K23, L51. **KW** Child Care. Licensing. Regulation.

AB We estimate reduced form models to discern the effect of state regulation on the quality of center and family day care. Specifically, we consider the effects of the number of mandated inspections, limits on group size and staff/child ratio, and staff training requirements on equilibrium price and hours of care and the quality of care as measured by the actual staff/child ratio. The specification of the reduced form model is derived from an eight equation market model for wages and work hours, type of child care chosen, price and hours of care and a set of hedonic equations for the characteristics of care. The results indicate strongly that child care regulations do affect equilibrium price, hours of care, and staff/child ratios. Child care regulations are binding. In equilibrium, only regulations regarding staff training appear to have consistently desirable effects. Such regulations decrease equilibrium price and hours of care and increase the staff/child ratio for both centers and family day care. Regulations of group size and the staff/child ratio have significant effects, but the welfare implications of the effects are more ambiguous. Tax deductions and subsidies for child care have similarly ambiguous welfare effects. For example, households that take a tax deduction for child care pay higher prices for care, consume more hours of care and consume higher quality day care.

Clark, Peter

PD July 1995. **TI** Capacity Constraints, Inflation and the Transmission Mechanism: Forward-Looking Versus Myopic Policy Rules. **AU** Clark, Peter; Laxton, Douglas; Rose, David. **AA** Rose: Bank of Canada. Clark and Laxton: International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/75; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 27. **PR** not available. **JE** C51, E31, E52. **KW** Inflation. Output. Monetary Policy.

AB This paper develops a small model of the output-inflation process in the United States in order to examine the implications of alternative monetary policy rules. In particular, two types of policy rules are considered; a myopic rule where interest rates respond contemporaneously to output and inflation and a forward-looking policy rule that exploits information about the nature of transmission mechanism in the setting of interest rates. The model has two key features. First, there are significant lags between interest rates and aggregate demand conditions. Second, the model is based on an asymmetric model of inflation where positive deviations of

aggregate demand from potential are more inflationary than negative deviations are disinflationary. As a consequence of this asymmetry, a policymaker that follows a myopic policy rule and allows the economy to overheat periodically will be forced to impose large recessions on the economy to keep inflation under control. The paper shows that the estimated degree of asymmetry implies that myopic policies can result in significant permanent losses in output. By contrast, policymakers that follow a forward-looking policy rule that avoids overheating will not only reduce the variance of output but also raise the mean level of output.

PD July 1995. **TI** Asymmetry in the U.S. Output-Inflation Nexus: Issues and Evidence. **AU** Clark, Peter; Laxton, Douglas; Rose, David. **AA** Rose: Bank of Canada. Clark and Laxton: International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/76; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 33. **PR** not available. **JE** C51, E31, E52. **KW** Inflation. Output. Recessions.

AB This paper presents empirical evidence supporting the proposition that there is a significant asymmetry in the U.S. output-inflation process, which implies that excess demand conditions are much more inflationary than excess supply conditions are disinflationary. The important policy implication of this asymmetry is that it can be very costly if the economy overheats because this will necessitate a severe tightening in monetary conditions in order to reestablish inflation control. The small model of the U.S. output-inflation process developed in the paper shows that the seeds of large recessions, such as that in 1981-82, are planted by allowing the economy to overheat. This type of asymmetry implies that the measure of excess demand which is appropriate in estimating the Phillips curve cannot have a zero mean; instead, this mean must be negative if inflation is to be stationary. The paper also shows that a failure to account for this important implication of asymmetry can explain why some other researchers may have been misled into falsely accepting the linear model. The empirical results presented in the paper show that the conclusions regarding asymmetry are robust to a number of tests for sensitivity to changes in the method used to estimate potential output and in the specification of the Phillips curve.

Clements, Benedict

PD September 1995. **TI** Government Subsidies: Concepts, International Trends, and Reform Options. **AU** Clements, Benedict; Hugounenq, Rejane; Schwartz, Gerd. **AA** Clements and Schwartz: International Monetary Fund. Hugounenq: DELTA/ENS and International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/91; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** H22. **KW** Government Subsidies. Fiscal Policy.

AB This paper addresses the problems of defining and measuring government subsidies, examines why and how government subsidies are used as a fiscal policy tool, assesses their economic effects, appraises international empirical evidence on government subsidies, and offers options for their reform. Recent international trends in government subsidy expenditure are analyzed for the 16-year period from 1975 to 1990, using general government subsidy data for 60 countries from the System of National Accounts (SNA) and central government expenditure on subsidies and other current transfers for 68 countries from Government Finance Statistics

(GFS). The paper reviews major policy options for subsidy reform, focusing on ways to improve the cost-effectiveness of subsidy programs.

Coate, Stephen

TI An Economic Model of Representative Democracy. **AU** Besley, Timothy; Coate, Stephen.

Cochrane, John H.

TI By Force of Habit: A Consumption-Based Explanation of Aggregate Stock Market Behavior. **AU** Campbell, John Y.; Cochrane, John H.

Coe, David T.

PD December 1994. **TI** North-South R&D Spillovers. **AU** Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander W. **AA** Coe and Hoffmaister: International Monetary Fund. Helpman: Tel-Aviv University and CIAR. **SR** Tel-Aviv Foerder Institute for Economic Research Working Paper: 32/94; The Eitan Berglas School of Economics, Tel-Aviv University. **PG** 40. **PR** not available. **JE** O31, O33, O41. **KW** R&D. North-South. Spillovers.

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

Cogley, Timothy

TI Testing the Implications of Long Run Neutrality for Monetary Business Cycle Models. **AU** Nason, James M.; Cogley, Timothy.

TI Technical Appendix: Testing the Implications of Long Run Neutrality for Monetary Business Cycle Models. **AU** Nason, James M.; Cogley, Timothy.

PD August 1994. **TI** Output Dynamics in Real Business Cycle Models. **AU** Cogley, Timothy; Nason, James M. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/28; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 48. **PR** not available. **JE** E32, C52. **KW** Business Cycles. Mean Reversion. Adjustment Costs.

AB The time series literature reports two stylized facts about output dynamics in the United States: GNP growth is positively autocorrelated, and GNP appears to have an important trend-reverting component. This paper investigates whether current real business cycle models are consistent with these stylized facts. Many RBC models have weak internal propagation mechanisms and must rely on external sources of dynamics to replicate both facts. Models that incorporate labor adjustment costs are partially successful. They endogenously generate positive autocorrelation in output growth, but they need implausibly large transitory shocks to match the trend-reverting

component in output.

PD August 1994. **TI** Technical Appendix: Output Dynamics in Real Business Cycle Models. **AU** Cogley, Timothy; Nason, James M. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/29; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 30. **PR** not available. **JE** E32, C52. **KW** Business Cycles. Linear Approximation. Simulation.

AB This technical appendix describes the real business cycle models we study as well as the methods to solve and simulate these models. The solution methods involve various linearization techniques. Analysis of the models consists of visual inspection of the theoretical autocorrelation and impulse response functions implied by the real business cycle models. Further, our analysis compares the sample and theoretical autocorrelation and impulse response functions using Monte Carlo methods.

Copeland, Brian R.

PD May 1994. **TI** Quality-Biased Technical Progress and North-South Trade. **AU** Copeland, Brian R.; Kotwal, Ashok. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/15; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 20. **PR** not available. **JE** F12, O31, O33. **KW** North-South Trade. Technical Progress. Quality-Differentiation.

AB This paper investigates the welfare effects on the South of quality-biased technical progress in the North's export sector. The North exports a quality-differentiated good, while the South exports a homogeneous good. We find that if Northern technical progress is quality-neutral, the South must gain, but if technical progress is sufficiently biased towards high quality goods, the South can lose. This is in contrast to the case of homogeneous goods, where the South must always gain from technical progress in the North's export sector if both goods are normal.

Corsetti, Giancarlo

TI A Center-Periphery Model of Monetary Coordination and Exchange Rate Crisis. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo.

Cosh, Andy

PD September 1995. **TI** Failures, Acquisitions and Post-Merger Success: The Comparative Financial Characteristics of Large and Small Companies. **AU** Cosh, Andy; Hughes, Alan. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP18; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 41. **PR** \$10.00. **JE** D20, L11, L20. **KW** Failures. Acquisitions. Takeovers. Mergers. Small Firms.

AB This paper analyses on a univariate and multivariate basis the financial characteristics of companies which are acquired with those which fail, and compares both in turn with those companies which survive in the UK company sector 1977-82. The effect of acquisition on post merger performance is also examined. The sample analyzed covers the whole of the UK company sector and allows comparison between the largest and smallest companies. Acquired companies are shown to be less distinguishable from surviving companies than are failing firms, and acquisition has an insignificant effect on profitability.

Larger firms which failed or were acquired were significantly worse performers than the small failing or acquired firms.

PD September 1995. **TI** Executive Remuneration Executive Dismissal and Institutional Shareholdings. **AU** Cosh, Andy; Hughes, Alan. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP19; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 34. **PR** \$10.00. **JE** G30, D21, D23, L20. **KW** Executive Pay. Executive Dismissal. Institutional Shareholdings. Company Performance.

AB This paper examines the links between executive pay, executive dismissals and company characteristics. Specific attention is paid to the role of institutional investors and non-executive directors in influencing pay/performance relationships. The analysis shows that in the UK Electrical Engineering Industry in the period 1989-94 pay was positively related to both shareholder welfare measures (profitability and share returns) and to size but that the latter was the most significant influence. The probability of executive dismissal was higher the smaller was company size and the lower was profitability. The presence or absence of institutions as major shareholders made no appreciable difference to either the level of pay or the likelihood of dismissal, or the sensitivity of either to shareholder performance or size.

PD October 1995. **TI** Manufacturing, the Balance of Payments and Capacity. **AU** Cosh, Andy; Coutts, Kenneth; Hughes, Alan. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP12; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 34. **PR** \$10.00. **JE** E17, E22, F40, L60. **KW** Investment. Capacity. Employment. Balance of Payments. Britain.

AB The paper examines the contribution manufacturing industry must make if Britain is to restore full employment in the foreseeable future. The main contribution will be to create a more favorable trade-off between growth and external deficits. Estimates are given of the likely improvement in manufacturing net exports which would be necessary to bring a sustained reduction in unemployment without persistent external deficits. The paper provides estimates of the extra growth of output and manufacturing investment expenditure in additional capacity necessary to accompany faster growth of manufacturing production.

Cottarelli, Carlo

PD April 1995. **TI** Bank Lending Rates and Financial Structure in Italy: A Case Study. **AU** Cottarelli, Carlo; Ferri, Giovanni; Generale, Andrea. **AA** Cottarelli: International Monetary Fund. Ferri and Generale: Bank of Italy. **SR** International Monetary Fund Working Paper: 95/38; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** E43, E44, E52, E58. **KW** Financial Structure. Bank Lending. Italy.

AB This paper discusses the relation between the financial structure and the determination of bank lending rates in Italy. It notes that the high degree of stickiness of bank lending rates observed in Italy in the past was related to constraints on competition within the banking and financial markets. In this light, it discusses the effect on the lending rate determination

process of the sweeping financial liberalization process that characterized the last few years. The paper discusses also the role of the discount rate in speeding up the adjustment process of bank interest rates, and the pros and cons of its possible indexation. The empirical analysis is characterized by use of microeconomic (individual bank) data for a group of 63 Italian banks operating in locally different financial environments. This approach allows the identification of some aspects of the relation between financial structure and lending rate stickiness that were not highlighted in previous studies.

Coutts, Kenneth

PD February 1995. TI Employment in the United Kingdom: Trends and Prospects. AU Coutts, Kenneth; Rowthorn, Robert E. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP3; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 25. PR \$10.00. JE E66, J23, J60. KW Unemployment. Employment. Inequality. Labor.

AB The paper examines the increasing diversity of the UK labor market recently with the spread of part-time and self-employment, the large entry of married women into the labor market and fall in activity rates of older men. There has also been increasing inequality resulting from greater unemployment, open and disguised, and insecurity for some together with a much wider dispersion of earnings. If the current recovery in the demand for jobs can be sustained, unemployment should fall substantially over the next decade but remain above the unemployment rates of 1950-73. The paper suggests additional measures to reduce unemployment further.

TI Manufacturing, the Balance of Payments and Capacity. AU Cosh, Andy; Coutts, Kenneth; Hughes, Alan.

Cowell, Frank

PD May 1994. TI How much Inequality can We Explain? A Methodology and an Application to the USA. AU Cowell, Frank; Jenkins, Stephen. AA London School of Economics. SR London School of Economics, Distributional Analysis Research Programme: DARP/7; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 24. PR no charge. JE D31, D63. KW Inequality. Decomposition.

AB We develop two simple measures of how much inequality is explained by individual population characteristics or groups of characteristics, analogous to R-squared in regression analysis. We investigate the measures' empirical implementation using several alternative theoretically consistent approaches to inequality decomposition. Results are illustrated using US PSID income data.

PD May 1994. TI Robustness Properties of Poverty Indices. AU Cowell, Frank; Victoria-Feser, Maria-Pia. AA London School of Economics. SR London School of Economics, Distributional Analysis Research Programme: DARP/8; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 19. PR no charge. JE C13, D65. KW Poverty. Inequality. Robustness. Influence Function.

AB Drawing on recent work concerning the statistical robustness of inequality statistics we examine the sensitivity of

poverty indices to data contamination using the concept of the influence function. We show that poverty and inequality indices have fundamentally different robustness properties, and demonstrate that an important commonly used subclass of poverty measures will be robust under data contamination. We investigate both the case where the poverty line is exogenously fixed and where it must be estimated from the data.

TI Inequality Among the Kibbutzim. AU Amiel, Yoram; Cowell, Frank; Polovin, Avraham.

TI The Measurement of Poverty: An Experimental Questionnaire Investigation. AU Amiel, Yoram; Cowell, Frank.

PD October 1994. TI Monotonicity, Dominance and the Pareto Principle. AU Cowell, Frank; Amiel, Yoram. AA London School of Economics. SR London School of Economics, Distributional Analysis Research Programme: DARP/6; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 8. PR no charge. JE D31, D63. KW Monotonicity. Pareto Superiority. Income Dominance.

AB We examine the implications of three similar criteria that are commonly used in welfare economics and the analysis of inequality and poverty--income dominance, monotonicity and the Pareto principle--within the context of income distribution comparisons. We show that while there is a simple logical relationship between the first two criteria, the third is neither implied by nor implies the other two unless an assumption of individual indifference to income distribution is made.

Crucini, Mario J.

TI Business Cycles and the Asset Structure of Foreign Trade. AU Baxter, Marianne; Crucini, Mario J.

De Fontenay, Patrick

PD February 1995. TI The Role of Foreign Currency Debt in Public Debt Management. AU De Fontenay, Patrick; Milesi-Ferretti, Gian Maria; Pill, Huw. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/21; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE F34, H63. KW Public Debt. Currency. Debt Management.

AB This paper analyzes the choice between public debt denominated in domestic currency and foreign currency in the context of public debt management theories. It discusses the experience of Belgium, Denmark, Ireland, Italy, New Zealand, and Sweden and relates it to the theoretical arguments in favor or against the issuance of foreign currency debt.

De Masi, Paula

PD May 1995. TI Relative Price Convergence in Russia. AU De Masi, Paula; Koen, Vincent. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/54; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE E31, P22, R32. KW Exchange Rates. Prices. Russia.

AB Following price and exchange rate liberalization, domestic consumer prices in Russia moved closer to market levels. This paper quantifies the magnitude of the associated relative price changes. It also shows that relative price variability has been positively correlated with inflation. It is further established that convergence toward international

relative and absolute price levels is far from complete, and that geographical price dispersion within Russia has declined since early 1992 but remains fairly high.

Deakin, S.

PD September 1995. TI Contracts, Cooperation and Trust: The Role of the Institutional Framework. AU Deakin, S.; Wilkinson, F. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP10; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 32. PR \$10.00. JE L60, L14, L22. KW Contracts. Cooperation. Trust. Vertical Linkages.

AB This paper examines the nature of contractual cooperation within and between firms in vertical supply chains. We suggest that such cooperation should be conceptualized not as a consequence of but as an alternative to market-based competition between economic agents. The quality of cooperation between agents is then dependent upon the presence of norms, conventions and other institutional arrangements which foster 'trust', particularly by controlling the process of competition through product and labor-market standards. One implication is that arrangements which are commonly condemned as collusive or restrictive may, for this reason, have important efficiency-enhancing effects.

Demekas, Dimitri G.

TI The Italian Public Pension System: Current Prospects and Reform Options. AU Canziani, Patrizia; Demekas, Dimitri G.

Devereux, Michael B.

PD August 1994. TI Growth, Convergence, and Risk-Sharing with Incomplete International Asset Markets. AU Devereux, Michael B.; Saito, Makoto. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/24; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 37. PR not available. JE F36, F41, G15. KW Risk-Sharing. Incomplete Markets. Growth. Convergence.

AB This paper develops a general equilibrium model of limited international asset trade in a two-country setting. In the model, only non-contingent claims can be traded in international asset markets. The paper has three main results. First, it establishes a simple and intuitive condition for the existence of a non-degenerate stationary distribution of world wealth; this condition requires the country with the highest expected growth rate under autarky to have the lowest autarky risk-free interest rate. Second, the paper compares welfare across regimes. It is shown that when a stationary wealth distribution exists, a small country may actually do better in a regime of incomplete asset trade than under complete markets. Third, the paper shows that in an environment of incomplete markets, capital controls may either increase or decrease world growth.

Dicks-Mireaux, Louis

PD September 1995. TI The Macroeconomic Effects of ESAF-Supported Programs: Revisiting Some Methodological Issues. AU Dicks-Mireaux, Louis; Mecagni, Mauro; Schadler, Susan. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/92;

International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE E65, F33. KW Growth. Debt Service. Inflation.

AB This paper examines whether ESAF-supported programs during 1986-91 had significant independent effects on growth, inflation and the external debt service ratio. Econometric estimates of the Generalized Evaluation Estimator (GEE) identify statistically significant beneficial effects on output growth and the debt service ratio but no effects on inflation. The robustness of these estimates is also examined. Diagnostic tests cast doubt on the applicability of the GEE framework to the ESAF-eligible countries, and the results obtained using it.

Diewert, W. Erwin

PD October 1994. TI Functional Form Problems in Modelling Insurance and Gambling. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/31; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 20. PR not available. JE D81, C21, C43, C44. KW Non-expected Utility. Insurance. Gambling. Consumer Demand.

AB Defining the outputs of the property insurance and gambling sectors of an economy has proved to be a difficult problem for national income accountants. It is well known that the traditional expected utility model is not consistent with economic agents fully insuring their property. Thus the present paper adapts existing non-expected utility theories to yield useful measures of output for the property insurance and gambling sectors.

PD October 1994. TI The Deadweight Costs of Taxation in New Zealand. AU Diewert, W. Erwin; Lawrence, Denis A. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/32; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 19. PR not available. JE C51, D12, D24, E62, H21. KW General Equilibrium Model. Deadweight Loss. Taxation.

AB The paper constructs a small (static) general equilibrium model for New Zealand. Flexible functional form techniques were used in order to estimate supply and demand elasticities. These estimates were used to construct estimates of the marginal efficiency costs of increasing various taxes. Over the last twenty years, these efficiency costs associated with increasing consumption taxation grew from 4.9 percent to 18.3 percent of the revenue raised and those associated with increasing labor taxation grew from 5.3 percent to 18.3 percent. These increases in marginal excess burdens were due to increases in tax as well as increases in elasticities of substitution.

Donaldson, David

TI Variable-Population Bargaining Problems: Single-Series and Single-Parameter Gini Solutions. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Leximin Population Ethics. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

Dooley, Michael P.

PD December 1994. TI A Retrospective on the Debt Crisis. AA University of California, Santa Cruz and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4963; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge,

MA 02138. PG 40. PR \$5.00. JE F34, G28. KW Banking Policy. Debt Crisis. International Debt.

AB In this paper I argue that the international debt crisis of 1982 can best be understood as a prolonged negotiation between commercial banks and their own governments over who would bear the economic losses generated by loans made to developing countries. This interpretation of the debt crisis is contrasted with the more familiar approach that emphasizes conflict between debtor countries and their creditors. The main conclusion is that the failure of governments of industrial countries to resolve this conflict with their banks transformed an unremarkable financial crisis into a decade-long economic crisis for debtor countries. The analysis also suggests that recent capital inflows to developing countries are less likely to generate the same economic costs for debtor countries even if changes in the economic environment generate similar losses for investors.

Dow, Sheila

TI Competition and the Future of the European Banking and Financial System. AU Chick, Victoria; Dow, Sheila.

Doyle, Chris

TI The Access Pricing Problem: A Synthesis. AU Armstrong, Mark; Doyle, Chris; Vickers, John.

Drees, Burkhard

PD June 1995. TI The Nordic Banking Crises: Pitfalls in Financial Liberalization? AU Drees, Burkhard; Pazarbasioglu, Ceyla. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/61; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 51. PR not available. JE E44, G21, G28. KW Deregulation. Banking Crises. Risk Management. Financial Systems.

AB This paper examines the recent banking crises in Finland, Norway, and Sweden in an attempt to draw some policy conclusions from their experiences. In all three countries, the timing of deregulation coincided with a strongly expansionary macroeconomic momentum. Delayed policy responses, as well as structural characteristics of the financial systems, and banks' inadequate internal risk management controls were important determinants of the consequences of the transition from tightly regulated to more or less competitive financial systems. In the absence of strengthened prudential banking supervision, these incentives coupled with expectations of government intervention in the event of a crisis prompted many Nordic banks to increase their lending excessively.

Dunn, Thomas A.

TI An Intergenerational Model of Wages, Hours and Earnings. AU Altonji, Joseph G.; Dunn, Thomas A.

Dustmam, Christian

PD April 1995. TI Generalized Switching Regression Analysis of Private and Public Wage Structures in Germany. AU Dustmam, Christian; Van Soest, Arthur. AA Dustmam: University College London. Van Soest: Telberg University, Netherlands. SR University College London Discussion Paper: 95/06; Department of Economics, University College London, Gower Street, London WC1E, England. PG 30. PR 3.00 pounds. JE C34, J31. KW Switching Regression. Public Choice. Wage Differentials. Germany.

AB This paper analyzes wage structures in the public and the private sector for Germany. The data contains a rich set of variables on parents' characteristics that we use as instruments. We extend the empirical literature in this field by endogenizing education level and hours worked, and by using life cycle wage differentials in the structural selection equation. We show that these extensions significantly improve the standard model. Moreover, they lead to considerably different parameter estimates. We compute conditional and unconditional wage predictions for the various specifications using model simulations. We find that, on average, potential wages in the private sector exceed those in the public sector. Those actually working in the public sector, would do somewhat better in the private sector, while those working in the private sector would earn much less in the public sector.

Eaton, Curtis

PD August 1994. TI Technology-Trading Coalitions in Supergames. AU Eaton, Curtis; Eswaran, Mukesh. AA Eaton: Simon Fraser University. Eswaran: University of British Columbia. SR University of British Columbia, Department of Economics: 94/23; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 30. PR not available. JE O33, L11, L14. KW Technology Trading. Rivalry. Collusion.

AB This paper attempts to explain the observation that rival firms often share their technologies instead of viewing technological knowledge in purely proprietary terms. It is shown that the trading of mutually beneficial technical information over the long haul can be sustained as an equilibrium in supergames. It is demonstrated that the strategy of ejection of a cheating firm from a technology-trading coalition, followed by the continuation of technology-trading by the non-cheating members, better facilitates trading than does a strategy in which cheating results in the dissolution of the coalition. Technology-trading turns out often to be welfare-improving. It is seen that all firms in an industry would not necessarily form a single, technology-trading coalition; fragmentation of an industry into smaller coalitions may be more the rule.

Eaton, Jonathan

PD October 1994. TI International Patenting and Technology Diffusion. AU Eaton, Jonathan; Kortum, Samuel. AA Boston University. SR Boston University, Department of Economics Working Paper: 30; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 42. PR no charge. JE F43, O14, O31, O34, O41. KW Technology Diffusion. Research. Innovation. Patent.

AB We model the invention of new technologies and their diffusion across countries. Our model predicts that, eventually, all countries will grow at the same rate, with each country's productivity ranking determined by how rapidly it adopts inventions. The common growth rate depends on research efforts in all countries, while research effort is determined by how much inventions earn at home and abroad. Patents affect the return to invention. We relate the decision to patent an invention internationally to the cost of patenting in a country and to the expected value of patent protection in that country. We can thus infer the direction and magnitude of the international diffusion of technology from data on international patenting, productivity, and research. We fit the model to data

from the five leading research economies. The parameters indicate how much technology flows between these countries and how much each country earns from its inventions domestically and elsewhere. Our results imply that foreign countries are important sources of technology even though countries earn most of their return to innovation at home. For example, about half of U.S. productivity growth derives from foreign technology yet U.S. inventors earn 98 percent of the revenue from their inventions domestically.

PD February 1995. TI Trade in Ideas: Patenting and Productivity in the OECD. AU Eaton, Jonathan; Kortum, Samuel. AA Boston University. SR Boston University, Department of Economics Working Paper: 34; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 37. PR no charge. JE F43, O14, O31, O34, O41. KW Technology Diffusion. Innovation. Patent. Productivity. Research.

AB We develop and estimate a model of technological innovation and its contribution to growth at home and abroad. International patents indicate where innovations come from and where they are used. Countries grow at a common steady-state rate. A country's relative productivity depends upon its capacity to absorb technology. We estimate that, except for the United States, OECD countries derive almost all of their productivity growth from abroad.

PD May 1995. TI Sovereign Debt. AU Eaton, Jonathan; Fernandez, Raquel. AA Boston University. SR Boston University, Department of Economics Working Paper: 37; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 59. PR no charge. JE F34. KW Sovereign Debt. Reputation. Debt Overhang. Buybacks.

AB We review the literature on sovereign debt. We organize our survey around three central questions: (1) Why do sovereign debtors ever repay their debts? (2) What burdens, in the form of distortions and inefficiencies, does sovereign debt impose? and (3) How might debt be restructured to reduce these burdens? In grappling with the first question the literature has pointed to, and argued about, the roles of reputation, punishments, rewards, and renegotiation. In addressing the second the literature has asked whether sovereign debtors tend to borrow too much or too little, and how debt can distort the domestic economy. Answers to the third question include measures by creditors, by debtors, and by public institutions to reduce debt burdens.

Edlin, Aaron S.

PD February 1995. TI Holdups, Standard Breach Remedies, and Optimal Investment. AU Edlin, Aaron S.; Reichelstein, Stefan. AA Edlin: University of California, Berkeley and National Bureau of Economic Research. Reichelstein: University of California, Berkeley. SR National Bureau of Economic Research Working Paper: 5007; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR \$5.00. JE C78, D81, D82. KW Holdup. Incomplete Contracts. Investment.

AB We consider a bilateral trading problem in which one or both parties make relationship-specific investments before trade. Without adequate contractual protection, the prospect of later holdups discourages investment. We postulate that the parties can sign noncontingent contracts prior to investing, and

can freely renegotiate them after uncertainty about the desirability of trade is resolved. We find that such contracts can induce one party to invest efficiently when either a breach remedy of specific performance or expansion damages is applied. Expectation damages is, however, poorly suited to two-investor problems. Specific performance can induce both parties to invest efficiently, if a separability condition holds.

Edwards, Franklin R.

PD January 1995. TI The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy. AU Edwards, Franklin R.; Mishkin, Frederic S. AA Edwards: Columbia University. Mishkin: Federal Reserve Bank of New York and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4993; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR \$5.00. JE G21, G28. KW Banking. Financial Stability. Risk.

AB This paper outlines the fundamental economic forces that have led to the decline in traditional banking, that is the process of making loans and funding them by issuing short-dated deposits. The declining competitiveness of traditional banking may threaten financial stability by increasing bank failures and by increasing the incentives for banks to take on more risk, either by making more risky loans or by engaging in "nontraditional" financial activities that promise higher returns but greater risk. This paper argues that most nontraditional activities, such as banks acting as derivatives dealers, expose banks to risks and moral hazard problems that are similar to those associated with banks' traditional activities, and that these activities can be regulated as effectively as can traditional activities. One regulatory approach to maintain financial stability and strengthen the banking system is to adopt a system of structured bank capital requirements with early corrective action by regulators. An important element in this approach is that market-value accounting principles would be applied to banks and there would be increased public disclosure by banks of the risks associated with their trading activities. With this regulatory structure in place, banks could be permitted greater freedom to expand into nontraditional activities.

Eichengreen, Barry

TI The Stability of the Gold Standard and the Evolution of the International Monetary System. AU Bayoumi, Tamim; Eichengreen, Barry.

Eissa, Nada

PD February 1995. TI Taxation and Labor Supply of Married Women: The Tax Reform Act of 1986 As a Natural Experiment. AA University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5023; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR \$5.00. JE H24, J16, J21. KW Labor Supply. Women. Tax Reform Act.

AB This paper uses the Tax Reform Act of 1986 as a natural experiment to identify the labor supply responsiveness of married women to changes in the tax rate. The Tax Reform Act of 1986 reduced the top marginal tax rate by 44 percent (from 50 percent to 28 percent), but changes less the marginal tax rate for those further down the income distribution. I analyze the response of married women at or above the 99th percentile of

the income distribution, using as a control group women from the 75th percentile of the income distribution. I therefore identify the tax effect as the difference between the change in labor supply of women with large tax rate reductions and the change in labor supply of women with small tax rate reductions. I find evidence that the labor supply of high-income, married women increased due to the Tax Reform Act of 1986. The increase in total labor supply of married women at the top of the income distribution (relative to married women at the 75th percentile of the income distribution) implies an elasticity with respect to the after-tax wage of approximately 0.8. At least half of this elasticity is due to labor force participation. Use of a second control group supports the participation response but is inconclusive on the hours of work response.

Elmendorf, Douglas W.

TI The Deficit Gamble. AU Ball, Laurence; Mankiw, N. Gregory; Elmendorf, Douglas W.

Engel, Eduardo M.R.A

TI Aggregate Employment Dynamics: Building From Microeconomic Evidence. AU Caballero, Ricardo J.; Engel, Eduardo M.R.A.; Haltiwanger, John.

Engle, Robert F.

PD December 1994. TI Hedging Options in a GARCH Environment: Testing the Term Structure of Stochastic Volatility Models. AU Engle, Robert F.; Rosenberg, Joshua. AA Engle: University of California, San Diego and National Bureau of Economic Research. Rosenberg: University of California, San Diego. SR National Bureau of Economic Research Working Paper: 4958; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$5.00. JE C22, G11, G15. KW Black-Scholes. GARCH. Term Structure.

AB This paper develops a methodology for testing the term structure of volatility forecasts derived from stochastic volatility models, and implements it to analyze models of S&P 500 index volatility. Volatility models are compared by their ability to hedge options positions sensitive to the term structure of volatility. Overall, the most effective hedge is a Black-Scholes (BS) delta-gamma hedge, while the BS delta-hedge is the least effective. The most successful volatility hedge is GARCH components delta-gamma, suggesting that the GARCH components estimate of the term structure of volatility is most accurate. The successful of the BS delta-gamma hedge may be due to mispricing in the options market over the sample period.

PD December 1994. TI Forecasting Transaction Rates: The Autoregressive Conditional Duration Model. AU Engle, Robert F.; Russell, Jeffrey R. AA Engle: University of California, San Diego and National Bureau of Economic Research. Russell: University of California, San Diego. SR National Bureau of Economic Research Working Paper: 4966; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE C33. KW Conditional Duration. Clustering. Transaction Rate. Trade Volume.

AB This paper will propose a new statistical model for the analysis of data that does not arrive in equal time intervals such as financial transactions data, telephone calls, or sales data on commodities that are tracked electronically. In contrast to fixed

interval analysis, the model treats the time between observation arrivals as a stochastic time varying process and therefore is in the spirit of the models of time deformation initially proposed by Tauchen and Pitts (1983), Clark (1973) and more recently discussed by Stock (1988), Lamoureux and Lastrapes (1992), Muller et al. (1990) and Ghysels and Jasiak (1994) but does not require auxiliary data or assumptions on the causes of time flow. Strong evidence is provided for duration clustering beyond a deterministic component for the financial transactions data analyzed. We will show that a very simple version of the model can successfully account for the significant autocorrelations in the observed durations between trades of IBM stock on the consolidated market. A simple transformation of the duration data allows us to include volume in the model.

Epstein, Roy J.

TI Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?. AU Carlton, Dennis W.; Epstein, Roy J.; Bamberger, Gustavo E.

Erbas, S. Nuri

TI Excess Wages Tax. AU Tait, Alan A.; Erbas, S. Nuri.

Errico, Luca

TI Regional Integration in Eastern and Southern Africa: The Cross-Border Initiative and its Fiscal Implications. AU Bakoup, Ferdinand; Bessaha, Abdelrahmi; Errico, Luca.

Estrin, Saul

PD February 1995. TI The Provision of Social Benefits in State-Owned, Privatized and Private Firms in Poland. AU Estrin, Saul; Schaffer, Mark E.; Singh, I.J. AA Estrin: London Business School. Schaffer: London School of Economics. Singh: World Bank. SR London School of Economics, Centre for Economic Performance Discussion Paper: 223; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 27. PR no charge. JE D21, P51, J32. KW Firms. Transition Economies. Social Benefits.

AB We use evidence from a survey of approximately 200 Polish state-owned, privatized, and de novo private manufacturing firms to investigate the nature and scope of enterprise-level provision of social benefits, and in particular how enterprise-level social provision is changing with transition, privatization and the emergence of the new private sector. We find that social provision remains surprisingly widespread, and has not been greatly reduced in either the state-owned or the privatized sectors. De novo private firms offer a substantially smaller but still significant range of social benefits to workers and, if anything, they are tending to increase rather than reduce the scale of their provision. The other main determinants of the scale of social provision aside from ownership form are firm size and employee power (the latter not explicitly via the union structure), both of which are associated with higher levels of social provision. Money wages and the provision of social benefits appear to be complementary rather than substitutes. Assets used for the provision of social benefits are concentrated in state-owned firms, but there is relatively little social asset disposal; the de novo private sector is expanding the range of social benefits offered but is not investing significantly in social assets. Social provision has been declining in state-owned firms, less so in privatized firms, and increasing (modestly) in new private firms. On average the

decline in the state-owned and formerly state-owned sectors is surprisingly small. The key determinants of the pace of change aside from ownership form are the size of the firm and its profitability, both of which are associated with increases or slower declines in social provision; in the case of the state-owned sector, provision also declines more slowly when the tax-based income policy (the "popiwiek") binds.

TI Enterprise Adjustment in Poland: Evidence from a Survey of 200 Private, Privatized, and State-Owned Firms. AU Belka, Marek; Estrin, Saul; Schaffer, Mark E.; Singh, I.J.

Eswaran, Mukesh

TI Technology-Trading Coalitions in Supergames. AU Eaton, Curtis; Eswaran, Mukesh.

Evans, Martin

PD July 1994. TI Designed for the Poor--Poorer by Design? The Effects of the 1986 Social Security Act on Family Incomes. AU Evans, Martin; Piachaud, David; Sutherland, Holly. AA Evans and Piachaud: London School of Economics, Sutherland: University of Cambridge. SR London School of Economics, Welfare State Programme: WSP/105; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 104. PR no charge. JE H55, I38. KW Social Security. Means-Test.

AB The paper examines the changes to means-tested benefits in Britain introduced by the 1986 Social Security Act. First, it outlines the aims and implementation of the Act and discusses its policy context. Second, it examines the changes in claimant profiles and government expenditure on each area of benefit between 1987/88 and 1990/91. Third, it describes the changing income profiles of claimants through secondary analysis of the Family Expenditure Survey between April 1987 and March 1991. Last, it uses a microsimulation model of the old schemes to calculate incomes of entitled families in 1990/91 and compares this entitlement to that which arises from a similar model of the new scheme introduced by the Act. Losers and gainers are identified and the resultant income profiles are compared to assess whether poverty gaps are different under both schemes. The paper concludes by examining the performance of the Act against its aims.

Evans, William N.

PD December 1994. TI Education and Health: Where There's Smoke There's an Instrument. AU Evans, William N.; Montgomery, Edward. AA University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4949; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 35. PR \$5.00. JE I12, I21, I24. KW Discount Rate. Education. Health. Smoking.

AB Victor Fuchs has suggested that the persistent positive correlation between education and health habits can be explained by interpersonal differences in the discount rate. If Fuchs is correct, some health habits can be used as instruments for education in standard wage equations. We use smoking at age 18 in such a fashion. The instrument is strongly correlated with years of education, and instrumental variables estimates of the return to schooling are 10 percent larger than the OLS estimates. We fail to reject tests of overidentifying restrictions, show how the smoking/education link varies systematically across age cohorts and income groups, and demonstrate that the instrument is correlated with other intertemporal decisions such

as home ownership. The results are replicated in four additional data sets, and for both males and females.

Fanizza, Domenico

TI Fiscal Deficit and Public Debt in Industrial Countries, 1970-1994. AU Tanzi, Vito; Fanizza, Domenico.

Farber, Henry S.

PD February 1995. TI Common Interests or Common Politics? Reinterpreting the Democratic Peace. AU Farber, Henry S.; Gowa, Joanne. AA Farber: Princeton University and National Bureau of Economic Research. Gowa: Princeton University. SR National Bureau of Economic Research Working Paper: 5005; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR \$5.00. JE D72. KW Democracy. War.

AB The central claim of a rapidly growing literature in international relations is that members of pairs of democratic states are much less likely to engage each other in war or in serious disputes short of war than are members of other pairs of states. Our analysis does not support this claim. Instead, we find that the dispute rate between democracies is lower than is that of other country pairs only after World War II. Before 1914 and between the World Wars, there is no difference between the war rates of members of democratic pairs of states and those of members of other pairs of states. We also find that there is a higher incidence of serious disputes short of war between democracies than between nondemocracies before 1914. We attribute this cross-temporal variation in dispute rates to changes in patterns of common and conflicting interests across time. We use alliances as an indicator of common interests to show that cross-temporal variation in dispute rates conforms to variations in interest patterns for two of the three time periods in our sample.

PD February 1995. TI Are Lifetime Jobs Disappearing? Job Duration in the United States: 1973-1993. AA Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5014; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR \$5.00. JE J16, J21, J24, J63. KW Employment Security. Job Security. Lifetime Job.

AB The public believes that job security has deteriorated dramatically in the United States. In this study, I examine job durations from eight supplements to the Current Population Survey (CPS) administered between 1973 and 1993 in order to determine if, in fact, there has been a systematic change in the likelihood of long-term employment. In order to measure changes in the distribution of job durations, I examine changes in selected quantiles (the median and the 0.9 quantile) of the distribution of duration of jobs in progress. I also examine selected points in the cumulative distribution function including the fraction of workers who have been with their employer 1) less than one year, 2) more than ten years, and 3) more than twenty years. The central findings are clear. By the measures I examine, there has been no systematic change in the overall distribution of job duration over the last two decades, but the distribution of long-term jobs across the population has changed in two ways. First, individuals, particularly men, with little education (less than twelve years) are substantially less likely to be in long jobs today than they were twenty years ago. Second, women with at least high-school education are substantially more likely to be in long jobs today than they

were twenty years ago.

Farmer, Roger E.A.

PD October 1994. TI The Econometrics of Indeterminacy: An Applied Study. AU Farmer, Roger E.A.; Guo, Jang-Ting. AA Farmer: University of California, Los Angeles. Guo: University of California, Riverside. SR University of California, Los Angeles Working Paper Series: 720; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 31. PR \$5.00. JE C32, E32. KW Business Cycle. General Equilibrium. Propagation Mechanism.

AB This paper presents evidence from the US economy on the propagation mechanism and on the impulses that have been responsible for business cycles in the United States over the period from 1929 through 1988. Our results support this view, advanced in earlier work, that a general equilibrium model with an indeterminate steady state does a good job of accounting for the propagation mechanism in US data. In addition to suggesting a novel explanation for the propagation mechanism of business fluctuations, the method by which we estimate our model is able to measure the relative importance of different sources of fluctuations by identifying different shocks with the residuals to our estimated equations. We divide the impulses to the business cycle into supply shocks (shocks that affect productivity) and demand shocks (unexplained fluctuations in private and government consumption). We find that demand shocks are roughly twice as important as supply shocks in the US data over the period from 1929 through 1988; in the post-war period, however, supply shocks and demand shocks have both been of roughly equal magnitude and the variances of both kinds of disturbances have been five times lower than in the pre-war period.

TI Indeterminacy and Sector-Specific Externalities. AU Benhabib, Jess; Farmer, Roger E.A.

Faruqee, Hamid

PD January 1995. TI Pricing to Market and the Real Exchange Rate. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/12; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 19. PR not available. JE E12, F12, F41. KW Exchange Rates. Trade. Monetary Shocks.

AB This paper investigates the consequences of pricing to market for exchange rate pass-through and real exchange rate dynamics across different patterns of trade under market segmentation. Under two-way, intra-industry trade--where home prices display greater linkage with those of foreign competitors--domestic and export prices exhibit lower pass-through and greater destination-specific adjustment compared to intersectoral trade. With both trade patterns, pricing-to-market behavior intensifies the degree of persistence in the real exchange rate under nominal rigidities, and allows monetary shocks to have permanent effects on relative prices when goods markets remain segmented.

PD April 1995. TI Saving Trends in Southeast Asia: A Cross-Country Analysis. AU Faruqee, Hamid; Husain, Aasim M. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/39; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE E21, H55, J11. KW Savings. Cointegration. Demographics.

AB This paper investigates the long-run pattern of private saving in Indonesia, Malaysia, Singapore, and Thailand. These countries have not only maintained saving levels that are currently among the highest in the world but have also experienced a sustained increase in their rate of private saving over the past twenty years. Using a cointegration approach, this paper empirically examines the economic determinants underlying the saving trends in this group and the extent to which these countries share a common experience with respect to the factors accounting for their strong saving performance. The findings suggest that demographic shifts have been an important factor underlying regional saving trends with a similar long-run impact in each country, except for Indonesia where the effects of demographics have been even more pronounced.

Feldman, Robert A.

PD May 1995. TI Auction Format Matters: Evidence on Bidding Behavior and Seller Revenue. AU Feldman, Robert A.; Reinhart, Vincent. AA Reinhart; International Monetary Fund and Board of Governors of the Federal Reserve System. Feldman; International Monetary Fund. SR International Monetary Fund Working Paper: 95/47; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 14. PR not available. JE C15, D44. KW Auction. Bidding. Revenue.

AB This paper evaluates the importance of auction format on bidding behavior and seller revenue, focusing on differences in performance under uniform-price and discriminatory-price formats. The analysis is based on a standard benchmark model from which empirically-testable hypotheses are derived on the optimal amount of bid shading that generates revenue equivalence between the two formats. Applying this model to data from the IMF gold auctions run in 1976-80, we find evidence of statistically significant shading in excess of the theoretically-derived optimum under the discriminatory format. This evidence suggests greater seller revenue under the uniform-price format.

Feldstein, Martin

PD January 1995. TI Behavioral Responses to Tax Rates: Evidence From TRA86. AA National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5000; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 9. PR \$5.00. JE H31, J16, J21, O47. KW Capital Gains. Labor Supply. Taxation. Women.

AB This paper uses the experience after the Tax Reform Act of 1986 to examine how taxes affect three aspects of individual taxpayer behavior: labor supply, total taxable income, and capital gains. The substantial sensitivity of married women's labor supply implies that the efficiency of the tax system could be increased significantly by reducing the marginal tax rates of these women relative to their husbands' marginal tax rates. More generally, the sensitivity of taxable income to the net of tax share implies that lower marginal tax rates would involve much less revenue loss than is traditionally assumed and would bring a much more substantial reduction in the deadweight loss of the tax system. The sharp fall in the real value of realized capital gains since the 1986 rise in tax rates on capital gains confirms earlier research indicating the substantial sensitivity of capital gains realizations to tax rates. A comparison with projections by the Treasury and Congressional Budget Office

made in 1988 shows that the current official model greatly understates the sensitivity of capital gains to tax rates.

Felli, Leonardo

PD June 1994. TI Job Matching, Learning and the Distribution of Surplus. AU Felli, Leonardo; Harris, Christopher. AA Felli: London School of Economics, Harris: Nuffield College, Oxford. SR London School of Economics, Theoretical Economics: TE/94/277; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 52. PR no charge. JE C73, C78, J24. KW Wage Determination. Job Matching. Human Capital. Bandit Problems.

AB We study wage determination in a job-matching model, under the assumption that wages may be continuously renegotiated, so as to reflect the employee's endogenous outside option. We characterize the unique equilibrium of the model and we analyze the distribution of producer surplus. The model is used to provide a theoretical analysis of the ongoing debate concerning the observed returns to specific (informational) human capital.

Fernandez, Raquel

TI Sovereign Debt. AU Eaton, Jonathan; Fernandez, Raquel.

Fernandez-Ansola, Juan José

PD March 1995. TI Historical Experience with Bond Financing to Developing Countries. AU Fernandez-Ansola, Juan José; Laursen, Thomas. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/27; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 11. PR not available. JE F34, H63. KW Financing. Developing Countries. Bond Issues.

AB The paper reviews the historical experience of developing countries with bond issues in international markets in order to put the recent wave of bond financing by these countries in some perspective. It examines developments in the early part of this century and during the mid-1970s and early 1980s. The sources and the role played by bond financing during these periods are discussed. The payments problems associated with these bonds that emerged during the 1930s and during the latter half of the 1980s and the ways in which these problems were resolved are also examined.

Fernie, Sue

PD April 1995. TI Participation, Contingent Pay, Representation and Workplace Performance: Evidence from Great Britain. AU Fernie, Sue; Metcalf, David. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 232; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 44. PR no charge. JE J50. KW Great Britain. Industrial Relations. Workplace Performance. Quits. Absenteeism.

AB Establishment level data from the 1980 British Workplace Industrial Relations Survey are used to analyze links between employee involvement, contingent pay, collective representation and six different indicators of workplace performance: productivity levels and growth, employment changes, the climate of management-employee

relations, quits and absenteeism. This information is then distilled to study the respective performance of three forms of workplace governance: employee involvement (EI), collective bargaining and authoritarian. Workplaces with EI governance have the best productivity performance, but authoritarian workplaces have lower quits, lower absenteeism and a better climate of industrial relations than the EI workplaces.

Ferri, Giovanni

TI Bank Lending Rates and Financial Structure in Italy: A Case Study. AU Cottarelli, Carlo; Ferri, Giovanni; Generale, Andrea.

Fershtman, Chaim

PD December 1994. TI Survival of Small Firms: Guerrilla Warfare. AA Tel-Aviv University. SR Tel-Aviv Sackler Institute of Economic Studies: 33/94; The Eitan Berglas School of Economics, Tel-Aviv University, Ramat Aviv. PG 25. PR not available. JE C72, D43, L13. KW Guerrilla Warfare. Duopoly. Price War.

AB Duopolistic interaction between a small firm and a large established firm is considered and compared to guerrilla warfare. The paper investigates the "Hit and Run" equilibrium in which the small firm enters the market, stays there for several periods, exits, stays out for several periods and then re-enters. Occasionally there may be a price war (or retaliation) but the small firm may also voluntarily exit, thereby avoiding possible confrontation. The amount of time that the small firm stays in the market, and the timing of the price wars do not follow any predictable pattern, which is part of the mixed strategies that both firms play in equilibrium.

FitzRoy, Felix

PD January 1995. TI Skills, Wages, and Employment in East and West Germany. AU FitzRoy, Felix; Funke, Michael. AA FitzRoy: University of St. Andrews and International Monetary Fund. Funke: Humboldt University and International Monetary Fund. SR International Monetary Fund Working Paper: 95/4; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 10. PR not available. JE E24, J23. KW Manufacturing. Employment. Germany.

AB Disaggregated data from 30 two-digit manufacturing industries in the east and west parts of unified Germany are used to estimate employment for three skill categories of blue collar workers. Employment elasticities are uniformly higher in the east, and for unskilled labor. The former result contradicts union claims that wages had little relevance for east German job losses, while the latter confirms the capital-skill complementarity hypothesis.

Flanagan, Robert J.

PD March 1995. TI Wage Structures in the Transition of the Czech Economy. AA Stanford University and International Monetary Fund. SR International Monetary Fund Working Paper: 95/36; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 18. PR not available. JE J31, J38, P22. KW Economic Transition. Wage Structure. Central Planning.

AB From the perspective of market economies, central planning produced distinct distortions in the wage structures of socialist countries. This paper examines the extent to which wage structures have adjusted to remove such distortions during the economic transition using micro-data from Czech

Republic. There is strong evidence that Czech wage structures are moving toward patterns in market economies, and the change is led by developments in the private sector and retarded by the sluggish response in state enterprises. At the same time, the establishment of collective bargaining does not appear to be introducing countervailing distortions into Czech wage structures.

PD July 1995. **TI** Institutional Structure and Labor Market Outcomes: Western Lessons for European Countries in Transition. **AA** Stanford University and International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/63; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** J21, J31, J38, O15. **KW** Labor Market. Market Economies. Wage Determination.

AB Changes in economic systems provide a rare opportunity to redesign basic institutional structures in labor markets. This paper attempts to provide guidance for such institutional choice by drawing on the findings of recent labor market research in market economies on the links between institutional structure and labor market performance. After considering the suitability of research from market economies for the labor market problems faced by economies in transition from central planning, the paper considers the effects of alternative institutions for wage determination (collective bargaining structures and minimum wage and indexation legislation), employment security, income security, and active labor market policy.

Flood, Robert

PD December 1994. **TI** The Size and Timing of Devaluations in Capital-Controlled Developing Economies. **AU** Flood, Robert; Marion, Nancy. **AA** Flood: International Monetary Fund and National Bureau of Economic Research, Marion: Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 4957; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** \$5.00. **JE** F21, F31, F32. **KW** Brownian Motion. Devaluation. Pegged Exchange Rate.

AB A developing country often pegs its exchange rate to a single currency, such as the U.S. dollar, even though it faces a higher inflation rate than the country to which it is pegged. As a consequence, it experiences real exchange-rate misalignments and a series of easily-anticipated devaluations. While the chaotic capital market events surrounding anticipated devaluations are avoided through quantitative capital controls, the country is left with the classic devaluation problem: when should it devalue, and by how much? In this paper, we consider a policymaker who pegs the nominal exchange rate and adjusts the peg periodically so as to minimize a set of costs. The control problem is made difficult by the fact that the future times for devaluations are currently unknown stochastic variables. Characterizing the real exchange rate as regulated Brownian motion permits the costs minimization problem to be solved explicitly. The size and timing of devaluations are jointly determined outcomes of optimizing behavior. The framework yields insights into how changes in the stochastic environment affect both the size and timing of devaluation. These insights provide guidance about the determinants of devaluation episodes even when Brownian motion is not the relevant stochastic process for real exchange rates. Using cross-sectional data on 80 peg episodes from seventeen Latin

American countries over the 1957-1990, we find empirical support for the model's main predictions.

Forchini, Giovanni

TI Some Exact Distribution Theory for the Gaussian AR(1) Model I: Joint Density of the Minimal Sufficient Statistics. **AU** Hillier, Grant; Forchini, Giovanni.

Ford, Robert

PD March 1995. **TI** World Public Debt and Real Interest Rates. **AU** Ford, Robert; Laxton, Douglas. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/30; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E43, F21, F32, F36. **KW** Interest Rates. Public Debt. Capital Market.

AB Real interest rates appear to have risen in virtually all industrialized countries relative to levels that prevailed in the 1960s and 1970s. There is increasing concern that this may reflect higher public debt, which is crowding out private sector activity. Over the last two decades, there has also been increasing international capital market integration. This suggests that interest rates in any country may be sensitive to global fiscal developments. This paper estimates the effects of aggregate fiscal developments in the industrialized world on real interest rates in nine industrial countries. The results imply that the increase in OECD-wide government debt since the late 1970s was a major factor explaining the rise in real interest rates.

PD April 1995. **TI** Exchange Rate Movements and Inflation Performance: The Case of Italy. **AU** Ford, Robert; Krueger, Thomas. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/41; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 18. **PR** not available. **JE** E31, F31, F47. **KW** Wages. Prices. Exchange Rates. Italy.

AB This paper presents an empirical model to study the response of wages and prices to movements in the nominal exchange rate. A four-equation model is applied to Italian data to evaluate the response of tradable goods prices, consumer prices, and wage following the lira's exit from the ERM in the fall of 1992. The model tracks reasonably well the inflation performance of tradables, especially import prices. But it is argued that structural changes in the labor market contribute to an overprediction of price and wage inflation.

Frankel, Jeffrey A.

PD February 1995. **TI** A Panel Project On Purchasing Power Parity: Mean Reversion Within and Between Countries. **AU** Frankel, Jeffrey A.; Rose, Andrew K. **AA** Frankel: Institute for International Economics and National Bureau of Economic Research. Rose: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5006; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** \$5.00. **JE** F11, F15, F31. **KW** Exchange Rate. Mean Reversion. Purchasing Power Parity.

AB Previous time-series studies have shown evidence of mean-reversion in real exchange rates. Deviations from purchasing power parity (PPP) appear to have half-lives of approximately four years. However, the long samples required for statistical significance are unavailable for most currencies,

and may be inappropriate because of regime changes. In this study, we reexamine deviations from PPP using a panel of 150 countries and 45 annual observations. Our panel shows strong evidence of mean-reversion that is similar to that from long time-series. PPP deviations are eroded at a rate of approximately 15 percent annually, i.e.; their half-life is around four years. Such findings can be masked in time-series data, but are relatively easy to find in cross-sections.

Freeman, Richard

TI Generating Equality and Eliminating Poverty the Swedish Way. AU Bjorklund, Anders; Freeman, Richard.

PD March 1995. TI Does It Fit? Drawing Lessons From Differing Labor Practices. AA Harvard University and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 230; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 22. PR no charge. JE F14. KW Cross National Study. Foreign Labor Practices.

AB Which labor practices successful in foreign lands can be adapted and adopted domestically? Analyzing the interrelation of diverse practices across national lines raises conceptual and empirical questions on the frontiers of social science, if not beyond those frontiers. This paper highlights some important aspects of the problem, and begins to develop a framework for consideration.

PD March 1995. TI Doing it Right? The US Labor Market Response to the 1980s/1990s. AA Harvard University and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 231; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 26. PR no charge. JE J30, J60. KW Labor Market. Decentralization.

AB In this paper I examine both the positive and negative aspects of the US labor market response to the economic world of the 1980s/1990s. I review the economic developments that created difficulties in the US and other advanced economies post the first oil shock; consider how a decentralized labor market might be expected to respond to them; and summarize the American response. I conclude by assessing the social welfare consequences of the American response relative to that of Europe.

Friedman, Benjamin M.

PD December 1994. TI Indicator Properties of the Paper-Bill Spread: Lessons from Recent Experience. AU Friedman, Benjamin M.; Kuttner, Kenneth N. AA Friedman: Harvard University and National Bureau of Economic Research. Kuttner: Federal Reserve Bank of Chicago. SR National Bureau of Economic Research Working Paper: 4969; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 19. PR \$5.00. JE E32, E37, E43, E44, E47. KW Commercial Paper. Paper-Bill Spread. Treasury Bill. Recession.

AB A feature of U.S. post-war business cycle experience that is now widely documented is the tendency of the spread between the respective interest rates on commercial paper and Treasury bills to widen shortly before the onset of recessions. By contrast, the paper-bill spread did not anticipate the 1990-91

recession. Empirical work presented in this paper supports two (not mutually exclusive) explanations for this departure from past experience. First, at least part of the paper-bill spread's predictive content with respect to business cycle fluctuations stems from its role as an indicator of monetary policy, but the 1990-91 recession was unusual in post-war U.S. experience in not being immediately precipitated by tight monetary policy. Second, movements of the spread during the few years just prior to the 1990-1990 recession were strongly influenced by changes in the relative quantities of commercial paper, bank CDs and Treasury bills that occurred for reasons unrelated to the business cycle. This latter finding in particular sheds light on the important role of imperfect substitutability of different short-term debt instruments in investors portfolios, and highlights the burdens associated with using relative interest rate relationships as business cycle indicators.

Froot, Kenneth A.

PD December 1994. TI Perspectives on PPP and Long-Run Real Exchange Rates. AU Froot, Kenneth A.; Rogoff, Kenneth. AA Froot: Harvard University and National Bureau of Economic Research. Rogoff: Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4952; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 40. PR \$5.00. JE F11, F31. KW Argentina. England. France. Purchasing Power Parity.

AB This paper reviews the large and growing literature which tests purchasing power parity and other models of the long-run real exchange rate. We distinguish three different stages of PPP testing and focus on what has been learned from each. The most important overall lesson has been that the real exchange rate appears stationary over sufficiently alternatives. However, we argue that multivariate tests, which ask whether any linear combination of prices and exchange rates are stationary, have not necessarily provided meaningful rejections of nonstationarity. We also review a number of other theories of the long run real exchange rate—including the Balassa-Samuelson hypothesis—as well as the evidence supporting them. We argue that the persistence of real exchange rate movements can be generated by a number of sensible models and that Balassa-Samuelson effects seem important, but mainly for countries with widely disparate levels of income of growth. Finally, this paper presents new evidence testing the law of one price on 200 years of historical commodity price data for England and France, and uses a century of data from Argentina to test the possibility of sample-selection bias in tests of long-run PPP.

Funke, Michael

TI Skills, Wages, and Employment in East and West Germany. AU FitzRoy, Felix; Funke, Michael.

Gandal, Neil

PD December 1994. TI Sequential Auctions of Cable Television Licenses: The Israeli Experience. AA Tel-Aviv University. SR Tel-Aviv Foerder Institute for Economic Research Working Paper: 31/94; The Eitan Berglas School of Economics, Tel-Aviv University. PG 34. PR not available. JE D44, L82. KW Sequential. Auctions. Cable Television.

AB In Israel, area cable television (CATV) licenses were

auctioned sequentially. This paper empirically finds a "morning" effect, that is, great competition in later rounds of the auction. While three factors (interdependencies among neighboring licenses, interdependencies among all licenses, and cautious bidding in early rounds) likely contributed to the "morning" effect, the evidence suggests that interdependencies among neighboring licenses were the primary cause.

Garber, Alan M.

PD February 1995. TI To Comfort Always: The Prospects of Expanded Social Responsibility for Long-Term Care. AA Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5034; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 35. PR \$5.00. JE H42, I38, J14, J18. KW Disability. Long-Term Care. Welfare State.

AB Long-term care is an important means of providing basic and humanitarian care for elderly Americans who are severely disabled. The demand for long-term care is likely to increase dramatically as baby-boomers begin to reach advanced ages. Long-term care has been a focus of health care reform because its current financing--largely a combination of out-of-pocket payments and Medicaid--is viewed as inadequate. Only a small fraction of long-term care is financed by private insurance, which is expensive in part because moral hazard and adverse selection may create greater distortion in the utilization of long-term care than in use of hospital and physician services. Increased government financing does not appear to be a feasible option for the coming decades, since the ratio of retirees to working age adults will decline at the time that the demand for long-term care rises. Furthermore, there is little prospect that the costs of existing Federal entitlement programs can be reduced enough to finance a greatly expanded government role in long-term care. Although there are likely to be roles for private insurance, especially if it can be made more efficient, and publicly funded catastrophic coverage, Federal efforts to improve financing of long-term care are most likely to be successful if they promote private savings.

Garber, Peter M.

PD December 1994. TI The Operation and Collapse of Fixed Exchange Rate Regimes. AU Garber, Peter M.; Svensson, Lars E. O. AA Garber: Brown University. Svensson: Stockholm University. SR National Bureau of Economic Research Working Paper: 4971; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 42. PR \$5.00. JE F31. KW Fixed Exchange Rate. Honeymoon Effect. S Curve. Target Zone.

AB This paper reviews the recent literature on exchange rate target zones and on speculative attacks on fixed exchange rates. The influential Krugman model of exchange rate target zones has two main results, namely that credible target zones stabilize exchange rates more than fundamentals (the "honeymoon effect") and the exchange rates depend on fundamentals according to a nonlinear "S-curve" with "smooth pasting." Almost all the model's empirical implications have been overwhelmingly rejected. Later research has reconciled the theory with empirical results by allowing for imperfectly credible exchange rates and for intra-marginal central bank interventions. That research has also shown that non-linearities and smooth pasting are probably empirically insignificant and that a linear managed-float model is a good approximation to

exchange rate target zones. The speculative attack literature has developed models built on the principles of no anticipated price discontinuities, endogenous timing of the speculative attack, and the attack occurring when a finite amount of foreign exchange reserves remain. These models have been extended to include random timing of attacks and alternative post attack regimes. Some empirical tests have been undertaken. In contrast to target zone models, speculative attack models have been influenced by empirical results only to a small extent.

Garibaldi, Pietro

PD August 1995. TI Job Flow Dynamics and Firing Restrictions. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 256; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 32. PR no charge. JE J60, J63, J64. KW Job Creation. Job Destruction. Dynamic Search. Firing Restrictions.

AB The purpose of this paper is to rationalize cross country differences in cyclical behavior of job creation and destruction. In a stochastic dynamic search model with endogenous job separation it is shown that the relative volatility of job creation and destruction depends crucially upon the arrival rate of exogenous firing permissions. The tighter the firing restrictions, the less volatile is job destruction and the higher the correlation between job reallocation and net employment changes. Furthermore, as firing restrictions increase, the average level of job reallocation falls while equilibrium unemployment is approximately constant. These results are in line with the cross country evidence on job reallocation and unemployment.

Generale, Andrea

TI Bank Lending Rates and Financial Structure in Italy: A Case Study. AU Cottarelli, Carlo; Ferri, Giovanni; Generale, Andrea.

Gertler, Mark

TI Are Banks Dead? Or Are The Reports Greatly Exaggerated?. AU Boyd, John H.; Gertler, Mark.

Ghura, Dhaneshwar

TI Public Policies and Private Savings and Investment in Sub-Saharan Africa: An Empirical Investigation. AU Hadjimichael, Michael T.; Ghura, Dhaneshwar.

Giovannetti, Giorgia

PD May 1995. TI Hysteresis in Exports. AU Giovannetti, Giorgia; Samiei, Hossein. AA Giovannetti: Trinity College and University of Cassino. Hossein: International Monetary Fund. SR International Monetary Fund Working Paper: 95/52; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 13. PR not available. JE C51, F11, F31. KW Hysteresis. International Trade. Exports.

AB This paper presents an empirical examination of the importance of hysteresis in international trade. An econometric model of export determination is developed where the presence of sunk costs causes discontinuous behavior and hysteresis so that individual exporters' decision to stay in or out of the market depends on the current value of the exchange rate as well as its past history. The aggregate level of exports is then determined by the proportion of exporters that stay in the

market. The resulting non-linear model is estimated using data on manufacturing exports for the United States, Germany, and Japan. The paper finds strong evidence in favor of the presence of pricing-to-market and hysteresis only in the case of Japanese exports.

Glaeser, Edward L.

PD December 1994. **TI** Neither a Borrower nor a Lender Be: An Economic Analysis of Interest Restrictions and Usury Laws. **AU** Glaeser, Edward L.; Scheinkman, Jose A. **AA** Glaeser: Harvard University and National Bureau of Economic Research. Scheinkman: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 4954; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 37. **PR** \$5.00. **JE** D45, E43, E51, K23. **KW** Income Inequality. Usury. Social Insurance.

AB Interest rate restrictions are among the most pervasive forms of economic regulations. This paper explains that three restrictions can be explained as a means of primitive social insurance. Interest rate limits are Pareto improving because agents borrow when they have temporary negative income shocks--interest rate restrictions transfer wealth to agents who have received those negative shocks and whose marginal utility of income is high. We assume that these shocks are not otherwise insurable because of problems related to asymmetric information or the difficulties inherent in writing complex contracts. The model predicts that interest rate restriction will be tighter when income inequality is high (and impermanent) and when growth rates are low. Data from U.S. states' regulations supports a connection between inequality and usury laws. The history of usury laws suggests that this social insurance mechanism is one reason why usury laws persist, but it also suggests that usury laws have had different functions across time (e.g. rent-seeking, limiting agency problems within the church, limiting overcommitment of debts, and attacking commerce generally).

PD January 1995. **TI** The Incentive Effects of Property Taxes on Local Governments. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4987; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$5.00. **JE** D72, H71, H72. **KW** Amenity Provision. Local Government. Property Tax.

AB This paper applies the ideas of Brennan and Buchanan (1977, 1978, 1980) to local property taxes. When local governments maximize their revenues, property taxes provide incentives for adequate amenity provision. Local amenity provision determines property values which then determine local tax revenues. As long as the demand for housing is inelastic, property-taxes will provide stronger incentives for local governments than lump-sum taxes. As current property values reflect expectations about future amenity levels, property taxes create incentives for even the most myopic government to invest for the future. Local property taxes can also act to limit the incentives of localities to tax; there are cases where higher levels of local property taxes lead to lower overall tax burdens. These ideas are applied to the tax reform in the late 1970s; one reason that tax reform may have been so successful is that in a period where land prices are driven by many forces other than government amenities, property taxes lose their value as incentive devices.

PD February 1995. **TI** Economic Growth in a Cross-Section of Cities. **AU** Glaeser, Edward L.; Shleifer, Andrei; Scheinkman, Jose A. **AA** Glaeser and Shleifer: Harvard University and National Bureau of Economic Research. Scheinkman: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 5013; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** \$5.00. **JE** R11. **KW** Income Growth. Manufacturing. Population Growth. Urban Growth.

AB We examine the relationship between urban characteristics in 1960 and urban growth (income and population) between 1960 and 1990. Our major findings are that income and population growth move together and both types of growth are (1) positively related to initial schooling, (2) negatively related to initial unemployment and (3) negatively related to the share of employment initially in manufacturing. These results are qualitatively unchanged if we examine cities (a smaller political unit) or SMSAs (a larger "economic" unit). We also find that racial composition and segregation are basically uncorrelated with urban growth across all cities, but that in communities with large nonwhite communities segregation is positively correlated with white population growth. Government expenditures (except for sanitation) are uncorrelated with urban growth. Government debt is positively correlated with later growth.

PD February 1995. **TI** Crime and Social Interactions. **AU** Glaeser, Edward L.; Sacerdote, Bruce; Scheinkman, Jose A. **AA** Glaeser: Harvard University and National Bureau of Economic Research. Sacerdote: Harvard University. Scheinkman: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 5026; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 47. **PR** \$5.00. **JE** C43, K42. **KW** Crime. Quetelet. School Choice. Social Interaction.

AB The high degree of variance of crime rates across space (and across time) is one of the oldest puzzles in the social sciences (see Quetelet (1835)). Our empirical work strongly suggests that this variance is not the result of observed or unobserved geographic attributes. This paper presents a model where social interactions create enough covariance across individuals to explain the high cross-city variance of crime rates. This model provides a natural index of social interactions which can compare the degree of social interaction across crimes, across geographic units and cross time. Our index gives similar results for different data samples and suggests that the amount of social interactions are highest in petty crimes (such as larceny and auto theft), moderate in more serious crimes (assault, burglary and robbery) and almost negligible in murder and rape. The index of social interactions is also applied to non-crime choices and we find that there is substantial interaction in schooling choice.

Glazer, Jacob

PD October 1994. **TI** The Design of Organizations for Collecting Information from Conformist Agents. **AU** Glazer, Jacob; Rubinstein, Ariel. **AA** Tel-Aviv University. **SR** Tel-Aviv Sackler Institute of Economic Studies: 27/94; The Eitan Berglas School of Economics, Tel-Aviv University, Ramat Aviv. **PG** 27. **PR** not available. **JE** C72. **KW** Implementation. Organizations. Game Theory.

AB We investigate the design of an organization which must choose between two possible actions, each of which is the preferred choice in one of two possible states of the world. A

group of agents receives noisy signals regarding the state of the world. The designer, as well as the agents, are interested in increasing the probability that the action taken will be the right one. The designer, however, cannot force the agents to truthfully report their signals. Our benchmark result is that the designer's target is not implementable. In the main body of the paper we assume that agents' preferences depend not only on the final consequence of the mechanism, but also on the agents' actions. Each agent desires not only to increase the probability of the "correctness" of the action, but to also increase the probability that his recommendation will coincide with the one eventually accepted by the organization. We refer to this desire as "conformism". We show that when the desire to conform with the organization's decision enters only lexicographically secondary into agents' considerations, then the designer's target is Bayesian implementable. If it is weighted more heavily, then the designer's target is implementable by mechanisms in which an informer, who does not receive a signal, but is able to assess the modes of behavior of the other agents, is added to the set of agents.

Gonzalo, Jesus

PD October 1994. TI Comovements in Large Systems. AU Gonzalo, Jesus; Pitarakis, Jean-Yves. AA Gonzalo: Boston University. Pitarakis: Universite Catholique de Louvain. SR Boston University, Department of Economics Working Paper: 33; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 42. PR no charge. JE C32, C52. KW Cointegration. Information Criteria. Likelihood Ratio Tests.

AB In this paper we study various methods for detecting the cointegrating rank as the number of variables gets large. We show that the use of standard tools will always lead to misleading inferences in such settings due to excessive size distortions. Particularly the LR test tends to produce too much cointegration. We introduce a new test statistic that displays excellent size properties in both small and large systems. In addition we propose a model selection procedure for selecting the cointegrating rank. A new criterion outperforms the standard information-theoretic criteria (AIC, BIC).

PD March 1995. TI On the Exact Moments of Non-Standard Asymptotic Distributions in Non Stationary Autoregressions with Dependent Errors. AU Gonzalo, Jesus; Pitarakis, Jean-Yves. AA Gonzalo: Boston University. Pitarakis: Universite Catholique de Louvain. SR Boston University, Department of Economics Working Paper: 35; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 22. PR no charge. JE C32, C52. KW Dependent Errors. Dickey-Fuller Distribution. Moment Generating Function.

AB In this paper we derive the exact moments of the asymptotic distributions of the OLS estimate and t-statistic in an unstable AR(1) with dependent errors. We can therefore establish theoretically and without simulations, the distortions induced by the presence of non i.i.d. errors on inferences as judged by their impact on the moments of the limiting distributions. In addition we study the relationship between the number of lagged dependent variables required for matching the moments of the distributions in the "approximately i.i.d. errors" model with those occurring in the purely i.i.d. case. Our framework allows us to distinguish explicitly between different types of error processes and study their implications for the lag length selection. A very accurate normal approximation also

allows us to obtain approximate magnitudes for the size distortions when the i.i.d. based distributions are used for inferences.

PD April 1995. TI Relative Power of t Type Tests for Stationary and Unit Root Processes. AU Gonzalo, Jesus; Lee, Tae-Hwy. AA Gonzalo: Boston University. Lee: University of California, Riverside. SR Boston University, Department of Economics Working Paper: 36; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 17. PR no charge. JE C12, C22. KW Unit Roots. Hypothesis Testing.

AB This paper shows numerically that the lack of power and size distortions of the Dickey-Fuller type tests for unit roots (very well documented in the unit root literature) are similar to and in many situations even smaller than the lack of power and size distortions of the standard Student-t tests for stationary roots of an AR model.

PD May 1995. TI Pitfalls in Testing for Long Run Relationships. AU Gonzalo, Jesus; Lee, Tae-Hwy. AA Gonzalo: Boston University. Lee: University of California, Riverside. SR Boston University, Department of Economics Working Paper: 38; Boston University Department of Economics, 270 Bay State Road, Boston, MA 02215. PG 39. PR no charge. JE C32, C22. KW Cointegration. Engle-Granger Test. Johansen Test. Unit Roots.

AB This paper analyzes the robustness of the two most commonly used cointegration tests: the single equation based test of Engle and Granger (EG) and the simultaneous equation based tests of Johansen. We show analytically and numerically several important situations where the Johansen LR tests tend to find spurious cointegration with probability approaching one asymptotically. The situations investigated are of two types. The first one corresponds to variables that have long-memory properties and a trending behavior, but they are not pure I(1) processes although they are difficult to tell from I(1) with standard unit root tests. The second corresponds to I(1) variables whose VAR representation has a singular or near-singular error covariance matrix. In most of the situations investigated in this paper, the EG test is more robust than Johansen LR tests. This paper shows that a proper use of the LR test in applied cointegration analysis requires a deeper data analysis than the standard unit root test. We conclude by recommending to use both tests (EG and Johansen) to test for cointegration in order to avoid or to discover a pitfall.

Gowa, Joanne

TI Common Interests or Common Politics? Reinterpreting the Democratic Peace. AU Farber, Henry S.; Gowa, Joanne.

Graham, Edward M.

PD June 1995. TI Foreign Direct Investment in the World Economy. AA Institute for International Economics and International Monetary Fund. SR International Monetary Fund Working Paper: 95/59; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE F21, F23. KW Foreign Direct Investment. Capital Flows.

AB The role of foreign direct investment (FDI) in international capital flows is examined. Theories of the determinants of FDI are surveyed, and the economic consequences of FDI for both host (recipient) and home

(investor) nations are examined in light of empirical studies. Policy issues surrounding possible negotiation of a "multilateral agreement on investment" are discussed.

Gray, Wayne B.

PD January 1995. TI Pollution Abatement Costs, Regulation, and Plant-Level Productivity. AU Gray, Wayne B.; Shadbegian, Ronald J. AA Gray: Clark University and National Bureau of Economic Research. Shadbegian: University of Massachusetts, Dartmouth. SR National Bureau of Economic Research Working Paper: 4994; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 20. PR \$5.00. JE K23, C33, Q28. KW Environmental Regulation. Pollution. Productivity.

AB We analyze the connection between productivity, pollution abatement expenditures, and other measures of environmental regulation for plants in three industries (paper, oil, and steel). We examine data from 1979 to 1990, considering both total factor productivity levels and growth rates. Plants with higher abatement cost levels have significantly lower productivity levels. The magnitude of the effect is somewhat larger than expected: \$1 greater abatement costs appears to be associated with the equivalent of \$1.74 in lower productivity for paper mills, \$1.35 for oil refineries, and \$3.28 for steel mills. However, these results apply only to variation across plants in productivity levels. Estimates looking at productivity variation within plants over time, or estimates using productivity growth rates show a smaller (and insignificant) relationship between abatement costs and productivity. Other measures of environmental regulation faced by the plants (compliance status, enforcement activity, and emissions) are not significantly related to productivity.

Griffith, Rachel

TI Individual Effects and Dynamics in Count Data Models. AU Blendell, Richard; Griffith, Rachel.

Grilli, Vittorio

PD March 1995. TI Economic Effects and Structural Determinants of Capital Controls. AU Grilli, Vittorio; Milesi-Ferretti, Gian Maria. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/31; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 36. PR not available. JE F21, F32. KW Foreign Exchange. Developing Countries. Central Bank.

AB This paper studies determinants and effects of capital controls using a panel of 61 developed and developing countries. The results suggest that capital account restrictions are more likely to be in place in countries with low income, a large share of government, and where the central bank is not independent. Other determinants of controls include the exchange rate regime, current account imbalances and the degree of openness of the economy. We also find that capital controls and other foreign exchange restrictions are associated with higher inflation and lower real interest rates. We do not find any robust correlation between our measures of controls and the rate of growth, although there is evidence that countries with large black market premia grow more slowly.

Grossman, Gene M.

PD August 1994. TI Foreign Investment with

Endogenous Protection. AU Grossman, Gene M.; Helpman, Elhanan. AA Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. SR Princeton University, Woodrow Wilson School of Public and International Affairs Discussion Papers in Economics: 173; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. PG 35. PR no charge. JE F23, F13, D78. KW Direct Foreign Investment. Multinationals. Lobbying. Rent-Seeking.

AB Jagdish Bhagwati coined the phrase *quid pro quo* foreign investment to describe international investments made in anticipation of host country trade policy and perhaps with the intention of defusing a protectionist threat. We apply Bhagwati's notion to situations where (i) foreign investment is best described as the (uncoordinated) opening of branch plants by multinational corporations, and (ii) protection is a political response by an incumbent government to offers of policy-contingent campaign contributions by domestic firms. We examine the determinants of anticipatory foreign investment and study some of its welfare implications. We also allow for lobbying by workers with sector-specific skills and show how the conflicting interests of these workers and the industrialists are resolved in determining policy toward foreign investment.

PD August 1994. TI Electoral Competition and Special Interest Politics. AU Grossman, Gene M.; Helpman, Elhanan. AA Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. SR Princeton University, Woodrow Wilson School of Public and International Affairs Discussion Papers in Economics: 174; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. PG 32. PR no charge. JE D72. KW Lobbying. Rent-Seeking. Elections. Voting.

AB We study the competition between two political parties for seats in a parliament. The parliament will set two types of policies: ideological and non-ideological. The parties have fixed positions on the ideological issues, but choose their non-ideological platforms to attract voters and campaign contributions. In this context, we ask: How do the equilibrium contributions from special interest groups influence the platforms of the parties? We show that each party is induced to behave as if it were maximizing a weighted sum of the aggregate welfares of informed voters and members of special interest groups. The party that is expected to win a majority of seats caters more to the special interests.

PD September 1994. TI Technology and Trade. AU Grossman, Gene M.; Helpman, Elhanan. AA Grossman: Princeton University. Helpman: Tel-Aviv University and CIAR. SR Tel-Aviv Foerder Institute for Economic Research Working Paper: 26/94; The Eitan Berglas School of Economics, Tel-Aviv University. PG 66. PR not available. JE F11, F13, D83, O31. KW Trade. Technology. Learning-By-Doing. Innovation.

AB We review the literature on the links between technology and international trade. The older literature assumed exogenous technologies and focused on their effects on the structure of foreign trade and on welfare. Recently much of the effort has been on explaining technological change. As a result, we also describe the effects of foreign trade on technological change. We deal with technological change that results from learning by doing and from innovation, and we describe the relationship between each one of these forms of change in technology with international trade. Apart from integrating much of the recent literature on learning by doing, we show that there are

important common themes and results in these two strands of the literature.

PD November 1994. TI Technology and Trade. AU Grossman, Gene M.; Helpman, Elhanan. AA Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. SR Princeton University, Woodrow Wilson School of Public and International Affairs Discussion Papers in Economics: 175; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. PG 77. PR no charge. JE F13, O33, O41. KW Technological Progress. Learning-by-Doing. Innovation. Trade Theory. AB We survey research on the relationship between technology and trade. We begin with the old literature, which treated the state of technology as exogenous and asked how changes in technology affect the trade pattern and welfare. Recent research has attempted to endogenize technological progress which results either from learning-by-doing or from investments in research and development. This allows one to examine not only how technology affects trade, but also how trade affects the evolution of technology. We emphasize the parallels between the models with learning-by-doing and those with explicit R&D and highlight the role that the geographic extent of knowledge spillovers plays in mediating the relationship between trade and technological progress.

Gulde, Anne-Marie

TI Inflation and Income Distribution: Further Evidence on Empirical Links. AU Bulii, Ales; Gulde, Anne-Marie.

Guo, Jang-Ting

TI The Econometrics of Indeterminacy: An Applied Study. AU Farmer, Roger E.A.; Guo, Jang-Ting.

Gustman, Alan L.

PD January 1995. TI Income and Wealth of Older American Households: Modeling Issues for Public Policy Analysis. AU Gustman, Alan L.; Juster, F. Thomas. AA Gustman: Dartmouth College and National Bureau of Economic Research. Juster: University of Michigan. SR National Bureau of Economic Research Working Paper: 4996.; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 43. PR \$5.00. JE J14, J26. KW Elderly. Public Policy. Retirement Savings.

AB This paper evaluates the extent to which current knowledge of retirement, savings, pension and related behavior is sufficient for determining the effects of major policy initiatives on the incomes and wealth of the aged population of the United States. Data are presented from two new surveys, the Health and Retirement Study and the Asset and Health Dynamics Among the Oldest Old Survey, describing the distributions of the major components of income and wealth to be explained by these behavioral models. The data suggest that the amount of wealth had by the older population has been severely understated in earlier surveys. Disagreements and inconsistencies in models of savings indicate that there is no agreed upon behavioral model upon which to base policy analysis. Similar problems characterize the pension literature. Most strikingly, central features of these three major branches of behavioral analysis are mutually inconsistent. Although there are important linkages among the behaviors determining retirement, savings and pension outcomes, research in each area ignores or misspecifies the related behavior from other areas.

Consequently, significant advances are required before we can confidently predict the effects of contemplated changes in policies on income and wealth in retirement.

Ha, Jiming

TI Measurement of Co-Circulation of Currencies. AU Krueger, Russell; Ha, Jiming.

Hadjimichael, Michael T.

PD February 1995. TI Public Policies and Private Savings and Investment in Sub-Saharan Africa: An Empirical Investigation. AU Hadjimichael, Michael T.; Ghura, Dhaneshwar. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/19; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 34. PR not available. JE O11, O55, C23. KW Inflation. Savings. Investment. Africa.

AB This paper assesses empirically the role of public policies in stimulating private savings and investment in sub-Saharan African countries, based on data for the period 1986-92. The main findings of the analysis are as follows: (i) policies effective in stimulating private savings and investment include those that keep the rate of inflation low, reduce macroeconomic uncertainty, promote financial deepening, and lower the external debt burden; (ii) measures that promote structural reforms and reduce the budget deficit (without lowering government investment) help to raise private investment; and (iii) declines in government savings are only partially offset by increases in private savings.

Hajivassiliou, Vassilis A.

PD May 1995. TI Unemployment and Liquidity Constraints. AU Hajivassiliou, Vassilis A.; Ioannides, Yannis M. AA Hajivassiliou: Columbia University and Yale University. Ioannides: Virginia Polytechnic Institute and State University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 243; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 59. PR no charge. JE D91, E24, C61, C33, C35. KW Intertemporal Optimization. Quantity Constraints. Liquidity Constraints. Unemployment.

AB In this paper we propose a modeling approach for labor supply and consumption decisions that is firmly grounded within a utility maximizing framework and allows for a role of such institutional constraints as limited access to borrowing and involuntary unemployment. We report estimations for a system of dynamic probit models with data from the Panel Study of Income Dynamics. These estimations test broad predictions of the theoretical model. One of our models describes a household's propensity to be liquidity constrained in a given period. The second is a dynamic ordered probit model for a labor constraint indicator describing qualitative aspects of the conditions of employment, that is whether the household head is involuntarily overemployed, voluntarily employed, or involuntarily underemployed or unemployed. These models are estimated separately as well as jointly. Our results provide strong support for the basic theory of constrained behavior and the interaction between liquidity constraints and exogenous constraints on labor supply.

Haller, Hans H.

PD May 1995. TI Monetary Union or Else. AU Haller,

Hans H.; Ioannides, Yannis M. AA Virginia Polytechnic Institute and State University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 207; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 43. PR no charge. JE F33, F36, C72. KW Currency Change. Currency Choice. Economic Integration. Monetary Union.

AB We analyze a strategic game where in a first step, a country can adopt another country's currency. In a second step, the two countries commit resources to economic integration. A common currency reduces the overall resource costs of economic integration, but imposes an idiosyncratic adjustment cost on the country changing its currency. A country's currency choice depends on how, favorably or adversely, it expects the other country to respond to a currency change. We find that economic integration without a common currency is a subgame perfect equilibrium outcome. Economic integration with a common currency is another, superior subgame perfect equilibrium outcome.

PD May 1995. TI Strategic Game Models of Economic Integration. AU Haller, Hans H.; Ioannides, Yannis M. AA Virginia Polytechnic Institute and State University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 208; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 27. PR no charge. JE F10, F15, C72. KW Autarky. Economic Integration. Fixed Cost.

AB We set up two-country games to express strategic aspects of economic integration, where integration requires overcoming fixed costs in the form of a vector of resources, the two countries' agents' characteristics are diverse, and each country's contribution is subject to strategic choice. Individual agents' payoffs depend, for any given trade allocation rule, on how integration costs are shared. We show existence of equilibrium and explore the properties of the game. A number of examples demonstrate that autarky or a multiplicity of Nash equilibria, some of which are Pareto rankable, are possible outcomes. We also explore certain strategic aspects of economic integration of the three-country case.

Haltiwanger, John

TI Aggregate Employment Dynamics: Building From Microeconomic Evidence. AU Caballero, Ricardo J.; Engel, Eduardo M.R.A.; Haltiwanger, John.

Hanson, Gordon H.

TI Spillovers, Foreign Investment, and Export Behavior. AU Aitken, Brian; Hanson, Gordon H.; Harrison, Ann E.

Harper, Peter

PD July 1995. TI Recording Interest Income in the Balance of Payments. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/71; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 14. PR not available. JE B41, C81, F21. KW Interest Income. Balance of Payments. Accrual Basis.

AB In the balance of payments, as well as the national accounts, income refers to the use of factors of production. Accordingly, income should be recorded in the balance of payments during the period or periods in which the economic benefits arising from the use of a factor of production are

enjoyed by the user—that is, on an accrual basis. This paper discusses: (1) the theoretical implications of using the accrual basis for recording interest income, including the nature of entries necessary to offset income accrued but not paid and the calculation of accrued interest; and (2) the practical aspects of measuring interest on this basis.

PD July 1995. TI Recording Insurance Transactions in the Balance of Payments. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/72; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 11. PR not available. JE B41, C82, G22. KW Balance of Payments. Insurance.

AB Insurance enterprises provide services, called insurance services, to policyholders. The values of such services are seldom, if ever, directly apparent; rather these values are implicitly entwined within the payment of premiums. This paper discusses the treatment of insurance services, and related transactions, in the balance of payments. A simple measure, based on a number of assumptions, of nonlife insurance services is considered. The assumptions underlying this measure are then relaxed. The treatment of life insurance, which has many of the characteristics of nonlife insurance, is then addressed. The paper concludes with a discussion on the practical aspects of measuring insurance transactions in the balance of payments.

Harris, Christopher

TI Job Matching, Learning and the Distribution of Surplus. AU Felli, Leonardo; Harris, Christopher.

PD September 1994. TI On the Rate of Convergence of Continuous-Time Fictitious Play. AA Nuffield College, Oxford. SR Boston University, Industry Study Program Discussion Paper: 52; Department of Economics, Boston University, 270 Bay State Road, Boston, MA 02215. PG 27. PR no charge. JE C72, D83. KW Fictitious Play. Learning.

AB This paper shows that continuous-time fictitious play converges at rate $1/t$ in all finite two-person zero-sum games. A simple proof that continuous-time fictitious play converges in weighted-potential games is also given.

Harrison, Ann E.

TI Spillovers, Foreign Investment, and Export Behavior. AU Aitken, Brian; Hanson, Gordon H.; Harrison, Ann E.

Harvey, Andrew

PD March 1995. TI The Modelling and Seasonal Adjustment of Weekly Observations. AU Harvey, Andrew; Koopman, Siem Jan; Riani, Marco. AA Harvey and Koopman: London School of Economics. Riani: Università di Firenze. SR London School of Economics, Econometrics: EM/95/284; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 40. PR no charge. JE C22, C82. KW Kalman Filter. Money Supply. Spline. Stochastic Seasonality.

AB A number of important economic time series are recorded on a particular day every week. Seasonal adjustment of such series is difficult, because the number of weeks varies between 52 and 53 and the position of the recording day changes from year to year. In addition certain festivals, most notably Easter, take place at different times according to the year. This paper presents a general solution to problems of this

kind by setting up a structural time series model which allows the seasonal pattern to evolve over time and enables trend extraction and seasonal adjustment to be carried out by means of state space filtering and smoothing algorithms. The method is illustrated with a Bank of England series on the money supply.

Hausman, Jerry A.

PD December 1994. TI Valuation of New Goods Under Perfect and Imperfect Competition. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4970; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR \$5.00. JE C43, D61, E31, L13. KW Consumer Price Index. Cost of Living. Hicks-Rothbarth.

AB The Consumer Price Index (CPI) attempts to answer the question of how much more (or less) income does a consumer require to be as well off in period 1 as in period 0 given changes in prices, changes in the quality of goods, and the introduction of new goods (or the disappearance of existing goods). The CPI has not attempted to estimate the effect of the introduction of new goods, despite the recognition of the potential importance of new goods on a cost-of-living index. In this paper I first explain the theory of cost-of-living indices and demonstrate how new goods should be included using the classical theory of Hicks and Rothbarth. The correct price to use for the good in the pre-introduction period is the "virtual" price which sets demand to zero. Estimation of this virtual price requires estimation of a demand function which in turn provides the expenditure function which allows exact calculation of the cost of living index. The data requirements and need to specify and estimate a demand function for a new brand among many existing brands requires extensive data and some new econometric methods which may have proven obstacles to the inclusion of new goods in the CPI up to this point. As an example I use the introduction of a new cereal brand by General Mills in 1989-Apple Cinnamon Cheerios. I find that the virtual price is about 2 times the actual price of Apple Cinnamon Cheerios and that the increase in consumers surplus is substantial. Based on some simplifying approximations, I find that the CPI may be overstated for cereal by about 25 percent because of its neglect of the effect of new cereal brands. I then extend the classical Hicks-Rothbarth theory from its implicit assumption of perfect competition to the more realistic situation of imperfect competition among multi-product firms. When I take account of the effect of imperfect competition, I find that the increase in consumer welfare is only 85 percent as high as in the perfect competition case so that the CPI for cereal would still be too high by about 20 percent.

Hayashi, Fumio

PD February 1995. TI Is the Japanese Extended Family Altruistically Linked? A Test Based on Engel Curves. AA Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5033; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 11. PR \$5.00. JE D10, I12. KW Altruism. Engle Curve. Family. Japan.

AB Altruism has the well-known neutrality implication that the family's demand for commodities is invariant to the division of resources within the family. We test this by

estimating Engle curves on a cross-section of Japanese extended families forming two-generation households. We find that the pattern of food expenditure is significantly affected by the division of resources. The food components whose budget share increases with the older generation's share of household income are precisely those favored by the old such as cereal, seafood, and vegetables.

He, Hua

PD February 1995. TI Differential Information and Dynamic Behavior of Stock Trading Volume. AU He, Hua; Wang, Jiang. AA He: University of California, Berkeley. Wang: Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5010; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR \$5.00. JE G11, G12, G14. KW Private Information. Rational Expectation. Stock Trading Volume.

AB This paper develops a multi-period rational expectations model of stock trading in which investors have differential information concerning the underlying value of the stock. Investors trade competitively in the stock market based on their private information and the information revealed by the market-clearing prices, as well as other public news. We examine how trading volume is related to the information flow in the market and how investors' trading reveals their private information.

Hellerstein, Judith K.

PD December 1994. TI The Demand for Post-Patent Prescription Pharmaceuticals. AA Northwestern University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4981; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 34. PR \$5.00. JE I11. KW Generic Drug. Prescription. Trade Name Drug.

AB This paper examines why physicians continue to prescribe trade-name drugs when less expensive generic substitutes are available. I utilize a data set on physicians, their patients, and the multi-source drugs prescribed to study the prescription habits of physicians in prescribing generic and trade-name drugs. The results indicate that almost half all physicians prescribe both types of drugs to their patients. There is persistence in the prescription behavior of physicians, so that some physicians are more likely to prescribe trade-name drugs, while others more often prescribe generics. While much of this persistence cannot be explained by observable characteristics of the physician or the physician's patients, patients who are treated by physicians with large numbers of HMO or pre-paid patients are more likely to be prescribed generics, and there is wide regional variation in the propensity of physicians to prescribe generic drugs. The results are most consistent with an explanation of physicians' prescription behavior based on habit persistence.

Helpman, Elhanan

TI Foreign Investment with Endogenous Protection. AU Grossman, Gene M.; Helpman, Elhanan.

TI Electoral Competition and Special Interest Politics. AU Grossman, Gene M.; Helpman, Elhanan.

TI Technology and Trade. AU Grossman, Gene M.;

Helpman, Elhanan.

TI Technology and Trade. AU Grossman, Gene M.; Helpman, Elhanan.

TI North-South R&D Spillovers. AU Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander W.

Hewitt, Daniel

PD January 1995. TI Wage Expenditures of Central Governments. AU Hewitt, Daniel; Van Rijckeghem, Caroline. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/11; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 25. PR not available. JE H50, H72. KW Stabilization Programs. Exchange Rates. Wage Expenditure. Income.

AB Central government wage expenditures accounted for 7 percent of GDP in 99 countries during 1980-90 (unweighted average). Regression analysis indicates that federations, countries with high populations and high per capita incomes, heavily indebted countries, and small low-income economies tend to have lower central government wage expenditures as a percent of GDP. Access to private nonguaranteed foreign financing is associated with higher wage expenditures, while public and publicly guaranteed foreign financing is not; the public and publicly guaranteed foreign financing is often provided for government capital projects. Medium-term structural adjustment programs, on average, have a negative association with wage expenditures, while short-term stabilization programs do not. The negative correlation between central government wage expenditures and per capita income appears related to the level of centralization of government expenditures. General government wage expenditures are higher in industrial countries than in developing countries.

Hiemstra, Craig

PD March 1995. TI Nonlinearity and Endogeneity in Macro-Asset Pricing. AU Hiemstra, Craig; Kramer, Charles. AA Hiemstra: University of Strathclyde and International Monetary Fund. Kramer: International Monetary Fund. SR International Monetary Fund Working Paper: 95/32; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE C22, C52, E44, G14. KW Stock Market. Nonlinear Dynamics.

AB We find nonlinear feedback between the stock market and certain macroeconomic factors. This evidence calls into question the adequacy of these factors as a basis for a linear pricing model. It also means that the interaction between the economy and the stock market is more complicated than given by the simple relationship in Chen, Roll and Ross (1986). It also suggests that the univariate evidence for nonlinear dynamics in the stock market may be due to the complicated relationship between the macroeconomy and the stock market.

Hillier, Grant

PD June 1995. TI Some Exact Distribution Theory for the Gaussian AR(1) Model I: Joint Density of the Minimal Sufficient Statistics. AU Hillier, Grant; Forchini, Giovanni. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9511; Department of Economics, University of Southampton, Southampton SO9 5NH, England. PG 26. PR no charge. JE C22. KW AR(1) Model. Exact

Distributions. Invariant Polynomials.

AB We derive the exact joint distribution of the minimal sufficient statistics in the first-order AR(1) model with Gaussian errors and a fixed startup value, for both the zero and non-zero startup cases. The results are fundamental to an exact distribution theory for the statistics that are typically of interest in this model, and exact results for such statistics will be presented in Part II of the paper.

Hochman, Oded

PD November 1994. TI On the Optimal Structure of Local Governments. AU Hochman, Oded; Pines, David; Thisse, Jacques Francois. AA Hochman: Ben Gurion University. Pines: Tel-Aviv University. Thisse: Universite de Paris, I-Sorbonne, and CERAS-ENPC. SR Tel-Aviv Sackler Institute of Economic Studies: 30/94; The Eitan Berglas School of Economics, Tel-Aviv University, Ramat Aviv. PG 45. PR not available. JE H11, H72, R51, R53. KW Local Governments. Decentralization. Functional. Territorial.

AB We show that space matters in designing the optimal provision of local public goods (LPGs). Geography imposes particular institutional structure of local governments due to the overlapping of market areas associated with different LPGs. The optimum can be decentralized through governments that have jurisdiction over market areas of all LPG-types. This implies that the appropriated suppliers of LPGs are metropolitan governments which finance them through user charges and land rent. In addition, our approach invalidates the prevailing theory of fiscal federalism, according to which a layer of government should be established for each type of LPG.

Hoffmaister, Alexander W.

TI North-South R&D Spillovers. AU Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander W.

PD October 1995. TI Disinflation and the Recession-Now-Versus-Recession-Later Hypothesis: Evidence from Uruguay. AU Hoffmaister, Alexander W.; Vegh, Carlos A. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/99; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE C32, E31, E52. KW Inflation. Stabilization. Recession. Uruguay.

AB Both analytical models and casual empiricism suggest that the timing of the recessionary costs associated with inflation stabilization in chronic inflation countries may depend on the nominal anchor which is used. Under money-based stabilization, the recession occurs at the beginning of the program, while under exchange rate-based stabilization the recession occurs later in the program. This paper provides a first attempt to formally test this hypothesis using a vector-autoregression model for Uruguay. The impulse response of output to different stabilization policies is broadly consistent with the "recession-now- versus-recession-later" hypothesis. The evidence also suggests, however, that the effectiveness of a monetary anchor in reducing inflation is hindered by the high degree of dollarization of the Uruguayan economy.

Hoffman, Philip T.

PD October 1994. TI What Do Notaries Do? Overcoming Asymmetric Information in Financial Markets: The Case of Paris, 1751. AU Hoffman, Philip T.; Postel-Vinay, Gilles; Rosenthal, Jean-Laurent. AA Hoffman: California Institute

of Technology. Postel-Vinay; INRA, Paris. Rosenthal: University of California, Los Angeles. SR University of California, Los Angeles Working Paper Series: 719; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 28. PR \$5.00. JE G12, G14, D82. KW Asset Markets. Financial Intermediaries. Paris.

AB Using evidence from eighteenth-century Paris, we examine how financial intermediaries resolved problems of asymmetric information in financial markets. The intermediaries in Paris were notaries, and after examining their role in asset markets, we develop a more general model of intermediaries' behavior and then confront the model with a rich set of data from Paris.

Hole, Alison

PD December 1994. TI Exploring Branching Structure: A Bandit Problem with Correlated Pay-Offs. AU Hole, Alison; Keller, Godfrey. AA Hole: London School of Economics. Keller: London School of Economics and University of Edinburgh. SR London School of Economics, Theoretical Economics: TE/94/279; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 35. PR no charge. JE C44, D83, O31. KW Bandit Problem. Gittins Index. Sequential Search. Research and Development.

AB This paper presents a model of a search process for the best outcome of many multi-stage projects. The branching structure of the search environment is such that the pay-offs to various actions are correlated; nevertheless, it is shown that the optimal strategy is given by a simple reservation price rule. A simple model of R&D is provided as an example.

Holtz-Eakin, Douglas

PD February 1995. TI Spatial Productivity Spillovers From Public Infrastructure: Evidence From State Highways. AU Holtz-Eakin, Douglas; Schwartz, Amy Ellen. AA Holtz-Eakin: Syracuse University and National Bureau of Economic Research. Schwartz: New York University. SR National Bureau of Economic Research Working Paper: 5004; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 12. PR \$5.00. JE C43, H42, H54, R41, R42. KW Aggregation. Infrastructure. Roads.

AB Is public sector infrastructure a key determinant of productivity? Traditional, project-based analyses of benefits and costs typically do not find large rates of return. Proponents of infrastructure spending instead point to regression-based analyses of the links between private productivity and public infrastructure that imply large productivity effects from public spending. The disparity in estimated returns is often attributed to geographic spillovers in productivity benefits that are not captured by disaggregated analyses. We examine the degree to which state highways provide productivity benefits beyond the narrow confines of each state's borders. Despite the fact that state highways--especially the interstate highway system--are designed at least in part with interstate linkages in mind, we find no evidence of quantitatively important productivity spillovers.

Horstmann, Ignatius J.

PD February 1995. TI Exploring New Markets: Direct Investment, Contractual Relations and the Multinational Enterprise. AU Horstmann, Ignatius J.; Markusen, James R.

AA Horstmann: University of Western Ontario. Markusen: University of Colorado and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5029; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$5.00. JE C71, C78, D23, F23. KW Direct Investment. Information Rent. Multinational.

AB We consider the multinational firm's decision on whether to enter a new market immediately via direct investment or to contract initially with a local agent and (possibly) invest later. Use of a local agent allows the multinational to avoid costly mistakes by finding out if the market is large enough to support direct investment. However, the agent is able to extract information rents from the multinational due to being better informed about the market characteristics. We find that direct investment is the desirable mode of entry when the market is on average large and there is little down-side risk in expected profits.

Howells, Jeremy

PD September 1995. TI Tacit Knowledge and Technology Transfer. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP16; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 31. PR \$10.00. JE D80, D23, O31, O32, O34. KW Technology Transfer. Research and Development. Tacit Knowledge.

AB Until recently the concept of tacit knowledge has been neglected by academics and managers alike, but this has now changed as tacit knowledge has become recognized as playing a key role in firm growth and economic competitiveness. Tacit knowledge forms an important element in a firm's knowledge base and has a central role in organizational learning. This paper analyses what is meant by tacit knowledge and outlines its main parameters and traits. The analysis stresses the need to view tacit knowledge in a dynamic setting and that tacit knowledge can be acquired and transferred on a variety of level: individual, group, firm and inter-firm basis. The paper then explores the policy implications of technology transfer initiatives which seek to shift tacit know-how between firms and analyses the ways in which this can be achieved.

Howes, Stephen

PD October 1994. TI Regional Growth and Inequality in Rural China. AU Howes, Stephen; Hussain, Athar. AA London School of Economics. SR London School of Economics, Programme of Research into Economic Transformation and Public Finance: EF/11; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 36. PR no charge. JE D31, O13, O14, O53. KW China. Income Distribution. Regional Inequality. Growth.

AB County data for the years 1985 to 1991 is used to examine the agricultural and non-agricultural performance of rural China in the second half of the eighties. Large increases in net output growth and inequality are observed. Decomposition analysis reveals both to be caused mainly by rapid growth in non-agricultural output. Contrary to much opinion, the dispersion of non-agricultural output is increasing only slowly (less than that of agricultural output). The growth of non-agricultural output has been much more widespread and

poverty-reducing than previously thought, which in turn casts doubt on claims that poverty has not fallen in rural China post-1985. The performance of agriculture in poor countries highlights the importance of non-agricultural growth, as it would seem that these counties are unable to increase their agricultural output per capita levels due to relatively high population growth rates.

Hoxby, Caroline Minter

PD December 1994. TI Do Private Schools Provide Competition For Public Schools?. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4978; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 34. PR \$5.00. JE H42, I21, I22. KW Private School. School Choice. Voucher.

AB Arguments in favor of school choice depend on the idea that competition between schools improves the quality of education. However, we have almost no empirical evidence on whether competition actually affects school quality. In this study, I examine the effects of inter-school competition on public schools by using exogenous variation in the availability and costs of private school alternatives to public schools. Because low public school quality raises the demand for private schools as substitutes for public schools, we cannot simply compare public school students' outcomes in areas with and without substantial private school enrollment. Such simple comparisons confound the effect of greater private school competitiveness with the increased demand for private schools where the public schools are poor in quality. I derive instruments for private school competition from the fact that it is less expensive and difficult to set up religious schools, which accounts for 9 out of 10 private school students in the U.S., in areas densely populated by members of the affiliated religion. I find that greater private school competitiveness significantly raises the quality of public schools, as measured by the educational attainment, wages, and high school graduation rates of public school students. In addition, I find some evidence that public schools react to greater competitiveness of private schools by paying higher teacher salaries.

PD December 1994. TI Does Competition Among Public Schools Benefit Students and Taxpayers?. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4979; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR \$5.00. JE H42, I21, I22. KW Private School. School Choice. Voucher.

AB Many school choice proposals would enable parents to choose among public school districts in their area, though not among private schools. Theory predicts three reactions to easier choice among public schools. The first is increased sorting of students and parents among schools. Analysts instinctively worry that, with greater sorting, advantaged students will gain at the expense of disadvantaged students. The second predicted reaction is that easier choice will encourage competition among schools, forcing them into higher productivity (better student performance per input). The third and final prediction is that easier choice among public schools will give parents less incentive to send their children to private schools. There is very little empirical evidence to substantiate any of these predictions, and this study attempts to fill that gap. I examine easing choice among public schools using exogenous

variation in the concentration of public school districts in metropolitan areas measured by a Herfindahl index on enrollment shares. The exogenous variation is generated by topography: I derive instruments for concentration from natural boundaries (rivers) that partially determine district size. I find strong evidence that easier choice leads to greater productivity. Areas with greater opportunities for choice among public schools have lower per-pupil spending, lower teacher salaries, and larger class sizes. The same areas have better average student performance, as measured by students' educational attainment, wages, and test scores. I find evidence of increased sorting but no evidence that disadvantaged groups are harmed by the sorting. Improvements in student performance are concentrated among white non-Hispanics, males, and students who have a parent with at least a high school degree. However, student performance is not worse among Hispanics, African-Americans, females, or students who do not have a parent with a high school degree. Also, student performance improves at both ends of the educational attainment distribution and test score distribution. Finally, I find strong evidence that a smaller share of students attend private schools in areas where choice among public schools is easier.

Hubbard, R. Glenn

PD December 1994. TI Is There a 'Credit Channel' For Monetary Policy?. AA Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4977; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR \$5.00. JE E51, E52. KW Credit View. Financial Accelerator. Money View. Monetary Transmission Mechanism.

AB This paper argues that the terms "money view" and "credit view" are not always well defined in theoretical and empirical debates over the transmission mechanism of monetary policy. Recent models of information and incentive problems in financial markets suggest the usefulness of decomposing the transmission mechanism into two parts: one related to effects of policy-induced changes on the overall level of real costs of funds, and one related to "financial accelerator" effects stemming from effects of policy actions on the financial positions of borrowers or intermediaries. The results presented here support the idea that the spending decisions of a significant group of borrowers are influenced by their balance sheet condition. Whether a bank-lending channel is operative is less clear, however. More micro evidence at the level of individual borrower-lender transactions is needed to resolve this question.

Hughes, Alan

TI Failures, Acquisitions and Post-Merger Success: The Comparative Financial Characteristics of Large and Small Companies. AU Cosh, Andy; Hughes, Alan.

TI Executive Remuneration Executive Dismissal and Institutional Shareholdings. AU Cosh, Andy; Hughes, Alan.

TI Manufacturing, the Balance of Payments and Capacity. AU Cosh, Andy; Coutts, Kenneth; Hughes, Alan.

Hugounenq, Rejane

TI Government Subsidies: Concepts, International Trends, and Reform Options. AU Clements, Benedict; Hugounenq, Rejane; Schwartz, Gerd.

Husain, Aasim M.

TI Saving Trends in Southeast Asia: A Cross-Country Analysis. AU Faruquee, Hamid; Husain, Aasim M.

Hussain, Athar

TI Regional Growth and Inequality in Rural China. AU Howes, Stephen; Hussain, Athar.

PD November 1994. TI Impact of Reform on Wage and Employment Determination in Chinese State Enterprises, 1986-1991. AU Hussain, Athar; Zhuang, Juzhong. AA London School of Economics. SR London School of Economics, Programme of Research into Economic Transformation and Public Finance: EF/12; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 36. PR no charge. JE J23, J31, P21, P23, P52. KW China. Economic Reforms. Wage Determination. Labor Market.

AB This paper reports the results of an empirical analysis of wage and employment determination in Chinese state-owned enterprises geared to an assessment of how these have been affected by reforms. The paper is structured around two main questions. First, is there evidence of a link between wages and the financial performance of enterprises, and has this link become stronger over time? Second, does enterprise employment respond to changes in wages and is the response different in the case of regular wages and bonuses? The paper finds that regular wages are generally not influenced by financial performance, but bonuses are. It also finds that regular wages and bonuses tend to be lower in loss-making than profit-making enterprises. Other findings include a negative relation between regular wages and employment but not between bonuses and employment. The output elasticity of employment in China tends to be lower than those found for market economies, confirming the presence of surplus employees in state enterprises.

Ikenberry, David

PD December 1994. TI Market Underreaction to Open Market Share Repurchases. AU Ikenberry, David; Lakonishok, Josef; Vermaelen, Theo. AA Ikenberry: Rice University. Lakonishok: University of Illinois. Vermaelen: INSEAD. SR National Bureau of Economic Research Working Paper: 4965; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 22. PR \$5.00. JE G12, G14. KW Open Market Repurchase. Underreaction. Undervaluation.

AB We examine long-run firm performance following open market share repurchase announcements which occurred during the period 1980 to 1990. We find that the average abnormal four-year buy-and-hold return measured after the initial announcement is 12.1 percent. For "value" stocks, companies more likely to be repurchasing shares because of undervaluation, the average abnormal return is 45.3 percent. For repurchases announced by "glamour" stocks where undervaluation is less likely to be an important motive, no positive drift in abnormal returns is observed. Thus, at least with respect to value stocks, the market errs in its initial response and appears to ignore much of the information conveyed through repurchase announcements.

Ioannides, Yannis M.

TI Monetary Union or Else. AU Haller, Hans H.;

Ioannides, Yannis M.

TI Strategic Game Models of Economic Integration. AU Haller, Hans H.; Ioannides, Yannis M.

TI Unemployment and Liquidity Constraints. AU Hajivassiliou, Vassilis A.; Ioannides, Yannis M.

Irwin, Douglas A.

PD December 1994. TI High Tech R&D Subsidies: Estimating the Effects of Sematech. AU Irwin, Douglas A.; Klenow, Peter J. AA Irwin: University of Chicago and National Bureau of Economic Research. Klenow: University of Chicago. SR National Bureau of Economic Research Working Paper: 4974; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR \$5.00. JE H42, O32. KW Commitment Hypothesis. Research and Development. Sharing Hypothesis. Sematech.

AB Sparked by concerns about their shrinking market share, 14 leading U.S. semiconductor producers, with the financial assistance of the U.S. government in the form of \$100 million in annual subsidies, formed a joint R&D consortium--Sematech--in 1987. Using Compustat data on all U.S. semiconductor firms, we estimate the effects of Sematech on members' R&D spending, profitability, investment, and productivity. In so doing we test two hypothesis: the "commitment" hypothesis that Sematech obligates member firms to spend more on high-spillover R&D, and the "sharing" hypothesis that Sematech reduces duplication of member R&D spending. Whereas the commitment hypothesis provides a rationale for the government subsidies, the sharing hypothesis does not. We find that Sematech induced members to cut their overall R&D spending on the order of \$300 million per year, providing support for the sharing hypothesis.

Jackman, Richard

PD March 1995. TI What Can Active Labour Market Policy Do?. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 226; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 36. PR no charge. JE J20, J68. KW Unemployment. Labor Market Policy.

AB During the 1980s, two dimensions in particular of the unemployment problem have been a source of increasing concern for policy-makers in Europe. One is the increasing rate of structural change and the resulting decline in employment opportunities for unskilled manual workers. The other is the evidence of the corrosive effects of long spells of unemployment on individuals and societies. This paper attempts to assess the role of active labor market policies in addressing these problems. It argues that, in the absence of active policies, the combination of more rapid structural change and the indefinite availability of cash benefits can be expected to lead to a continuing growth in long-term unemployment. Even where schemes do not have much of a return to those on them, as much of the microeconomic evidence suggests, they may still have a substantial social return in preventing the emergence of long-term unemployment. The key requirement is to ensure that no unemployed person, who is able and willing to work, should be allowed to draw benefit for more than a limited period of time. The resources of the labor market authorities should be used to ensure that as a last resort appropriate temporary job or training opportunity is made available by the

end of this period.

PD April 1995. **TI** Unemployment and Wage Inequality in OECD Countries. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 235; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 38. **PR** no charge. **JE** E24, I38, J10, J20, J30. **KW** Inequality. Labor Demand. OECD. Skill. Women.

AB This paper surveys the main changes in the level and composition of employment and in the wage structure in OECD countries during the last two decades. Despite a slowdown in the growth rates of output and productivity, employment has continued to grow in the OECD countries. The working age population has also continued to grow in most countries, with substantial increases in the female participation rate being offset by declines in participation due to later entry and early retirement for both men and women. It is argued that the growth in unemployment which has been the most serious labor market development for many of the countries cannot be attributed to demographic, to macroeconomic or to institutional supply side factors, but rather has been caused by major and pervasive shifts in the demand for labor by skill attributable primarily to technological innovation. The main evidence for this is the widening of the wage distribution in the United States and in other countries such as the UK where market forces have not been suppressed. The widening of the wage distribution has helped to preserve low skill jobs (more successfully perhaps in the US than in Britain). The paper describes the main institutional impediments to widening the wage distribution in other countries, including the role of trade unions, employment protection and minimum wage legislation and the unemployment benefit system. While in the longer term the improvements in education and training currently taking place can be expected to substantially alleviate the skills imbalance, in the short run the pressures of increasingly inegalitarian market forces will impose heavy strains on social institutions designed to assist the needy.

PD September 1995. **TI** Regional Migration in Britain 1975-1992: A Re-Examination of Distance and Contiguity Effects. **AU** Jackman, Richard; Savouri, Savvas. **AA** Jackman: London School of Economics. Savouri: Credit Lyonnais Liang. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 262; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 38. **PR** no charge. **JE** J61, R23. **KW** Great Britain. Distance. Contiguity. Migration Laws.

AB This paper examines the effects of distance and contiguity on migration flows in Great Britain over the period 1975-1992. It first establishes that the hiring function framework, developed in Jackman and Savouri (1992a), remains valid for the longer data period. It then goes on to show that distance effects are clearly defined and significant, for non-contiguous regions, and that the elasticity of migration with respect to distance is close to -1. Distance effects do not appear significant for migration between adjacent regions, possibly because of difficulties in measurement, but a contiguity measure (more specifically the length of the common regional boundary) has a well defined and significant effect. The effect of economic variables remain by and large unaffected by the inclusion of distance and accessibility variables.

PD October 1995. **TI** Economic Policies, Employment and Labour Markets in Transition in Central and Eastern Europe. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 265; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 46. **PR** no charge. **JE** E24, E65. **KW** Employment Policy. Europe. Europe. Shocks.

AB This paper discusses employment policy in the transitional economies of Central and Eastern Europe. It argues that unemployment has arisen as a consequence of economy-wide shocks rather than as part of the process of reallocation of labor between sectors. Hence policies such as tax-based incomes policy, to restrain wage growth, and selective financial support of enterprises can slow down the inflow into unemployment without impeding the process of restructuring. Likewise active labor market policies can be most successful if aimed at direct job creation rather than at improving labor mobility across sectors.

Jamison, Julian C.

PD October 1994. **TI** Costly Offers and The Equilibration Properties of the Multiple Unit Double Auction Under Conditions of Unpredictable Shifts of Demand and Supply. **AU** Jamison, Julian C.; Plott, Charles R. **AA** Jamison: Massachusetts Institute of Technology. Plott: California Institute of Technology. **SR** Caltech Social Science Working Paper: 906; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 11. **PR** no charge. **JE** C92, D52, D81, D82, D84. **KW** Experimental. Speculation. Uncertainty. Double Auction.

AB The paper reports on the behavior of markets in which a transactions cost is imposed in the form of a tax on bids and asks that are tendered in the market. That is, in the markets studied communication with the other side of the market is costly. The markets were nonstationary in the sense that market demand and market supply shifted unpredictably each period and the markets were organized by the computerized Multiple Unit Double Auction. The results are as follows. (1) A market equilibration process is observed across the periods of nonstationary markets. (2) The imposition of the cost on offers did not negate the tendency toward market equilibration but the price discovery process was "incomplete" relative to the free offer case. (3) Price equilibration with the offer cost was slower and efficiencies were reduced.

Jenkins, Stephen

TI How much Inequality can We Explain? A Methodology and an Application to the USA. **AU** Cowell, Frank; Jenkins, Stephen.

Jerger, Jurgen

PD March 1995. **TI** Remuneration Systems, Capital Formation and the NAIRU. **AU** Jerger, Jurgen; Michaelis, Jochen. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 227; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 29. **PR** no charge. **JE** J23, J33, J51. **KW** Capital Formation. Share Economy. Investment. NAIRU. **AB** In this paper we analyze the effect of different remuneration systems on capital formation and employment at the sectoral and at the aggregate level. We show that, in

general, the switch from a Fixed Wage Economy to Share Economy results in a lower non-accelerating-inflation rate of unemployment. This conclusion is derived by aggregation of the outcome of a three stage-bargaining game at the sectoral level, in which capital stock and employment are chosen by the firm and wages (or share parameters) are negotiated between firms and unions.

Jermann, Urban J.

TI The International Diversification Puzzle is Worse Than You Think. AU Baxter, Marianne; Jermann, Urban J.

Johnson, Johnnie E.V

PD October 1995. TI A Violation of Dominance and the Consumption Value of Gambling. AU Johnson, Johnnie E.V.; Shin, Hyun Song. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9525; Department of Economics, University of Southampton, Southampton SO9 5NH, England. PG 34. PR no charge. JE D81, C25. KW Violation of Dominance. Gambling.

AB We document an apparently widespread violation of dominance in the horse-racing betting market in the United Kingdom, and the use of systematic variation in the incidence of this violation to estimate the consumption value of gambling. Gamblers in the U.K. face a tax on gambling of 10%, but have the choice of paying the tax either at the time of wager, or on any return on a successful bet. It can be shown, however, that the latter act is strictly dominated by another action in which tax is paid on the wager. We explore the hypothesis that this apparent violation of rationality may be explained by a component of utility which represents the consumption value of gambling, which in turn varies with the amount wagered. We then estimate this component from a dataset consisting of a record of 25,000 individual bets using probit analysis of the tax decision.

Jones, Ian W.

PD December 1995. TI Economics, Ethics and Unfair Competition. AU Jones, Ian W.; Pollitt, Michael G. AA Jones: European School of Management. Pollitt: University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP22; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 47. PR \$10.00. JE M10. KW Business Ethics. Unfair Competition.

AB This paper seeks to define, illustrate and analyze the nature of unfair competition in the context of three important economic relationships: vertical relations between firms, relations between firms and private (or ultimate) customers, and horizontal relations between firms. The authors start by developing concepts of fairness within each of the three types of relationship with reference to the Bible. They go on to illustrate and analyze these concepts with six case studies of "good" and "bad" competitive relationships. The case studies involve Hewlett Packard, the UK clothing industry, ServiceMaster, the UK mortgage market, United Biscuits, and the BA "Dirty Tricks".

Jones, Robert

PD April 1994. TI Economic Growth as a Coordination Problem. AU Jones, Robert; Newman, Geoffrey.

AA Jones: Simon Fraser University. Newman: University of British Columbia. SR University of British Columbia, Department of Economics: 94/11; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 37. PR not available. JE O11, O31, O33, O41. KW Endogenous Growth. Technology. Creative Destruction. Search. Coordination.

AB This paper develops a search-theoretic approach to optimal growth in a setting where agents anticipate that superior technologies will continuously arise. When agents must make an adaptive search investment to 'match with' the requirements of any new technology, but where this learning is depreciated at the inception of the next, an economy is trapped in a tradeoff between absorbing new technologies and adapting to them. We show that forward-looking agents will naturally gravitate to an equilibrium either in which they absorb new technologies at their maximum rate (and largely forego the benefits of adaptation) or refrain from adoption altogether (to reap such benefits). The cyclical implication of the former is that the immediate effect of new technology adoption is an economic downturn, not a boom: expansions manifest only continuing adaptation. The latter provides foundations for reconciling sustained growth with technological inertia and other 'entrenchment' effects. It is proposed that the model offers a more general representation of Schumpeterian creative destruction, while widening the human capital foundations of endogenous growth theory.

Joshi, D.K

TI From Closed to Open Economy Macroeconomics: The Real Exchange Rate and Capital Inflows. AU Lal, Deepak; Joshi, D.K.

Joskow, Paul L.

PD December 1994. TI CEO Pay and Firm Performance: Dynamics, Asymmetries, and Alternative Performance Measures. AU Joskow, Paul L.; Rose, Nancy L. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4976; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR \$5.00. JE J31, J32, J33. KW Chief Executive Officer. Executive Compensation. Pay for Performance.

AB This study explores the dynamic structure of the pay-for-performance relationship in CEO compensation and quantifies the effect of introducing a more complex model of firm financial performance on the estimated performance sensitivity of executive pay. The results suggest that current compensation responds to past performance outcomes, but that the effect decays considerably within two years. This contrasts sharply with models of infinitely persistent performance effects implicitly assumed in much of the empirical compensation literature. We find that both accounting and market performance measures influence compensation and that the salary and bonus component of pay as well as total compensation have become more sensitive to firm financial performance over the past two decades. There is no evidence that boards fail to penalize CEOs for poor financial performance or reward them disproportionately well for good performance. Finally, the data suggest that boards may discount extreme outcomes--both high and low--relative to performance that lies within some "normal" band in setting compensation.

PD December 1994. TI Political Constraints on

Executive Compensation: Evidence From the Electric Utility Industry. AU Joskow, Paul L.; Rose, Nancy L.; Wolfram, Catherine D. AA Joskow and Rose: Massachusetts Institute of Technology and National Bureau of Economic Research. Wolfram: Massachusetts Institute of Technology. SR National Bureau of Economic Research Working Paper: 4980; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 24. PR \$5.00. JE J31, J32, J33, L51. KW Chief Executive Officer. Executive Compensation. Pay for Performance.

AB This study explores the effect of regulatory and political constraints on the level of CEO compensation for 87 state-regulated electric utilities during 1978-1990. The results suggest that political pressures may constrain top executive pay levels in this industry. First, CEOs of firms operating in regulatory environments characterized by investment banks as relatively "pro-consumer" receive lower compensation than do CEOs of firms in environments ranked as more friendly to investors. Second, CEO pay is lower for utilities with relatively high or rising rates, or a higher proportion of industrial sales, consistent with earlier research that describes political pressures on electricity rates. Finally, attributes of the commission appointment and tenure rules affect CEO compensation in ways consistent with the political constraint hypothesis: for example, pay is lower in states with elected commissioners than in states where commissioners are appointed by the governor, all else equal. Despite apparently effective pressure to constrain pay levels in this sector, however, we find no evidence of related intra-industry variation in the sensitivity of pay to firm financial performance.

Juster, F. Thomas

TI Income and Wealth of Older American Households: Modeling Issues for Public Policy Analysis. AU Gustman, Alan L.; Juster, F. Thomas.

Kaestner, Robert

PD February 1995. **TI** The Effects of Cocaine and Marijuana Use on Marriage and Marital Stability. AA National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5038; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR \$5.00. JE J12. KW Cocaine. Illicit Drug. Marijuana. Marriage.

AB This paper examines the relationship between illicit drug use and marital status. The paper starts with an overview of the relevant economic theory for this problem. Then, using data from the National Longitudinal Survey of Labor Market Experiences, the paper presents both cross sectional and longitudinal estimates of the effect of marijuana and cocaine use on marital status, time until first marriage, and duration of first marriage. The results indicate that in general, drug users are more likely to be unmarried due to a delay in the age at first marriage, and shorter marriage durations. The findings are not uniform, however, and differ according to the gender, race and age of the sample.

Kandel, Shmuel

PD January 1995. **TI** On the Predictability of Stock Returns: An Asset-Allocation Perspective. AU Kandel, Shmuel; Stambaugh, Robert F. AA Kandel: University of Pennsylvania. Stambaugh: University of Pennsylvania and National Bureau of Economic Research. SR National

Bureau of Economic Research Working Paper: 4997; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$5.00. JE G11, G12, G13, G14. KW Portfolio Choice. Stock Return. Predictability.

AB The predictability of monthly stock returns is investigated from the perspective of a risk-averse investor who uses the data to update initially vague beliefs about the conditional distribution of returns. The optimal stocks-versus-cash allocation of the investor can depend importantly on the current value of a predictive variable, such as dividend yield, even though a null hypothesis of no predictability might not be rejected as conventional significance levels. When viewed in this economic context, the empirical evidence indicates a strong degree of predictability in monthly stock returns.

Kaplow, Louis

PD December 1994. **TI** A Fundamental Objection to Tax Equity Norms: A Call for Utilitarianism. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4961; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$5.00. JE D63, D78. KW Egalitarianism. Equity. Interpersonal Aggregation. Utilitarianism. Tax Policy.

AB Anti-utilitarian norms often are used in assessing tax systems. Two motivations support this practice. First, many believe utilitarianism to be insufficiently egalitarian. Second, utilitarianism does not give independent weight to other equitable principles, notably concerns that reforms may violate horizontal equity or result in rank reversals in the income distribution. This investigation suggests that a policy maker who believes in the Pareto principle--that any reform preferred by everyone should be adopted--cannot consistently adhere to any of these anti-utilitarian sentiments. Moreover, the affirmative case for utilitarian tax policy assessment is stronger than is generally appreciated.

PD February 1995. **TI** Regional Cost-of-Living Adjustments in Tax-Transfer Schemes. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5008; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR \$5.00. JE E31, E62, H21, H23, I38. KW Cost of Living. Redistribution. Transfer Payment.

AB The federal income tax and major welfare programs do not take into account significant cost-of-living variations among regions. This article considers what adjustments might be appropriate in light of the distributive purposes of tax and welfare systems and concerns about the efficiency of the interregional allocation of resources. Price index problems, differences in amenities, and heterogeneity of individuals' locational preferences are considered.

Kashyap, Anil K.

TI Do Firms Smooth the Seasonal in Production in a Boom? Theory and Evidence. AU Cecchetti, Stephen G.; Kashyap, Anil K.; Wilcox, David W.

Kattuman, Paul A.

PD May 1995. **TI** On the Size Distribution of Establishments of Large Enterprises: An Analysis for UK Manufacturing. AA University of Durham and University of

Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP8; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 28. PR \$10.00. JE L11, L60, C49. KW Maximum Entropy. Size Distribution. Establishment. Enterprise.

AB A parsimonious explanation for the positive skew of enterprise size distributions is Gibrat's law. In large multi-establishment enterprises, do establishment-specific idiosyncratic shocks penetrate the veil of common ownership and lead to a similar regularity in the intra-enterprise, establishment size distribution? A maximum entropy method is used to derive statistically a null hypothesis on the nature of this distribution for UK manufacturing industries. It is shown that the degree of concentration of the intra-enterprise establishment size distribution determines the variance of the distribution of growth rates of the enterprise--and thus the risk it faces.

Keane, Michael

PD April 1995. TI The Employment and Wage Effects of Oil Price Changes: A Sectoral Analysis. AU Keane, Michael; Prasad, Eswar. AA Keane: University of Minnesota and Federal Reserve Bank of Minneapolis. Prasad: International Monetary Fund. SR International Monetary Fund Working Paper: 95/37; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE J21, J31, Q43. KW Employment. Wages. Oil.

AB In this paper, we use micro panel data to examine the effects of oil price changes on employment and real wages, at the aggregate and industry levels. We also measure differences in the employment and wage responses for workers differentiated on the basis of skill level. We find that oil price increases result in a substantial decline in real wages for all workers, but raise the relative wage of skilled workers. The use of panel data econometric techniques to control for unobserved heterogeneity is essential to uncover this result, which is completely hidden in OLS estimates. We find that changes in oil prices induce changes in employment shares and relative wages across industries. However, we find little evidence that oil price changes cause labor to consistently flow into those sectors with relative wage increases.

Keeble, David

PD February 1995. TI Management Consultancy in Europe. AU Keeble, David; Schwalbach, Joachim. AA Keeble: University of Cambridge. Schwalbach: Humboldt-University at Berlin. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP1; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 43. PR \$10.00. JE L11, L86, M13, M20. KW Management Consultancy. Small Firm Dynamics. Entrepreneurship. European Business.

AB The paper reviews the characteristics and recent growth of management consultancy firms in western Europe. Particular attention is paid to inter-country variations in firm size and age structures, employment growth, and the differentiation of consultancy activities. It then presents an in-depth analysis of the role and dynamics of small management consultancy firms in the UK. This reveals remarkable growth and dynamism

amongst small consultancy firms, together with high birth and death rates, as well as highlighting the key role of market specialization and of different supply-side and demand-side influences in the industry's expansion. The paper also discusses entrepreneurship, founder motivation and the origins of small consultancy firms, the nature of demand and competitive advantage, flexibility and networking, the effect of externalization and new technology, and future prospects for small consultancies.

PD February 1995. TI Enterprising Behavior and the Urban-Rural Shift. AU Keeble, David; Tyler, Peter. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP4; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 55. PR \$10.00. JE R11, R23, M13, O31, O18. KW Urban-Rural Shift. Innovation. Flexible Specialization. Rural Migration.

AB The paper presents and discusses new evidence on the nature and causes of the urban-rural shift of business activity and employment in England, derived from a matched pairs survey of over 1000 manufacturing and service businesses in remote rural, accessible rural, and urban settlements. It reveals faster employment growth in rural firms, highlights the migration origins of and environmental influences on rural firm founders, and identifies significant urban-rural differences in the enterprising behavior of companies. The implications of these findings for a new theoretical understanding of the reasons for the urban-rural shift are explored.

TI Growth-Oriented SMEs in Unfavorable Regional Environments. AU Vaessen, Peter; Keeble, David.

Keller, Godfrey

TI Exploring Branching Structure: A Bandit Problem with Correlated Pay-Offs. AU Hole, Alison; Keller, Godfrey.

Kelm, Matthias

PD September 1995. TI Economic Growth as an Evolutionary Process. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP17; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 67. PR \$10.00. JE D41, D80, E10, O30, O11. KW Evolutionary Theory. Economic Growth. Uncertainty. Bounded Rationality.

AB Building on theories of economic and cultural evolution, and on empirical research on technical change, this paper derives a coherent evolutionary theory of economic growth from the basic assumptions of genuine uncertainty and bounded rationality. As a by-product, it also sheds light on the fundamental problems associated with the use of the neoclassical paradigm in dealing with long-run economic growth. The theory developed here improves on previous theories of economic evolution by distinguishing more precisely between the various evolutionary forces driving the growth process. This distinction enhances our understanding of economic growth, and it is also relevant to the important question regarding the 'optimality' of economic evolution.

Kessler, Daniel P.

TI The Causes and Effects of Liability Reform: Some

Empirical Evidence. AU Campbell, Thomas J.; Kessler, Daniel P.; Shepherd, George B.

Kesselman, Jonathan R.

PD June 1994. TI Assessing a Direct Consumption Tax to Replace the GST. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/21; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 103. PR not available. JE H21, H24. KW Value-Added Tax. Consumption Tax. Payroll Tax. Cash Flow Tax.

AB Replacing the GST with a direct consumption tax (DCT) would preserve or surpass most of the advantages of the GST over its predecessor while also reducing or eliminating the major deficiencies of the GST. This study examines the design of a DCT that is based on the principles of consumption taxation and utilizes existing collection devices for personal, corporate, and excise taxes. Its major components are a federal payroll tax (FPT) and a cash flow tax (CFT) on corporations. Together these two bases could approximate the base of a value-added tax such as the GST. The FPT would be a flat-rate levy on gross employee compensation, deducted at source by employers, combined with flat-rate withholding on pension-type payments and non-income-tested transfers. A rate of 2.9 percent for FPT/CFT would suffice to replace the net revenues of the GST if combined with certain fiscal offsets. The study undertakes a comparative examination of the GST and the DCT in terms of their economic, operational, and political economy properties. The DCT is found to be generally similar to the GST in most major economic respects, though some differences are noted. The largest gains of the DCT over the GST are found to be in terms of the cost of administration and compliance, with the DCT projected to save over \$1 billion per year. The study also compares the DCT with other proposals for replacing or reforming the GST (including base broadening, provincial harmonization, and tax-inclusive pricing). On economic, operational, and political economy grounds such as tax visibility, the DCT is found to offer more advantages than disadvantages relative to the GST.

PD October 1994. TI Public Policies to Combat Child Poverty: Goals and Options. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/33; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 26. PR not available. JE I31, I38, H11. KW Poverty Policy. Child Care. Child Support.

AB The federal review of social policies has taken as one of its top priorities reducing the incidence of child poverty. This study critically assesses the parts of the federal discussion paper that deal with child antipoverty policies. A critical question in framing these policies is why society cares about child poverty. The reasons relate more to the consequences of child poverty--the stunted emotional, intellectual, and physical development that carry external costs for society--than the poverty itself. This leads to a child development perspective on public policies, including preventive policies, income policies, and investments in the human capital of poor children. Income policies can include improved child support, changes to public transfers, and enhancing the employability of poor parents. The study examines a range of proposals for improving child support and child care. More detailed analysis is given to the proposals for enlarging or reforming the Child Tax Benefits. The priority of enhanced transfers relative to other policies targeted on the lifetime prospects of poor children is

questioned, and some of the proposals for increasing cash transfers are found to have serious deficiencies. Other methods of reforming child benefits are also considered in the child development perspective.

Khalaf, Haifa

TI An Exploration of Entry to and Exit From Self-Employment. AU Abell, Peter; Khalaf, Haifa; Smeaton, Deborah.

Kimball, Miles S.

PD February 1995. TI The Quantitative Analytics of the Basic Neomonetarist Model. AA University of Michigan and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5046; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 42. PR \$5.00. JE E30, E40, E50. KW Adjustment Cost. Neomonetarism. Business Cycle. Returns to Scale.

AB This paper constructs a dynamic macroeconomic model with less-than-perfect price flexibility which has a real side consistent with Real Business Cycle Theory, augmented by investment adjustment costs, increasing returns to scale, and a new, flexible formalization of imperfect competition. A new mode of approximation is developed--useful for any model in which one state variable adjusts quickly, while another state variable adjusts slowly. Even with investment adjustment costs, monetary expansions are found to raise the real interest rate. The determinants of real rigidity and the macroeconomic rate of price adjustment are investigated.

King, John

TI The Taxation of Financial Assets: A Survey of Issues and Country Experiences. AU Tanzi, Vito; King, John.

King, Robert G.

TI Measuring Business Cycles Approximate Band-Pass Filters for Economic Time Series. AU Baxter, Marianne; King, Robert G.

Kitson, Michael

PD February 1995. TI Seedcorn or Chaff? Unemployment and Small Firm Performance. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP2; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 35. PR \$10.00. JE J60, L10, L20. KW Unemployment. Entrepreneurship. Small Firm Growth.

AB It is commonly contended that unemployment is an important stimulus to new firm formation. It is also argued that this stimulus reduces the dynamism of the small firm sector as founders of firms who were previously unemployed are inferior entrepreneurs. This paper seriously questions this conclusion. Evidence from a national survey of small and medium-sized businesses is used to examine in detail the role of the unemployment push mechanism of new firm formation and the relative performance of firms established by unemployed founders. The empirical evidence, covering a range of indicators, shows that employment status of the founder produces no significant difference in firm performance.

PD October 1995. TI Britain's Industrial Performance

since 1960: Underinvestment and Relative Decline. AU Kitson, Michael; Michie, J. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP14; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 37. PR \$10.00. JE E22, L50, L60. KW Economic Policy. Manufacturing. Deindustrialization. AB This article argues that Britain's industrial performance since 1960 has been relatively poor; secondly, that the deindustrialization which has been associated with this relatively poor industrial performance is a serious problem for the whole economy; thirdly, that neither the specific problem of deindustrialization nor the consequent general problem of continued relative economic decline were solved in the 1980s; and fourthly, that the key reason why British industry has been doing relatively poorly has been underinvestment in manufacturing.

Klenow, Peter J.

TI High Tech R&D Subsidies: Estimating the Effects of Sematech. AU Irwin, Douglas A.; Klenow, Peter J.

Kletzer, Kenneth

TI Capital Mobility, Fiscal Policy and Growth Under Self-Financing of Human Capital Formation. AU Buiter, Willem H.; Kletzer, Kenneth.

Knight, Malcolm

PD May 1995. TI The Peace Dividend: Military Spending Cuts and Economic Growth. AU Knight, Malcolm; Loayza, Norman; Villanueva, Delano. AA Loayza: World Bank. Knight and Villanueva: International Monetary Fund. SR International Monetary Fund Working Paper: 95/53; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 30. PR not available. JE O41, O47. KW Growth. Military Spending. Capital Formation. AB Although conventional wisdom suggests that reducing military spending may improve a country's economic growth performance, empirical studies have produced ambiguous results. This paper extends a standard growth model and estimates it using techniques that exploit both cross-section and time-series dimensions of available data to obtain consistent estimates of the growth-retarding effects of military spending via its adverse impact on capital formation and resource allocation. Model simulations suggest that a substantial long-run "Peace Dividend"--in the form of higher capacity output--may result from: (i) markedly lower military expenditure levels achieved in most regions during the late 1980s; and (ii) further military spending cuts that would be possible in the future if a global peace could be secured.

Koen, Vincent

PD January 1995. TI Stabilization and Structural Change in Russia, 1992-94. AU Koen, Vincent; Marrese, Michael. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/13; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE E23, E31, E51, E62, P27. KW Stabilization. Economic Reform. AB Macroeconomic stabilization and structural reforms in Russia since 1992 have been proceeding in a rather chaotic fashion. The Russian variety of economic gradualism has seen a

sharp decline in output, though less than indicated by official statistics, and relatively resilient household consumption. Hyperinflation has been avoided so far by tightened financial policies, but remains a threat. Conventional macroeconomic wisdom on the relation between money, prices and output is relevant for Russia. Moreover, stabilization and structural change interact and are mutually reinforcing.

TI Relative Price Convergence in Russia. AU De Masi, Paula; Koen, Vincent.

PD August 1995. TI Price Measurement and Mismeasurement in Central Asia. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/82; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 19. PR not available. JE E31, P22, R32. KW Indexing. Prices. Inflation.

AB The vertiginous increases in the overall price level and dramatic swings in relative prices experienced by Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan since the onset of the transition rendered their traditional Paasche retail price indices obsolete and called for the introduction of Laspeyres consumer price indices. While the latter represent a major improvement, several measurement or interpretation issues remain, reflecting various potential index number biases, dispersion of prices and inflation across geographical areas and social groups, discontinuities in the inflation process, residual shortages, and seasonality.

Kollman, Ken

TI A Comparison of Political Institutions in a Tiebout Model. AU Page, Scott E.; Kollman, Ken; Miller, John H.

Koopman, Siem Jan

TI The Modelling and Seasonal Adjustment of Weekly Observations. AU Harvey, Andrew; Koopman, Siem Jan; Riani, Marco.

Koopmans, Reinout

TI Cross-Sectional Firm Dynamics: Theory and Empirical Results from the Chemical Sector. AU Lamo, Ana; Koopmans, Reinout.

Kortum, Samuel

TI International Patenting and Technology Diffusion. AU Eaton, Jonathan; Kortum, Samuel.

TI Trade in Ideas: Patenting and Productivity in the OECD. AU Eaton, Jonathan; Kortum, Samuel.

Kotwal, Ashok

TI Quality-Biased Technical Progress and North-South Trade. AU Copeland, Brian R.; Kotwal, Ashok.

Kraay, Aart

PD July 1995. TI Employment and Wages in the Public Sector--A Cross-Country Study. AU Kraay, Aart; Van Rijckeghem, Caroline. AA Kraay: World Bank and International Monetary Fund. Van Rijckeghem: International Monetary Fund. SR International Monetary Fund Working Paper: 95/70; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 32. PR not available. JE E62, H50, J31. KW Employment. Efficiency Wages. Government Debt.

AB We study the determinants of employment and wages in the public sector, using a new set of panel data for 34 LDCs and 21 OECD countries from 1972-1992, by estimating equations suggested by an efficiency wage model. We find that government employment is positively associated with the relaxation of resource constraints (the revenue-to-GDP ratio and foreign financing in the case of developing countries and GDP per capita in the case of OECD countries), urbanization, the level of education, and certain countercyclical pressures for government hiring (the real effective exchange rate for developing countries and private employment for OECD countries). Certain measures of government wages are positively associated with government revenues and negatively associated with the level of education, government debt, and countercyclical pressures.

Kramer, Charles

TI Nonlinearity and Endogeneity in Macro-Asset Pricing.
AU Hiemstra, Craig; Kramer, Charles.

PD July 1995. **TI** Recent Turmoil in Emerging Markets and the Behavior of Country-Fund Discounts: Renewing the Puzzle of the Pricing of Closed-End Mutual Funds.
AU Kramer, Charles; Smith, R. Todd. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/68; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 12. **PR** not available. **JE** G12, G15. **KW** Mutual Funds. Asset Prices. Stock Market.

AB This paper argues that recent movements in closed-end emerging markets funds present a strong challenge to the leading explanations of the behavior of closed-end country fund prices. In particular, closed-end funds dedicated to Mexico and other Latin American stock markets developed large premia after the December 1994 devaluation of the Mexican peso and the subsequent financial crisis. The so-called "investor sentiment hypothesis" could explain these events only by suggesting that investors became very optimistic about emerging markets stocks, and especially Mexican stocks; this possibility seems unlikely given the facts surrounding the devaluation. We argue instead that a sensible explanation for recent dynamics of closed-end country funds is that investors in these funds are loss-averse, implying that they do not want to realize paper losses on their closed-end fund shares. This works to put a drag on the downward movement in closed-end fund prices.

Krishna, Kala

PD January 1995. **TI** Implementing Free Trade Areas: Rules of Origin and Hidden Protection. **AU** Krishna, Kala; Krueger, Anne. **AA** Krishna: Pennsylvania State University and National Bureau of Economic Research. Krueger: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4983; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$5.00. **JE** F11, F12, F15. **KW** Free Trade Area. Rule of Origin.

AB This paper focuses on the effects of rules of origin in Free Trade Areas. We first point out that even rules of origin which are not restrictive, namely those which do not raise costs of production, have very pronounced effects on trade and investment flows. We then look at some different ways of specifying rules of origin (ROOs) under perfect competition.

We compare price and cost based ROOs and show that even if they are equivalent in the "long run", they are not equivalent in the short run where capacity constraints can exist. We also show that some kinds of ROOs can be ranked in terms of their implications for producer profits. We also show that welfare is likely to be non monotonic in the restrictiveness of the ROO, so that making a ROO more stringent could raise welfare. Finally, we show that in the presence of imperfect competition, ROOs may raise output and reduce prices as they become more stringent.

PD January 1995. **TI** The Adding Up Problem: A Targeting Approach. **AA** Pennsylvania State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4999; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$5.00. **JE** F34, F36, G21, G24. **KW** Adding Up Problem. Investment. Targeting.

AB This paper looks at the problem of making multiple lending decisions which affect the supply of the product when the consequences of these lending decisions are interrelated via the effect on the world price of the product. Thinking of this problem from the point of view of the targeting literature helps to clarify the nature of optimal policies. In order to do so, three factors need to be specified. First, the objective function of the lender (the Bank) as compared to those of the borrowers (the countries) must be clear. Second, the extent of the lenders' ability to influence total investment in the product, and the instruments available to it, must be understood. Third, the distortions present in the environment must be identified. The lender is thought of as trying to implement policies which maximize its objective function. There are distortions in the system which prevent this objective function from being maximized automatically. These distortions could arise because (1) the objectives of the lender do not match those of the borrowers, (2) because of misconceptions about how the system operates on the part of the borrowers, (3) because of a lack of access to funds on the part of the borrowers relative to the lender, among a host of other distortions not focused on here. The environment and policies available to the lender limit its ability to influence the outcome. In this context, it is argued that targeting models can be used to help guide policy. The basic rule is to correct the distortions where they occur using the appropriate instrument to do so. If instruments are limited, the available instruments are used to target multiple distortions, and the first best need not be attainable.

Krueger, Anne

TI Implementing Free Trade Areas: Rules of Origin and Hidden Protection. **AU** Krishna, Kala; Krueger, Anne.

Krueger, Russell

PD March 1995. **TI** Measurement of Co-Circulation of Currencies. **AU** Krueger, Russell; Ha, Jiming. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/34; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 27. **PR** not available. **JE** C42, C82, E51, F31. **KW** Capital Flows. Monetary Aggregates. Currency.

AB "Co-circulation" involves the regular use of two or more currencies within an economy. This paper examines methodologies to measure the extent to which foreign currencies are circulated within an economy. Ample anecdotal

evidence exists that the U.S. dollar, DM, and other currencies are widely used outside their home countries, as general mediums of exchange, as speculative instruments, or as means of saving. Co-circulation is rarely estimated, which can result in serious errors in statistical estimates of international capital flows and monetary aggregates. We examine a variety of measurement techniques that might be used in various situations. However, estimation remains difficult or impossible in some settings. Limited evidence available suggests that co-circulation is widespread and large scale in some countries. In the final section, we discuss some policy implications of co-circulation regarding seigniorage, inflation control, and the partial integration of monetary systems that accompanies co-circulation. An appendix by Roman Zyttek discusses possible sampling biases in measuring co-circulation due to segmentation in markets.

Krueger, Thomas

TI Exchange Rate Movements and Inflation Performance: The Case of Italy. AU Ford, Robert; Krueger, Thomas.

Kuttner, Kenneth N.

TI Indicator Properties of the Paper-Bill Spread: Lessons from Recent Experience. AU Friedman, Benjamin M.; Kuttner, Kenneth N.

Kynch, Jocelyn

PD October 1994. TI Food and Human Growth in Palanpur. AA University of Wales. SR London School of Economics, Development Economics Research Programme: DEP/57; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 56. PR no charge. JE I12, O12, J16. KW Nutrition. Human Growth. Cooperative. Conflict. Gender.

AB An examination of the physical growth process and achievements of children and adults in agricultural households of one village provides some insights into the different risks and shortfalls which men, women and children face. We review circumstances in the village which suggest that a hazardous environment and gender roles contribute to a potent synergism between ill-health and poor growth of children which is characteristic of deprived communities. Despite income growth over 25 years, most members of households are thin. Although the village favors children being less thin than others, the children are still growing up stunted by Indian and international reference standards. An accumulation of evidence indicates poor growth of young girls relative to boys, and that girls risk severe impairment of their development.

Lakonishok, Josef

TI Market Underreaction to Open Market Share Repurchases. AU Ikenberry, David; Lakonishok, Josef; Vermaelen, Theo.

Lal, Deepak

PD July 1994. TI From Closed to Open Economy Macroeconomics: The Real Exchange Rate and Capital Inflows. AU Lal, Deepak; Joshi, D.K. AA Lal: University of California, Los Angeles. Joshi: NCAER, New Delhi. SR University of California, Los Angeles Working Paper Series: 715; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 17. PR \$5.00. JE D58, E13, F41. KW Macroeconomic Policy. Balance of Payments.

India.

AB With the opening of the Indian economy following the Narasimha Rao- Manmohan Singh reforms, macroeconomic policy needs to be examined in a different analytical framework from the essentially closed economy "structuralist" framework that has hitherto characterized policy discussions in India (see e.g., Pohit and Bhide). A simple but very useful framework is the so-called "Australian" balance of payments model for a small open economy which integrates the real and monetary aspects in a simple general equilibrium framework (see Salter, Corden, Harberger, Lal (ch. 17)). This paper attempts to apply this framework to India to explain the evolution of major economic variables since 1991, and to identify the key policy instruments which are relevant in determining macroeconomic balance in an economy which is likely to see a large increase in capital inflows.

PD July 1994. TI Labor Market Insurance and Social Safety Nets in Developing Countries. AA University of California, Los Angeles. SR University of California, Los Angeles Working Paper Series: 716; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 32. PR \$5.00. JE H11, I31, I38, J65. KW Poverty. Labor Market. Unemployment. Safety Nets.

AB The purpose of this paper is to examine the design of social safety nets that are fiscally and politically sustainable. Various components of proposed safety nets: the provision of merit goods, direct transfers to alleviate poverty, insurable labor market risks, unemployment benefits and severance payments are distinguished, and discussed. To anchor the discussion, it is necessary to briefly outline the difference between a "welfare state" and a "social safety net" and to provide a typology by stage of development of the type of labor market risks faced by workers in different developing countries which requires some collective action. This is done in Section I. Even if a social safety net embodying such collective action is required, there is the open question whether this should be left to individuals to organize through private institutions or should be imposed on them through the coercive power of the State--including its power to tax. This question is discussed along with the available empirical evidence in Section II. This then allows us to set up some general principles for the design of social safety nets in line with classical liberalism, in Section III. The fourth and final section then applies these principles to provide some operational guidelines for individual components of the safety net distinguished above.

PD July 1994. TI The Role of the Public and Private Sectors in Health Financing in Developing Countries. AA University of California, Los Angeles. SR University of California, Los Angeles Working Paper Series: 717; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. PG 35. PR \$5.00. JE I11, I18, H51. KW Health Care. Public Finance. Market Failure.

AB This paper follows the WDR93 in distinguishing between public health programs and clinical services, and argues that while the case for public financing of the former is valid, that for the "essential clinical package" is more questionable. This is partly because of the impossibility of any objective definition of an essential clinical package for any country. The use of DALYs (or QALYs) to derive such a package is shown to be conceptually unsound. Equally dubious are the rationales based on "market failure" in health care for public intervention. It is argued there is no a priori reason to believe that with imperfect information (the major cited source of "market failure") there is

any political solution which is "Pareto superior" to that provided by a competitive market. Nor are the other purported "market failures" unique to health markets. So, as arguments based on an unattainable ideal are considered to be irrelevant in suppressing private markets by political solutions for other goods and services, the same conclusion applies to health markets. As regards the justification for public financing of health care for the poor, it is argued this case is only valid for destitutes, who for reasons of political economy may not do any better from public transfers than from private charity. But such charity might be stimulated by earmarking foreign aid funds for poverty alleviation, on a matching basis, to charities dealing with destitutes. Finally, the paper examines the lessons to be learned from the private health care market in the U.S. and the pre-NHS private health market in the U.K. as contrasted with the experience with socialized medicine. It is argued that the ills of the U.S. health market are due to policy induced distortions in their working. For the "working poor" the mutual aid societies of 19th century Britain are of particular relevance for developing countries, and they too could be encouraged through the provision of matching public funds.

Lamo, Ana

PD March 1995. TI Cross-Sectional Firm Dynamics: Theory and Empirical Results from the Chemical Sector. AU Lamo, Ana; Koopmans, Reinout. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 229; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 78. PR no charge. JE L11, L65, C21, C23, C73. KW Industry. Dynamics. Chemical. Sector. Stochastic Kernels.

AB The literature on the dynamics of industry structure has generated very few robust empirical predictions. This paper shows that if one particular assumption is made about the pay off structure of an investment project, three well know games, a modified 'Grab the Dollar' game, an auction and a stochastic race all have identical (robust) empirical predictions. The assumed structure of payoffs applies particularly well to the chemicals sector. The theoretical implication is that small firms are more likely to install new capacity than their larger competitors, leading to a tendency of firm sizes to converge. We show that the conventional empirical approach using discrete choice models is inappropriate in this context, due to Galton's Fallacy. Using a novel method to study empirical firm dynamics, by analyzing dynamically evolving cross-section distributions and by that exploiting time series and cross-section information more fully than standard cross-section regressions, we show that there is a strong tendency of firm sizes to converge in the chemicals sector.

TI Dynamics of the Income Distribution Across OECD Countries. AU Andres, J.; Lamo, Ana.

Lane, Christel

PD February 1995. TI Risk, Trust and Power: The Social Constitution of Supplier Relations in Britain and Germany. AU Lane, Christel; Bachmann, Reinhard. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP5; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 53. PR \$10.00. JE L10, L60, L14. KW Risk. Trust. Power. Inter-firm Relationships. Contracts.

AB Trust and power are analyzed as means to reduce uncertainty and risk in inter-firm relationships. Both theoretically and with reference to empirical comparative research (Britain and Germany) it is shown that trust-based relations between buyer and supplier firms rarely evolve spontaneously on the level of individual interaction but are highly dependent on the existence of stable legal, political and social institutions.

PD December 1995. TI Cooperation in Vertical Inter-Firm Relations in Britain and Germany: The Role of Social Institutions. AU Lane, Christel; Bachmann, Reinhard. AA Lane: University of Cambridge. Bachmann: Technische Universität Hamburg-Harburg. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP21; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 42. PR \$10.00. JE L14, M20. KW Trust. Power. Industry Associations. Inter-Firm Relationships. Contract Law. AB This paper examines from a comparative perspective (Britain and Germany) how two important aspects of institutional order--industry associations and legal regulations--influence the quality of inter-firm relations. It is argued that these institutional structures contribute in important ways to the construction of both trust and power relations and that there exists a complex interrelationship between 'system trust' and 'system power'. It is shown that the radically different institutional orders of Britain and Germany lead to some significant differences in the nature of inter-firm coordination achieved. The paper draws on empirical material from the ESRC project on Vertical Contracts.

Laursen, Thomas

TI Historical Experience with Bond Financing to Developing Countries. AU Fernandez-Ansola, Juan Jose; Laursen, Thomas.

Lawrence, Denis A.

TI The Deadweight Costs of Taxation in New Zealand. AU Diewert, W. Erwin; Lawrence, Denis A.

Laxton, Douglas

TI World Public Debt and Real Interest Rates. AU Ford, Robert; Laxton, Douglas.

TI Capacity Constraints, Inflation and the Transmission Mechanism: Forward-Looking Versus Myopic Policy Rules. AU Clark, Peter; Laxton, Douglas; Rose, David.

TI Asymmetry in the U.S. Output-Inflation Nexus: Issues and Evidence. AU Clark, Peter; Laxton, Douglas; Rose, David.

Layard, Richard

PD May 1995. TI How Much Unemployment is Needed for Restructuring?: The Russian Experience. AU Layard, Richard; Richter, Andrea. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 238; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 35. PR no charge. JE J23. KW Privatization. Redeployment. Russia. Unemployment.

AB Open unemployment in Russia has been growing very

slowly--by only about 1 percentage point a year. This is mainly because of a degree of wage flexibility unknown in the West. Comparing industries over a two year period we find that, if relative employment fell by 10 percent, relative wages fell by 24 percent. Redundancies have been very low--only 1.5 percent of the work force in 1993. There has, however, been substantial redeployment of labor through job to job movement--with a hiring rate of 21 percent of the workforce in 1993. The paper then discusses the reasons for this wage flexibility--in terms of the unemployment aversion of workers and the financial and other incentives facing managers. Finally, it appraises the 'Russian way' and argues that it is better than having large-scale open unemployment, provided the under-employed workers kept in enterprises do not impede the internal restructuring of the enterprise.

Le Dem, Jean

TI Labor Market Representation in Quantitative Macroeconomic Models for Developing Countries: An Application to Cote d'Ivoire. AU Bodart, Vincent; Le Dem, Jean.

Leahy, D.

TI Learning By Doing, Precommitment and Infant-Industry Protection. AU Neary, J.P.; Leahy, D.

Leahy, John V.

PD January 1995. TI The Effect of Uncertainty on Investment: Some Stylized Facts. AU Leahy, John V.; Whited, Toni M. AA Leahy: Harvard University and National Bureau of Economic Research. Whited: University of Delaware. SR National Bureau of Economic Research Working Paper: 4986; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR \$5.00. JE G12. KW CAPM. Investment Uncertainty. Irreversibility.

AB The theoretical relationship between investment and uncertainty is ambiguous. This paper briefly surveys the insights that theory has to offer and then runs a series of simple tests aimed at evaluating the empirical significance of various theoretical effects. Our results from a panel of U.S. manufacturing firms indicate a negative effect of uncertainty on investment consistent with theories of irreversible investment. We find no evidence for a positive effect via the channel of the convexity of the marginal product of capital, and we find no evidence for the presence of a CAPM-based effect of risk.

LeBaron, Blake D.

TI A Dynamic Structural Model for Stock Return Volatility and Trading Volume. AU Brock, William A.; LeBaron, Blake D.

Lee, In Hoo

PD November 1995. TI Merging of Forecasts in Markov Models. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9531; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 5. PR no charge. JE C11, C44, D83. KW Merging of Forecasts. Merging of Opinions. Markov Models.

AB Blackwell and Dubins (1962) and Kalai and Lehrer (1994) showed that absolute continuity is necessary and sufficient for merging of opinions. This paper suggests the

concept of merging of forecasts which is a modification of merging opinions in Markov models where the underlying state of nature may change over time. We define the merging of forecasts as the conditional probabilities of the future state given the past observations of signals drawn conditional on the state get close to each other for different agents; it allows for the event that agents agree on the future evolution of the states even if they have not agreed in the distant past. For an ergodic Markov chain, any forecasts merge. In particular, we can dispense with the absolute continuity for merging of forecasts.

Lee, Tae-Hwy

TI Relative Power of t Type Tests for Stationary and Unit Root Processes. AU Gonzalo, Jesus; Lee, Tae-Hwy.

TI Pitfalls in Testing for Long Run Relationships. AU Gonzalo, Jesus; Lee, Tae-Hwy.

Levinsohn, James

PD December 1994. TI Competition Policy and International Trade. AA University of Michigan and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4972; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE F12. KW Competition Policy. Imperfect Competition. Trade.

AB This paper presents a non-technical discussion of economic issues that arise due to links between competition (or anti-trust) policy and international trade. While recent advances in international trade theory have borrowed heavily from the industrial organization literature, this work has a schizophrenic quality to it. One of the insights that motivated the new trade theory was the observation that many markets were not perfectly competitive. For the case of purely domestic markets, the industrial organization literature provided a foundation for policy advice and most countries have well established public policy regarding competition between firms. While trade theorists have borrowed heavily from the theory of industrial organization, they seem to have ignored the existence of competition policy when investigating trade policy. The two interact in important ways, and pretending that trade policy in imperfectly competitive markets takes place in the absence of any competition policy may lead to inadvertent policy outcomes.

Levitt, Steven D.

PD January 1995. TI Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime. AA Harvard Society of Fellows and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4991; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR \$5.00. JE D72, H42, K42. KW Crime. Elections. Police.

AB Previous empirical studies have typically uncovered little evidence that police reduce crime. One problem with those studies is a failure to adequately deal with the simultaneity between police and crime: while police may or may not reduce crime, there is little doubt that expenditures on police forces are an increasing function of the crime rate. In this study, the timing of mayoral and gubernatorial elections is used to identify the effect of police on crime. This paper first demonstrates that increases in the size of police forces disproportionately occur in mayoral and gubernatorial election years, a relationship that

had previously gone undocumented. After controlling for changes in government spending on other social programs, there is little reason to think that elections will be otherwise correlated with crime, making election ideal instruments. Using a panel of large U.S. cities from 1970-1992, police are shown to reduce crime for six of the seven crime categories examined. Each additional police officer is estimated to eliminate eight to ten serious crimes. Existing estimates of the costs of crime suggest that the social benefit of reduced crime is approximately \$100,000 per officer per year, implying that the current number police is below the optimal level.

PD January 1995. **TI** The Impact of Federal Spending on House Election Outcomes. **AU** Levitt, Steven D.; Snyder, James M. Jr. **AA** Levitt: Harvard Society of Fellows and National Bureau of Economic Research. Snyder: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 5002; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$5.00. **JE** C52, D71. **KW** Non-Transfer Spending. Transfer Spending. Vote Buying.

AB While it is widely believed by academics, politicians, and the popular press that incumbent congressmen are rewarded by the electorate for bringing federal dollars to their district, the empirical evidence supporting that claim is extremely weak. One explanation for the failure to uncover the expected relationship between federal spending and election outcomes is that incumbents who expect to have difficulty being reelected are likely to exert greater effort in obtaining federal outlays. Since it is generally impossible to adequately measure this effort, the estimated effect of spending is biased downward due to an omitted variable bias. We address this estimation problem using instrumental variables. For each House district, we use spending outside the district but inside the state containing the district, as an instrument for spending in the district. Federal spending is affected by a large number of actors (e.g. governors, senators, mayors, and other House members in the state delegation), leading to positive correlations in federal spending across the House districts within states. However, federal spending outside of a district is unlikely to be strongly correlated with the strength of that district's electoral challenge. Thus, spending in other districts is a plausible instrument. In contrast to previous studies, we find strong evidence that non-transfer federal spending benefits congressional incumbents: an additional \$100 per capita in such spending is worth as much as two percent of the popular vote. Additional transfer spending, on the other hand, does not appear to have any electoral effects.

Levy, Joaquim V.

PD June 1995. **TI** Some Considerations Relevant to Prefunded Pensions in France. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/64; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** H53, H55. **KW** Insurance. Retirement. Pension Funds. France.

AB Increasing use of life insurance instruments and company-sponsored funds in France suggest that French households may be inclined to a greater reliance on financial savings as a source of retirement income. This paper examines the challenges imposed by an aging population on the pay-as-you-go basic and supplementary pension systems, the growth of life insurance and company-sponsored funds in the absence of a

comprehensive legislation on prefunded pensions, and issues related to prefunding pension schemes, such as the possibility of a welfare enhancing transition to prefunding; effects on capital markets in view of the experience in other OECD countries; and the importance of the transportability of pensions and measures fostering competition in financial markets.

PD July 1995. **TI** The Spanish Social Security: Prospects of the Pension and Health-Care Systems. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/73; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available.

JE H53, H55. **KW** Social Security. Health Care. Spain.

AB The social security system in Spain has steadily expanded since the late 1970s. Currently, social security expenditure exceeds 15 percent of GDP, being a factor of fiscal imbalance. This paper reviews achievements and the current situation of the social security system, discusses changes in the financing of health care expenditure in view of the need for fiscal consolidation by the general government, and analyzes the scope for a partial prefunding of future liabilities of the pension system.

Lewis, Karen K.

PD December 1994. **TI** Puzzles in International Financial Markets. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4951; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 57. **PR** \$5.00. **JE** F21, F31, F32, G15. **KW** Home Bias Puzzle. Predictable Excess Returns. Non-Traded Good.

AB This paper presents a survey of two basic puzzles in international finance. The first puzzle is the "predictable excess return puzzle." The returns on foreign currency deposits relative to domestic currency deposits should be equalized based upon uncovered interest parity. However, not only do researchers find that deviations from uncovered interest parity are predictable ex ante, but their variance exceeds the variance in expected exchange rate changes. In the paper, I describe different explanations of this phenomenon including the view that excess returns are driven by a foreign exchange risk premium, peso problems or learning, and market inefficiencies. While the research to date has been able to better define the "predictable excess return puzzle" and to suggest the most likely directions for future progress, no one explanation has provided a full answer to the puzzle. The second puzzle is the "home bias puzzle." Empirical evidence shows that domestic residents do not diversify sufficiently into foreign stocks. This evidence is clear whether looking at models based on portfolio holdings or outcomes of consumption realizations across countries. In this paper, I examine several possible explanations including non-traded goods and market inefficiencies, although even after considering these possibilities, the puzzle remains.

Lo, Andrew W.

PD February 1995. **TI** Maximizing Predictability in the Stock and Bond Markets. **AU** Lo, Andrew W.; MacKinlay, A. Craig. **AA** Lo: Massachusetts Institute of Technology and National Bureau of Economic Research. MacKinlay: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5027; National Bureau of Economic Research,

1050 Massachusetts Avenue, Cambridge, MA 02138. PG 34. PR \$5.00. JE G11, G12. KW Bond. Data Snooping. Stock. Predictability.

AB We construct portfolios of stocks and of bonds that are maximally predictable with respect to a set of ex ante observable economic variables, and show that these levels of predictability are statistically significant, even after controlling for data-snooping biases. We disaggregate the sources for predictability by using several asset groups, including industry-sorted portfolios, and find that the sources of maximal predictability shift considerably across asset classes and sectors as the return-horizon changes. Using three out-of-sample measures of predictability, we show that the predictability of the maximally predictable portfolio is genuine and economically significant.

Loayza, Norman

TI Paradise Lost? Growth, Convergence and Migration in the South Pacific. AU Cashin, Paul; Loayza, Norman.

TI The Peace Dividend: Military Spending Cuts and Economic Growth. AU Knight, Malcolm; Loayza, Norman; Villanueva, Delano.

Lyons, Richard K.

PD January 1995. TI Explaining Forward Exchange Bias. AU Lyons, Richard K.; Rose, Andrew K. AA University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4982; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 12. PR \$5.00. JE F31, G12. KW Foreign Exchange. Intraday Capital Gains. Intraday Interest.

AB Intraday interest rates are zero. Consequently, a foreign exchange dealer can short a vulnerable currency in the morning, close this position in the afternoon, and never face an interest cost. This tactic might seem especially attractive in times of crisis, since it suggests an immunity to the central bank's interest rate defense. In equilibrium, however, buyers of the vulnerable currency must be compensated on average with an intraday capital gain as long as no devaluation occurs. That is, currencies under attack should typically appreciate intraday. Using data on intraday exchange rate changes within EMS, we find this prediction is borne out.

PD January 1995. TI Foreign Exchange Volume: Sound and Fury Signifying Nothing?. AA University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4984; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 22. PR \$5.00. JE F31, G14, G15. KW Foreign Exchange Volume. Hot-Potato Hypothesis.

AB This paper examines whether currency trading volume is informative, and under what circumstances. Specifically, we use transactions data to test whether trades occurring when trading intensity is high are more informative--dollar for dollar--than trades occurring when intensity is low. Theory admits both possibilities, depending primarily on the posited information structure. We present what we call a hot-potato model of currency trading, which explains why low-intensity trades might be more informative. In the model, the wave of inventory-management trading among dealers following innovations in order flow generates an inverse relationship

between intensity and information content. Empirically, low-intensity trades are more informative, supporting the hot-potato hypothesis.

MacDonald, Ronald

PD January 1995. TI Long-Run Exchange Rate Modeling: A Survey of the Recent Evidence. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/14; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 35. PR not available. JE C32, F31. KW Exchange Rates. Unit Root. Cointegration.

AB In this paper we survey the recent literature on long run, or equilibrium, exchange rate modeling. In particular, we review the voluminous literature which tests for a unit root in real exchange rates and the closely related work on testing for a unit root in the residual from a regression of the nominal exchange rate on relative prices. We argue that the balance of evidence is supportive of the existence of some form of long-run exchange rate relationship. The form of this relationship, however, does not accord exactly with a traditional representation of the long-run exchange rate. We offer some potential explanations for this lack of conformity.

PD June 1995. TI Asset Market and Balance of Payments Characteristics: An Eclectic Exchange Rate Model for the Dollar, Mark, and Yen. AA University of Strathclyde and International Monetary Fund. SR International Monetary Fund Working Paper: 95/55; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 25. PR not available. JE F31, F32. KW Exchange Rates. Balance of Payments. Asset Markets.

AB In this paper we use an exchange rate model that combines asset market characteristics with balance of payments interactions to examine the nominal effective exchange rates of the German mark, Japanese yen, and U.S. dollar for the recent experience with floating exchange rates. Our approach may be interpreted as one which attempts to flesh out the missing links that arise in conditioning an exchange rate solely on relative prices, as occurs in a standard PPP analysis. In contrast to much other empirical exchange rate modeling, our approach explicitly involves the use of a current account sustainability term. Amongst the findings reported in this paper are: significant, and sensible, long-run relationships for all of the currencies studied; appealing short-run dynamics for two of the currencies; and a finding that the Japanese effective exchange rate closely tracks the long-run exchange rate defined in this paper.

Machin, Steve

PD January 1995. TI Changes in the Relative Demand for Skills in the UK Labour Market. AA University College London. SR London School of Economics, Centre for Economic Performance Discussion Paper: 221; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 23. PR no charge. JE J20. KW Employment Structure. Technology.

AB In this paper, I document changes in the distribution of employment in the UK labor market in the 1980s. I use two longitudinal data sources, an industry-level panel data set between 1979 and 1990 and the panel component of the 1984 and 1990 establishment-level Workplace Industrial Relations Surveys. There is evidence of a considerable shift towards the increased relative use of what may be termed more skilled labor

(i.e. towards nonmanual work, away from manual work and towards more highly educated labor). This seems to be principally driven by within-industry and establishment factors rather than by industry/establishment shifts in product demand. There is some support for the notion that manual employment saving changes, perhaps due to the increased use of computer technology and/or innovation, are of empirical importance. To form a more complete picture, however, one probably needs to look wider than this.

PD May 1995. **TI** Trade Unions and Financial Performance. **AU** Machin, Steve; Stewart, Mark. **AA** Machin: University College London. Stewart: University of Warwick. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 242; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 32. **PR** no charge. **JE** J50, L10. **KW** Financial Performance. Trade Unions. Closed Shops. Restrictive Practices.

AB This paper investigates the relationship between trade unions and financial performance using British establishment-level data in 1990, following the anti-union legislation of the 1980s. We estimate the overall effect of manual union recognition in 1990 to be roughly half what it was in 1984, suggesting that unions are less successful in extracting a share of the quasi-rents for their members than they used to be. Within this overall average we find the effect in establishments with a closed shop or where management recommends union membership to have remained roughly constant, but that the effect in the remainder of unionized establishments has collapsed completely. In addition to a closed shop or management recommendation, we find that a high relative employment share of the 4-digit industry, taken to reflect product market power, is also required for there to be an effect. Within this group we then find the effect to be roughly double if unions are able to limit managerial freedom to allocate tasks. This latter group (with a closed shop or management recommendation, a higher relative employment share and union limits on managerial freedom) constitute about 1 in 10 of the establishments with manual union recognition.

MacKinlay, A. Craig

TI Maximizing Predictability in the Stock and Bond Markets. **AU** Lo, Andrew W.; MacKinlay, A. Craig.

Maggi, Giovanni

PD December 1994. **TI** Strategic Trade Policies with Endogenous Mode of Competition. **AA** Princeton University. **SR** Princeton University, Woodrow Wilson School of Public and International Affairs Discussion Papers in Economics: 176; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 44. **PR** no charge. **JE** F13, L13. **KW** Capacity Constraints. Oligopolistic Conduct. Trade Policy.

AB A key sensitivity of the strategic trade policy theory concerns the mode of oligopolistic conduct: subsidies tend to be optimal if firms compete in quantities, taxes tend to be optimal if firms compete in prices. In this paper, a new model of oligopoly is developed, in which the mode of competition is endogenized to a structural parameter--an index of the importance of capacity constraints--whose level determines whether the outcome of the game is closer to the Bertrand or to the Cournot outcome. The impact of strategic trade policies is then examined, assuming that the government lacks

information about this critical parameter. The analysis suggests that this crucial informational constraint need not diminish the scope for strategic distortions of the firms' incentives. In particular, it is argued that there exists simple single-rate policies--subsidies to the home firms' productive capacity--that can increase the home country's income regardless of the mode of oligopolistic competition.

Malcomson, James M.

TI Contracting for Health Services with Unmonitored Quality. **AU** Chalkley, Martin; Malcomson, James M.

TI Contracts and Competition in the NHS. **AU** Chalkley, Martin; Malcomson, James M.

TI Contracting for Health Services When Patient Demand Does Not Reflect Quality. **AU** Chalkley, Martin; Malcomson, James M.

Mankiw, N. Gregory

TI The Deficit Gamble. **AU** Ball, Laurence; Mankiw, N. Gregory; Elmendorf, Douglas W.

Marion, Nancy

TI The Size and Timing of Devaluations in Capital-Controlled Developing Economies. **AU** Flood, Robert; Marion, Nancy.

Markusen, James R.

TI Exploring New Markets: Direct Investment, Contractual Relations and the Multinational Enterprise. **AU** Horstmann, Ignatius J.; Markusen, James R.

PD February 1995. **TI** Multinational Firms and the New Trade Theory. **AU** Markusen, James R.; Venables, Anthony J. **AA** Markusen: University of Colorado and National Bureau of Economic Research. Venables: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 5036; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** \$5.00. **JE** F11, F12, F13, F23. **KW** Multinational. New Trade Theory.

AB A model is constructed in which multinational firms may arise endogenously. Multinationals exist in equilibrium when transport and tariff costs are high, incomes are high, and firm-level scale economies are important relative to plant-level scale economies. Less obvious, multinationals are more important in total economic activity when countries are more similar in incomes, relative factor endowments, and technologies. The model may thus be useful in explaining several stylized facts, including (a) the growing importance of direct investment relative to trade among the developed countries over time and (b) the greater ratio of investment to trade among the developed countries relative to this ratio for "north-south" or "south-north" economic relationships. The model offers predictions about the volume of trade that contrast with those of the "new trade theory", predicting that trade at first rises and then falls as countries converge in incomes, relative endowments, and technologies. Welfare is also considered, and it is shown that direct investment makes the smaller (or high cost) country better off, but may make the larger (or low cost) country worse off.

Marrese, Michael

TI Stabilization and Structural Change in Russia, 1992-94.
 AU Koen, Vincent; Marrese, Michael.

Marsden, David

PD May 1995. TI The Impact of Industrial Relations Practices on Employment and Unemployment. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 240; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 73. PR no charge. JE J60, J50. KW Industrial Relations. Collective Bargaining. Employment.

AB The rules and institutions of collective bargaining are widely held to have an adverse effect on employment and thus on unemployment. These views are analyzed, and it is argued that many industrial relations institutions provide a much greater degree of flexibility for firms than is often realized. It is often forgotten that collective agreements involve the agreement of employers who are thus able to influence the rules that are fixed. Nevertheless, there are many areas where collective rules conflict with the needs for firms to raise productivity and to adapt to market changes. The paper then examines a number of the sources of flexibility in such areas as low inflation bargaining structures, industry agreements, workplace cooperation, and mechanisms for youth inclusion. It also reviews some of the developments in the area of flexibility agreements, and recent reforms of collective bargaining systems in a number of OECD countries, all features likely to increase the ability of firms to adjust in these countries. It concludes with a number of policy recommendations for further reform of industrial relations systems including the need to combine some form of macro-level coordination with greater flexibility at the enterprise level.

PD May 1995. TI Management Practices and Unemployment. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 241; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 63. PR no charge. JE J60, M12. KW Wage Rigidity. Training. Unemployment. Production.

AB The possible effect of management practices on unemployment has been little explored. Normally, those practices voluntarily adopted by competitive firms are considered likely to improve their performance and thus their long term scope to provide jobs. Yet there are a number of areas where such management practices could adversely affect jobs. The paper starts by examining management practices and wage rigidity, reviewing some of the links, such as various forms of implicit contract, problems of low trust, and the influence of social norms. It then explores the issues of working time arrangements and management reasons limiting flexible hours. Training and internal labor markets are another important area of management policies. New production philosophies, such as 'lean production' and 'total quality management' are examined for their effects upon employment structure, and evidence is reviewed on their extent. The paper concludes by looking at current high levels and persistence of unemployment in the European Union, and explores the degree to which it could be due to a lack of functional flexibility within the firm. With relatively high job tenures and lacking such flexibility, European firms would be less placed to adapt to external

shocks, and so much more reluctant to hire new labor.

Marsh, Patrick

PD October 1995. TI Saddlepoint Approximations and Non-Central Quadratic Forms. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9530.; Department of Economics, University of Southampton, Southampton SO9 5NH, England. PG 39. PR no charge. JE C20, C12. KW Non-Centrality. Saddlepoint Approximation. Lugannani and Rice.

AB Frequently, in Econometrics and Statistics, estimators and tests are of the form of a ratio of quadratic forms in normal variables. Excepting a few special cases, little is known about the density or distribution of these ratios, especially if we allow for non-centrality in the quadratic forms. This paper assumes a general set up and derives saddlepoint approximations for both the density and distribution, based on an expansion of an exact inversion of the joint characteristic function. As an illustrative example approximations for the size and power of F-tests in a linear regression model are found. In particular, the approximations of the size of these tests are shown to be exact, whilst for the powers the approximations seem relatively accurate.

Marston, David

PD September 1995. TI Financial Sector Reform in Jamaica During 1985-1992; Possible Lessons for the Caribbean. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/90; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE E52, E58. KW Monetary Control. Currency. Jamaica.

AB This paper reviews the Jamaican experience with indirect instruments and contrasts this with the currency board type arrangements of the common currency area governed by the Eastern Caribbean Central Bank (ECCB). Reforms in Jamaica improved intermediation and banking efficiency, but a weak fiscal position and interest rate caps undermined the effectiveness of indirect instruments in attaining monetary control. The apparent stability amongst members of the currency union may mask fiscal pressures. In most Caribbean countries, problems of quasi-fiscal pressures on money supply, and disintermediation due to some regulation, are evident. Resolving these issues are necessary to facilitate the reforms being pursued.

Martinez-Mendez, Pedro

TI Setting Up a Treasury in Economies in Transition.
 AU Ter-Minassian, Teresa; Parente, Pedro P.; Martinez-Mendez, Pedro.

Massilia, Marzia Raybaudi

PD September 1995. TI Economic Geography and Multinational Enterprise. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9520; Department of Economics, University of Southampton, Southampton SO9 5NH, England. PG 30. PR no charge. JE F12, F22, F23. KW International Trade. International Migration. Multinational Firms.

AB This paper proposes an Economic Geography model with two regions, two sectors and two factors of production which

allows for single- and double-plant firms to coexist. Location patterns are studied by assessing the existence of the various equilibrium configurations, using model simulation. The existence of equilibria is examined by investigating the incentive to defection for a single firm, allowing for wages and incomes to change due to defection, and assuming real wage equalization. It is shown that the tendency towards configurations characterized by an "industrialized core" and an "agricultural periphery", due to integration between countries and industrialization, is reduced by the presence of multinationals.

Masson, Paul R.

PD May 1995. TI International Evidence on the Determinants of Private Saving. AU Masson, Paul R.; Bayoumi, Tamim; Samiei, Hossein. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/51; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE C33, E21, H31, J11. KW Saving. Developing Countries. Demographics.

AB A broad set of possible determinants of private saving behavior is examined, using data for a large sample of industrial and developing countries. Both time-series and cross-section estimates are obtained. Results suggest that there is a partial offset on private saving of changes in public saving and (for developing countries) in foreign saving, that demographics and growth are important determinants of private saving rates, and that interest rates and terms of trade have positive, but less robust, effects. Increases in per capita GDP seem to increase saving at low income levels (relative to the United States) but decrease it at higher ones.

Mauro, Paolo

PD February 1995. TI Current Account Surpluses and the Interest Rate Island in Switzerland. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/24; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 34. PR not available. JE E43, F21. KW Current Account. Balance of Payments. Interest Rates. Switzerland.

AB This paper describes some long-run aspects of the Swiss balance of payments, highlighting two macroeconomic phenomena that make Switzerland stand out among other countries: first, it has had a persistent current account surplus and the largest ratio of net foreign assets to GDP in the world; second, its real interest rates have been significantly lower than those of most other industrialized countries, earning it the label "interest rate island". These two distinctive features may be related, and ultimately both may result from an excess of national savings over investment for many years. The real interest differential may largely be attributed to a foreign exchange rate risk premium, which compensates Swiss residents for holding net assets in foreign currency and foreign residents for bearing net liabilities in Swiss francs.

Mazarei, Adnan

PD July 1995. TI The Parallel Market for Foreign Exchange in an Oil Exporting Economy: The Case of Iran, 1978-1990. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/69; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE F31, F32, F41,

O53. KW Foreign Exchange. Oil.

AB This paper provides a model for the determination of the parallel market exchange rate premium in a country where oil export earnings accrue directly to the government, and foreign exchange is centrally allocated for the importation of specific goods. Next, it studies the parallel market for foreign exchange in the Islamic Republic of Iran during the period of 1978-90. The paper then examines the various time series properties of parallel market exchange rate in Iran, and the evidence of the role of oil and non-oil exports in the determination of the parallel market premium.

PD October 1995. TI Imports Under a Foreign Exchange Constraint: The Case of the Islamic Republic of Iran. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/97; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 17. PR not available. JE F14, O53. KW Foreign Exchange. Imports. Iran.

AB This paper examines the role of foreign exchange receipts in determining Iran's imports during 1961/62-1992/93. It provides evidence of the existence of long-term relationship between imports and foreign exchange receipts, as well as the traditional price and output variables.

McDermott, C. John

TI Informational Efficiency in Developing Equity Markets. AU Cashin, Paul; McDermott, C. John.

McDonald, J.

TI Patterns of Employee Participation and Industrial Democracy in UK Employee Share Ownership Plans. AU Pendleton, A.; McDonald, J.; Robinson, A.; Wilson, N.

Mecagni, Mauro

TI The Macroeconomic Effects of ESAF-Supported Programs: Revisiting Some Methodological Issues. AU Dicks-Mireaux, Louis; Mecagni, Mauro; Schadler, Susan.

Mendoza, Enrique G.

PD August 1995. TI Do Taxes Matter for Long-Run Growth? Harberger's Superneutrality Conjecture. AU Mendoza, Enrique G.; Milesi-Ferretti, Gian Maria; Asea, Patrick. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/79; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 31. PR not available. JE E62, O42. KW Investment. Taxation. Superneutrality.

AB Harberger's superneutrality conjecture contends that, although in theory the mix of direct and indirect taxes affects investment and growth, in practice growth effects of taxation are negligible. This paper provides evidence in support of this view by testing the predictions of endogenous growth models driven by human capital accumulation. The theoretical analysis highlights implications of different taxes for growth and investment in these models. The empirical work is based on cross-country regressions and numerical simulations, using a new methodology for estimating aggregate effective tax rates. Results show significant investment effects from income and consumption taxes that are consistent with small growth effects. The results are robust to the introduction of other growth determinants.

Menezes-Filho, Naercio

PD December 1994. TI Unions and Profitability Over the 80's: Some Evidence on Union Firm Bargaining in the UK. AA University College London. SR University College London Discussion Paper: 94/17; Department of Economics, University College London, Gower Street, London WC1E, England. PG 39. PR 3.00 pounds. JE J51. KW Trade Unions. Profitability. Bargaining.

AB In this paper an attempt is made to assess the behavior of the rate of return on sales of unionized firms, as compared to non-unionized ones, in the late 1980's in the UK. The main aim is to examine what has happened to the relationship between unionization and profitability after the changes in the union legislation, competition environment, and the cyclical variations that took place over that period. We also examine the impact of different forms of union-firm bargaining on the union-profitability effect and its robustness to the inclusion of firm specific fixed effects. We find that the negative union effect profitability exists, that it is magnified where unions negotiate jointly with a firm as part of an industry level bargaining, but that it has been dramatically reduced over the 1980's.

Meschi, Meloria M.

PD May 1995. TI Female Labour Supply and Unemployment in Italy: An Empirical Analysis. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9509; Department of Economics, University of Southampton, Southampton SO9 5NH, England. PG 26. PR no charge. JE J22, C81, C12. KW Labor Supply. Econometric Test. Micro Data.

AB This paper analyses married women labor supply in Italy, testing whether the individuals are free to choose whether to work or not. Using survey data, a Double-Hurdle model is estimated, based on the assumption that not all non-workers are voluntarily unemployed. This model is compared with a Tobit model, based on the assumption that there is no involuntary unemployment. The Tobit model is rejected by our data. The estimation results suggest that the probability of finding a job is below one for all Italian women, and is very low for non-workers. The labor supply schedule is inelastic with respect to the wage rate, suggesting the presence of constraints on the choice of hours. As more than 75 percent of the working women in our sample declared that they are happy with the hours they work; it seems that unless a system of incentives is created to make labor supply more flexible, any policy aimed at varying labor supply through changes in wages is doomed to fail.

Metcalf, David

TI Participation, Contingent Pay, Representation and Workplace Performance: Evidence from Great Britain. AU Fernie, Sue; Metcalf, David.

TI Employment Protection Legislation and Labour Market Outcomes in Spain. AU Milner, Simon; Metcalf, David; Nombela, Gustavo.

Meyer, Bruce D.

TI The Effects of Unemployment Insurance Taxes and Benefits on Layoffs Using Firm and Individual Data. AU Anderson, Patricia M.; Meyer, Bruce D.

Michaelis, Jochen

TI Remuneration Systems, Capital Formation and the NAIRU. AU Jerger, Jürgen; Michaelis, Jochen.

Michie, J.

TI Britain's Industrial Performance since 1960: Underinvestment and Relative Decline. AU Kitson, Michael; Michie, J.

Milesi-Ferretti, Gian Maria

TI The Role of Foreign Currency Debt in Public Debt Management. AU De Fontenay, Patrick; Milesi-Ferretti, Gian Maria; Pill, Huw.

TI Economic Effects and Structural Determinants of Capital Controls. AU Grilli, Vittorio; Milesi-Ferretti, Gian Maria.

PD June 1995. TI Growth Effects of Income and Consumption Taxes: Positive and Normative Analysis. AU Milesi-Ferretti, Gian Maria; Roubini, Nouriel. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/62; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE E62, H21, O41. KW Human Capital. Growth. Taxation.

AB The effects of income and consumption taxation are examined in the context of models in which the growth process is driven by the accumulation of human and physical capital. The different channels through which these taxes affect economic growth are discussed, and it is shown that in general the taxation of factor incomes (human and physical capital) is growth-reducing. The effects of consumption taxation on growth depend crucially on the elasticity of labor supply, and therefore on the specification of the leisure activity. The paper also derives some implications for the optimal intertemporal choice of tax instruments.

TI Do Taxes Matter for Long-Run Growth? Harberger's Superneutrality Conjecture. AU Mendoza, Enrique G.; Milesi-Ferretti, Gian Maria; Asea, Patrick.

Miller, John H.

TI A Comparison of Political Institutions in a Tiebout Model. AU Page, Scott E.; Kollman, Ken; Miller, John H.

Millward, Neil

PD January 1995. TI Gender Segregation and Male/Female Wage Differences. AU Millward, Neil; Woodland, Steve. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 220; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 34. PR no charge. JE J16, J31. KW Gender. Wage Differentials. Skill. Training.

AB We examine gender concentration and segregation between and within establishments in the British economy, using the 1990 Workplace Industrial Relations Survey. Higher levels of gender concentration are found than are predicted by a gender-neutral random hiring model. There are striking effects upon the wage levels of typical employees. We find that high female concentration, both within occupational groups and within workplaces, depresses wage levels substantially, when other factors known to effect wage levels are controlled for.

The effect of gender concentration on wage levels far outweighs the wage premium attributed to trade union bargaining. The findings have important implications for public policy and employers' practices with respect to equal pay between men and women.

Milner, Simon

PD May 1995. TI Employment Protection Legislation and Labour Market Outcomes in Spain. AU Milner, Simon; Metcalf, David; Nombela, Gustavo. AA Milner: Institute for Public Policy Research and London School of Economics. Metcalf and Nombela: London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 244; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 62. PR no charge. JE J21, J42, K31. KW Regulation. Employment. Segmented Labor Markets.

AB Spanish experience of labor market deregulation since the early 1980s, particularly in the form of reform of fixed-term contract legislation, illustrates the potential pitfalls of such policies. The changing nature of employment protection legislation in Spain is outlined in the paper along with theory and international evidence of the effect of such legislation on the new permissive policy on fixed-term contracts has, if anything, exacerbated the segmented labor market via lower wage responsiveness to unemployment, greater precariousness of recorded. However, these problems are almost certainly not the fault of the reforms. Rather it is other aspects of the Spanish labor market and industrial relations system which have contributed to the apparent "failure of deregulation" to improve performance. The combination of a worker representation system, which encourages insiderism, and the labor ordinances, which hinder internal flexibility, has stymied the reforms of employment protection. These two features will need to be altered if the less stringent employment protection is to have its desired effect.

PD July 1995. TI Industrial Disputes and the Law in Spain. AA London School of Economics and Institute of Public Policy Research. SR London School of Economics, Centre for Economic Performance Discussion Paper: 250; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 66. PR no charge. JE J52, K31. KW Strikes. Law.

AB Strike activity in Spain is unusually high compared to most other developed countries and, moreover, it has remained at a high level for the last decade, whilst strike rates have been falling in most other countries. One possible explanation for this poor strikes record is Spanish labor law with respect to industrial disputes which may be too permissive, or have remained permissive whilst other countries have tightened their legislative frameworks. By investigating the comparative strike record and comparative strike law across Europe, it is clear that neither of the above scenarios holds true. Spanish law is neither particularly permissive, nor has it become more permissive relative to other countries which suggests that, given some caveats, Spanish strikes law cannot be held responsible for the poor strike record. Some tentative assessment of other possible explanations is made using industry data on strikes, collective bargaining coverage and levels, union representation and the proportion of fixed-term contract workers. Taken together these results are indicative of a role for non-legal industrial or

labor market institutions in explaining strikes. There is clearly, though, a crying need for more micro industrial relations data sets to properly test the influence of both exogenous and endogenous factors in explaining strikes.

PD August 1995. TI Trade Union Strength, Organisation and Impact in Spain. AU Milner, Simon; Nombela, Gustavo. AA IPPR. SR London School of Economics, Centre for Economic Performance Discussion Paper: 258; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 70. PR no charge. JE J51, J58. KW Trade Unions. Spain.

AB Spanish trade unions enjoy an uncomfortable mix of high coverage and very low membership base. This state of affairs has arisen primarily because of state support for the collective representation system. Union organization in terms of the core and its branches and union finances are also heavily influenced by the structure of representation. The limited facts on union membership, organization and finance are fleshed out in this paper. The effect of unions on three economic outcomes is assessed: pay/employment flexibility; pay dispersion; and productivity growth. Although the data are quite limited, there is some suggestion that whereas unions are able to resist the pressure for widening pay dispersion, they are associated with somewhat poorer productivity performance. However, this research throws up as many unanswered puzzles about unions in Spain, as it does answer the previously unanswered. There is clearly a need for a representative survey of firms or workplaces to investigate both this and other aspects of Spanish industrial relations.

Mishkin, Frederic S.

TI The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy. AU Edwards, Franklin R.; Mishkin, Frederic S.

PD February 1995. TI The Rational Expectations Revolution: A Review Article of: Preston J. Miller, Ed.: The Rational Expectations Revolution, Readings From the Front Line. AA Federal Reserve Bank of New York National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5043; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$5.00. JE E30, E40, E50, E60. KW Activism. Discretionary Policy. Expectation. Rational Expectation. Time Inconsistency.

AB This review article of Preston Miller's *The Rational Expectations Revolution, Readings From the Front Line* focuses on the effect of this research on macroeconomic policymaking. Although policymakers have generally not accepted the equilibrium business cycle models advocated in many of the articles in the Miller volume and even continue to use traditional Keynesian macroeconomic models for policy analysis, several of the lessons from the rational expectations revolution have become central in thinking about policymaking. Policymakers now recognize the importance of expectations and credibility to the outcomes of particular policies. This means that they are more cautious in their use of econometric models and are less likely to advocate discretionary activist stabilization policies. They are also more willing to design policymaking to avoid the time-inconsistency problem and take a long rather than a short-run view, thereby avoiding myopic policies that produce undesirable outcomes.

Mocan, H. Naci

PD February 1995. TI Quality Adjusted Cost Functions For Child Care Centers. AA University of Colorado at Denver and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5040; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 9. PR \$5.00. JE H42, J13. KW Child Care. Day Care.

AB Using a newly compiled data set, this paper estimates multi-product translog cost functions for 399 child care centers from California, Colorado, Connecticut, and North Carolina. Quality of child care is controlled by a quality index, which has been shown to be positively related to child outcomes by previous research. Nonprofit centers that receive public money, either from the state or federal government, (which is tied to higher standards), have total variable costs that are 18 percent higher than other centers, keeping quality of services constant. No statistically significant differences between general categories of for-profit and non-profit centers are detected. Furthermore, various types of nonprofits are not distinguishable from their for-profit counterparts. In agreement with previous studies, the data show that the average quality of center-based child care is between "minimal" and "good", and it costs 13 cents per hour per child to increase this average quality to the level considered developmentally appropriate by child care experts.

Moen, Espen R.

PD January 1995. TI A Matching Model with Wage Announcement. AA London School of Economics. SR London School of Economics, Theoretical Economics: TE/95/280; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 33. PR no charge. JE D83, D61, C78. KW Matching. Wage Announcement. Stable Equilibrium. Efficiency.

AB This paper studies a matching model where heterogeneous firms publicly announce wage offers. A Walrasian type of equilibrium is derived, and the concept of stability used to restrict the set of equilibria. It is shown that the equilibrium is always separable, with high productivity firms announcing strictly higher wages than low productivity firms. Furthermore, it is shown that the equilibrium is constrained efficient.

Montanjees, Marie

PD January 1995. TI Government Finance Statistics in the Countries of the Former Soviet Union: Compilation and Methodological Issues. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/2; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 50. PR not available. JE C82, E62, H50, H62, H87. KW Data Compilation. Government Finance. Fiscal Reports.

AB This paper examines compilation issues affecting government finance statistics (GFS) in the Baltics, the Russian Federation and other states of the former Soviet Union (the FSU countries). It finds that there are several major problems affecting the use of FSU fiscal reports as source documents for compilation of GFS data. These include the inadequate coverage of the data in the fiscal reports, the structure of the paper also examines a number of methodological issues and suggests appropriate treatments for certain types of transactions found in the FSU countries. Finally, the paper identifies

priority areas for the future development of GFS reporting systems for these countries. A supplementary paper provides bridge tables between the fiscal classification codes of selected FSU countries and the GFS classification codes; that paper is available from the author on request.

Montgomery, Edward

TI Education and Health: Where There's Smoke There's an Instrument. AU Evans, William N.; Montgomery, Edward.

Morris, Stephen

PD October 1995. TI Informational Events Which Trigger Currency Attacks. AU Morris, Stephen; Shin, Hyun Song. AA Morris: University of Pennsylvania. Shin: University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9524; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 25. PR no charge. JE F31, D82. KW Currency Crisis. Common Knowledge.

AB When a currency is susceptible to a self-fulfilling speculative attack, some informational events will trigger an attack on the currency while others will not. We address some of the mechanisms behind this difference. We show that a large piece of bad news need not lead to an attack, provided investors agree on how to interpret that news. On the other hand, an apparently insignificant piece of news may trigger an attack if investors do not agree on how to interpret the news. The key to this difference is the operation of higher order beliefs. Uncertainty about the beliefs of others depends on subtle features of the information structure, and even small disparities in interpretation leads to large changes in the equilibrium outcome.

PD October 1995. TI The Rationality and Efficacy of Decisions Under Uncertainty and the Value of an Experiment. AU Morris, Stephen; Shin, Hyun Song. AA Morris: University of Pennsylvania. Shin: University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9529; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 19. PR no charge. JE D81. KW Rationality. Efficacy.

AB A decision maker faces a known prior distribution over payoff relevant states. We compare the expected utility of this individual under two scenarios. In the first, the decision maker makes a choice without further information. In the second, the decision maker has access to an experiment before choosing an action. However, the decision maker does not know the true joint distribution over states and messages. The value of the experiment as measured by the difference in the two utility levels can be negative as well as positive. We give a condition which is necessary and sufficient for the experiment to be valuable in our sense, for any decision problem.

Mortensen, Dale

PD September 1995. TI Technological Progress, Job Creation and Job Destruction. AU Mortensen, Dale; Pissarides, Christopher. AA Mortensen: Northwestern University. Pissarides: London School of Economics, and Centre for Economic Policy Research. SR London School of Economics, Centre for Economic Performance Discussion Paper: 264; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 28. PR no charge. JE J41, O33. KW Technology.

Growth. Job Creation. Job Destruction. Unemployment.

AB We generalize apparently contradictory results in the literature about the effect of exogenous technological progress on unemployment. We assume that new technology can be adopted either through creative job destruction or through on-the-job implementation at a cost. We show that there is a critical level of implementation cost where the effect of growth on employment switches from positive to negative at higher costs. In extensions of the model we show that gross job reallocation can increase at faster growth with no clear-cut effects on aggregate employment.

Moye, Melissa

PD March 1996. **TI** Financing the Industrial Cooperatives of the Mondragon Group. **AA** Work and Technology Institute. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP25; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 55. **PR** \$10.00. **JE** M21, J54, G3, L3. **KW** Cooperatives. Credit Banks. Mondragon. Small Firms Finance.

AB Analyses the effects of and recent changes in the system of cooperative credit and financing developed by the Mondragon industrial cooperatives of the Basque region of Spain. Cooperative credit provided by the Caja Laboral has reduced risk and facilitated external management intervention, but external pressures are now reducing its effectiveness.

Mukerji, Sujoy

PD August 1995. **TI** Understanding the Nonadditive Probability Decision Model. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9517; Department of Economics, University of Southampton, Southampton S09 5NH, England. **PG** 39. **PR** no charge. **JE** D81. **KW** Ambiguity. Nonadditive Probability. Knightian Uncertainty.

AB The pioneering research of Schmeidler [19][20] and others identified behavioral axioms that underlie preferences consistent with the maximization of Choquet expected utility. However, these theories do not clarify the link between the epistemics of the decision maker's (DM) problem and his choice behavior. This essay shows that if they DM is aware that his anticipation and perception of future contingencies is incomplete, then his subjective beliefs will be described by a nonadditive probability specification. Further, if the DM acts with a certain notion of caution in the face of this incompleteness in his understanding of the environment, his preferences over acts may have a Choquet expected utility representation.

PD September 1995. **TI** A Theory of Play for Games in Strategic Form when Rationality is not Common Knowledge. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9519; Department of Economics, University of Southampton, Southampton S09 5NH, England. **PG** 35. **PR** no charge. **JE** C70, D81. **KW** Ambiguity. Rationality. Knightian Uncertainty.

AB Both casual empiricism and evidence from formal experimentation suggest strongly that common knowledge of rationality rarely obtains in reality. In general it is hard to get a theoretical prediction of how play will unravel if common knowledge of rationality is not assumed and if rational players

do not have a commonly understood theory about irrational "types" behave. This paper shows however, if we model the situation by restricting players' beliefs about irrational behavior to be completely ambiguous and assume players are ambiguity averse then we can get sharp predictions of play. Formally, this leads to a model where players choose actions that re best responses to a specific class of non-additive prior. Two solution concepts are defined, one in the spirit of rationalizability and the other the equilibrium counterpart. Informational foundations, properties and applications of the solution concepts are extensively discussed.

Mulligan, Casey B.

PD February 1995. **TI** Measuring Aggregate Human Capital. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier. **AA** Mulligan: University of Chicago. Sala-i-Martin: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5016; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$5.00. **JE** C43, J24. **KW** Aggregation. Human Capital.

AB In this paper we construct a set of human capital indexes for the states of the United States for each Census year starting in 1940. In order to do so, we propose a new methodology for the construction of index numbers in panel data sets. Our method is based on an optimal approach by which we choose the "best" set index numbers by minimizing the expected estimation error subject to some search constraints. Some of the empirical findings are that the stock of human capital in the United States grew twice as rapidly as the average years of schooling and that human capital inequality across states went up during the 1980s (while the dispersion of schooling actually fell). We conclude that using the average years of schooling for the empirical study of existing growth models may be misleading.

PD February 1995. **TI** A Labor-Income-Based Measure of the Value of Human Capital: An Application to the States of the United States. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier. **AA** Mulligan: University of Chicago. Sala-i-Martin: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5018; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$5.00. **JE** C43, I21, J24, J31. **KW** Human Capital. Labor Income.

AB We argue that a sensible measure of the aggregate value of human capital is the ratio of total labor income per capita to the wage of a person with zero years of schooling. The reason for that is that total labor income not only incorporates human capital, but also physical capital: given human capital, regions with higher physical capital will tend to have higher wages for all workers and, therefore, higher labor income. We find that one way to net out the effect of aggregate physical capital on labor income is to divide labor income by the wage of a zero-schooling worker. For the average U.S. state, our measure suggests that the value of human capital during the 1980s grew at a much larger rate than schooling. The reason has to do with movements in the relative productivities of the different workers: in some sense, some workers and some types of schooling became a lot more relevant in the 1980s and, as a result, measured human capital increased.

Myagkov, Mikhail

PD November 1994. **TI** Exchange Economies and Loss Exposure: Experiments Exploring Prospect Theory and Competitive Equilibria in Market Environments. **AU** Myagkov, Mikhail; Plott, Charles R. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 909; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 34. **PR** no charge. **JE** C91, C92, D52, D81. **KW** Experiment. Prospect Theory. Stability. Psychology.

AB A natural economic interpretation of Prospect Theory is that people have preferences that are risk seeking in losses and risk averse in gains. Thus, according to this interpretation of the theory, individuals in an exchange economy facing only losses in wealth, would have concave preferences as opposed to the usual convex preferences. That is, if individuals could engage in trade that would reduce the magnitude of expected losses and change the variance associated with losses, they would have a tendency to seek higher variance and perhaps be willing to do so at the cost of a reduction of expected value of wealth. Such individuals would be willing to sell insurance at prices below the expected value. With concave preferences all competitive equilibria have allocations at the boundaries of the Edgeworth Box. Experimental markets were constructed to determine if such behavior could be observed. The results are that risk seeking behavior is observed in many people. Furthermore, the propensity toward risk seeking in markets is consistent with answers given to questionnaires involving hypothetical choices among lotteries. The propensity toward risk seeking appears to be reduced with experience. In one sense the data are strongly supportive of Prospect Theory but in another sense the data are not. The evidence suggests that preferences in the market setting are not labile and that the risk seeking propensities are not a result of delicate framing effects. The preferences revealed in the market seemed to be a property of the people and not simply a property of their decision processes as required by Prospect Theory.

Nagar, Ramses Abul

PD June 1994. **TI** Identifying the Poor: A Multiple Indicator Approach. **AA** London School of Economics. **SR** London School of Economics, Distributional Analysis Research Programme: DARP/9; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. **PG** 25. **PR** no charge. **JE** I32, C39. **KW** Poverty. Latent Variable. Indicators.

AB The standard approach to the study of poverty assumes the existence of an ideal variable that captures the extent of deprivation. In this paper we postulate that poverty is involved with many dimensions. We use a latent variable framework to predict the extent of an individual's hardship as a function of income status and an unobserved variable.

PD December 1994. **TI** Poverty and the Economics of Information. **AA** London School of Economics. **SR** London School of Economics, Development Economics Research Programme: DEP/59; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. **PG** 20. **PR** no charge. **JE** I32, D52, D82. **KW** Poverty. Credit Markets. Adverse Selection.

AB We consider an economy where individuals have to invest in their human capital in order to earn high wages. They may use the credit market in order to finance their training. The credit market is imperfect because the probability of default

varies across borrowers, and is unobservable to lenders. We assess to what extent the above type of information asymmetry can be a cause of poverty. We identify cases where the presence of information asymmetries has a neutral effect, and other situations where it can cause reductions in the level of poverty.

Nason, James M.

PD August 1994. **TI** Testing the Implications of Long Run Neutrality for Monetary Business Cycle Models. **AU** Nason, James M.; Cogley, Timothy. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/26; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 54. **PR** not available. **JE** C52, E32, E52. **KW** Aggregate Fluctuations. Vector Autoregression. Neutrality.

AB This paper compares sample fluctuations of the U.S. business cycle to those predicted by a class of equilibrium monetary business cycle models. The predictions of the models are generated using the long run neutrality restrictions implicit in the models. By imposing these restrictions on sample data, tests of the ability of the models to replicate the dynamics of the U.S. business cycle are constructed. Although the predictions of the models for real side variables are rejected, there is evidence that the nominal side predictions of the models are not rejected.

PD August 1994. **TI** Technical Appendix: Testing the Implications of Long Run Neutrality for Monetary Business Cycle Models. **AU** Nason, James M.; Cogley, Timothy. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/27; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 22. **PR** not available. **JE** C52, E32, E52. **KW** Optimality Conditions. Linear Approximation. Simulation.

AB This technical appendix describes the methods used to solve, simulate, and analyze the equilibrium monetary business cycle models we study. The solution method involves computing the unknown coefficients of linear approximate decision rules. Given solutions to the monetary business cycle models, we simulate the models and generate the structural vector moving average (SVMA) representations of the models. Analysis of the models consists of visual inspection of the theoretical impulse response functions implied by the SVMA representations and comparison of the simple and theoretical impulse response functions using Monte Carlo methods.

TI Output Dynamics in Real Business Cycle Models. **AU** Cogley, Timothy; Nason, James M.

TI Technical Appendix: Output Dynamics in Real Business Cycle Models. **AU** Cogley, Timothy; Nason, James M.

Neary, Hugh M.

PD January 1995. **TI** Equilibrium Structure and Strategic Behavior in an Economic Model of Conflict. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/35; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 29. **PR** not available. **JE** C72, D23, D31, D74. **KW** Conflict. Property Rights. Arms Expenditure.

AB This paper looks at a model of a society where only self-enforcement of property rights is possible. Players must decide how to allocate their initial resource stock between activities that are wealth creating, and activities that redistribute wealth through coercion. Four different types of equilibrium are

possible within the model. The paper partitions parameter space into regions in which the respective types of equilibrium occur. The parameters looked at include the total stock of resource available to the society, the initial distribution of this resource between the players, and a parameter of the distribution technology that determines the marginal effectiveness of investing in arms.

PD March 1995. **TI** The Initial Resource Distribution in an Economic Model of Conflict. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics: 94/34; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 34. **PR** not available. **JE** C72, D23, D31, D74. **KW** Conflict. Arms Expenditure. Property Rights. **AB** This paper analyzes a simple model of a society where only self-enforcement of property rights is possible. In such a world players must decide how to allocate their initial resource stock between activities that are wealth creating, and activities that redistribute wealth through coercion. The focus of attention is on the role played by the level of initial resource available, and on the distribution of this resource between the players, in determining the structure of equilibrium. Key findings are that wealth-diverting arms investments will be made only when society's wealth has grown beyond a threshold level, and that the deadweight loss from positive arms investment is decreasing in the degree of skewness of the resource distribution. A corollary is that for a wide range of models social welfare is maximized by an initial resource distribution that gives all the resource to a single person.

Neary, J.P

PD July 1995. **TI** Factor Mobility and International Trade. **AA** University College and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 248; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 34. **PR** no charge. **JE** F13. **KW** International Capital Mobility. International Trade. Tariffs. Capital Taxes.

AB This paper develops a two-country model of trade and factor mobility, in which capital is sector-specific but internationally mobile. The model avoids the indeterminacy and propensity to specialize of Heckscher-Ohlin models and exhibits a rich variety of responses to exogenous shocks, including transfers, capital taxes and tariffs. The results throw light on the relationship between goods and factor trade, reconciling the conflicting views of previous writers. It is argued that the model holds out the possibility of a new paradigm in international trade theory, in which international factor movements play a central rather than a peripheral role.

PD July 1995. **TI** Learning By Doing, Precommitment and Infant-Industry Protection. **AU** Neary, J.P.; Leahy, D. **AA** Neary: University College, Dublin and London School of Economic Research. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 251; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 44. **PR** no charge. **JE** F12, L52, L13. **KW** Trade Policy. Precommitment. Learning By Doing. Infant Industry. Time Consistency.

AB This paper examines the implications for strategic trade policy of different assumptions about precommitment. In a dynamic oligopoly game with learning by doing, the optimal

first-period subsidy is lower if firms cannot precommit to future output than if they can; and is lower still if the government cannot precommit to future subsidies. In the linear case the optimal subsidy is increasing in the rate of learning with precommitment but decreasing in it if the government cannot precommit. The infant-industry argument is thus reversed in the absence of precommitment, which has important implications for economic policy in dynamic environments.

Neumark, David

PD February 1995. **TI** Sex Discrimination in Restaurant Hiring: An Audit Study. **AU** Neumark, David; Bank, Roy J.; Van Nort, Kyle D. **AA** Neumark: Michigan State University and National Bureau of Economic Research. Bank: Eastern Mortgage Services, Inc. **SR** National Bureau of Economic Research Working Paper: 5024; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** \$5.00. **JE** J16. **KW** Food Service. Restaurant. Sexual Discrimination.

AB This paper reports on a small-scale audit study that investigates sex discrimination in restaurant hiring. Comparably matched pairs of men and women applied for jobs as waiters and waitresses at 65 restaurants in Philadelphia. The 130 applications led to 54 interviews and 39 job offers. The results provide statistically significant evidence of sex discrimination against women in high-price restaurants. In high-price restaurants, job applications from women had an estimated probability of receiving an interview that was lower by about .4. These hiring patterns appear to have implications for sex differences in earnings, as informal survey evidence indicates that earnings are higher in high-price restaurants.

PD February 1995. **TI** Relative Income Concerns and the Rise in Married Women's Employment. **AU** Neumark, David; Postlewaite, Andrew. **AA** Neumark: Michigan State University and National Bureau of Economic Research. Postlewaite: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 5044; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** \$5.00. **JE** D19, J16, J22. **KW** Heterogeneity Bias. Relative Income. Sibling Rivalry. Women.

AB We ask whether women's decisions to be in the labor force may be affected by the decisions of other women in ways not captured by standard models. We develop a model that augments the simple neoclassical framework by introducing relative income concerns into women's (or families') utility functions. In this model, the entry of some women into paid employment can spur the entry of other women, independently of wage and income effects. This mechanism may help to explain why, over some periods, women's employment appeared to rise faster than could be accounted for by the simple neoclassical model. We test the model by asking whether women's decisions to seek paid employment depend on the employment decisions of other women with whom relative income comparisons might be important. In particular, we look at the effects of sisters' employment on women's own employment. We find strong evidence that women's employment decisions are positively related to their sisters' employment decisions. We also take account of the possibility that this positive relationship arises from heterogeneity across families in unobserved variables affecting the employment decision. We conduct numerous empirical analysis to reduce or eliminate this heterogeneity bias. We also look at the

relationship between husbands' relative income and wives' employment decisions. In our view, the evidence is largely supportive of the relative income hypothesis.

Newman, Geoffrey

TI Economic Growth as a Coordination Problem.
AU Jones, Robert; Newman, Geoffrey.

Nickell, Stephen

PD August 1995. TI Labour Market Dynamics in OECD Countries. AA University of Oxford. SR London School of Economics, Centre for Economic Performance Discussion Paper: 255; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 35. PR no charge. JE E24, J66. KW Dynamics. Employment. Unemployment. Adjustment Costs.

AB The title accurately reflects the subject matter of the paper and we come to the following conclusions: First, we note that the well documented difficulties in hiring faced by firms in the tight labor market of a boom provides a perfectly satisfactory explanation of both asymmetric employment cycles and countercyclical job reallocation. Second, employment adjustment costs are significantly inversely correlated with the speed of labor demand adjustment across the OECD economies. Third, the degree of hysteresis in the wage equation is positively related to long-term unemployment and negatively related to the proportion of small firms in the economy (where insider power is lower). The long-term unemployment rate is strongly related to the duration of benefits. Finally, we find that unemployment persistence in the OECD countries is positively related to employment adjustment costs, benefit durations and negatively related to employer coordination in wage bargaining.

PD October 1995. TI How Does Financial Pressure Affect Firms?. AU Nickell, Stephen; Nicolitas, Daphne. AA Oxford University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 266; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 37. PR no charge. JE J23, D21. KW Employment. Wages. Cash Flow. Financial Pressure.

AB How does monetary policy work? While one aspect of the investigation has focused on the behavior of consumers, another has concentrated on the behavior of companies faced with the kind of financial pressure associated with tight monetary policy. The general focus in this area is on the effect of financial constraints on investment expenditures including fixed capital and inventories. Our purpose is to shift this focus somewhat and to concentrate on the effect of financial pressure on other aspects of company behavior. We first discuss briefly the theoretical background and the empirical formulation. Then, using panel data on a large number of UK companies, we derive a number of results.

Nicolitas, Daphne

PD October 1995. TI Accounting for Strikes: Evidence from UK Manufacturing in the 1980s. AA University of Oxford. SR London School of Economics, Centre for Economic Performance Discussion Paper: 263; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 42. PR no charge. JE J52. KW Dispute Resolution. Strikes. Arbitration. Mediation. United Kingdom.

AB The decrease in the number of strikes in the UK during the 1980s has revived the discussion on the explanatory factors of strike frequency. This paper investigates explanations for the variations of strike frequency in British manufacturing. The framework used is that of the joint cost model; strike frequency is inversely related to strike costs. The results from a panel of 90 manufacturing industries for the period 1983-88 show some support for the hypothesis that strikes decreased because they became more expensive. In the main we find that factors which affect both employers and employees (such as revenue, inventories) are significant in explaining variations in strike frequency. Factors which affect only employees, however, such as the unemployment rate, are not.

TI How Does Financial Pressure Affect Firms?.
AU Nickell, Stephen; Nicolitas, Daphne.

Nolan, Peter

PD December 1994. TI Joint Ventures and Economic Reform in China: A Case Study of the Coca-Cola Business System, With Particular Reference to the Tianjin Coca-Cola Plant. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP24; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 62. PR \$10.00. JE L10, L20, L66, F23, O53. KW China. Joint Ventures. Beverage Industry. Coca-Cola. Supplier Networks. Labor Market Impacts.

AB This paper analyses the microeconomic effect of the growth of the Coca-Cola business system in China since the mid 1980s. It focuses on the Coca-Cola bottling plant in Tianjin. It places the study in the setting of broader changes taking place in the Chinese beverage industry during reform period. It analyses the effect of the growth of the Coca-Cola business system in respect to three main issues. First, it looks at the effect upon capital markets, including the effect upon the generation and distribution of profits, upon plant size distribution and firm level structure in the Chinese beverage industry. Second, it examines the effect Coca-Cola has had upon the wide network of suppliers to the company. Third, it analyses the effect upon labor markets, looking especially at both the direct and the indirect employment effects.

Nombela, Gustavo

TI Employment Protection Legislation and Labour Market Outcomes in Spain. AU Milner, Simon; Metcalf, David; Nombela, Gustavo.

TI Trade Union Strength, Organisation and Impact in Spain.
AU Milner, Simon; Nombela, Gustavo.

Noussair, Charles N.

PD January 1995. TI The Principles of Exchange Rate Determination in an International Finance Experiment. AU Noussair, Charles N.; Plott, Charles R.; Riezman, Raymond G. AA Noussair: Purdue University. Plott: California Institute of Technology. Riezman: University of Iowa. SR Caltech Social Science Working Paper: 908; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 29. PR no charge. JE C92, D58, F31. KW International Finance. Experiments. International Trade. Exchange Rates.

AB This paper reports the first experiments designed to

explore the behavior of economies with prominent features of international finance. Two "countries," each with its own currency, were created. International trade could only take place through the operation of markets for currency. Purchasing power parity and the flow of funds theory of exchange rate determination produced models that captured much of the behavior of the economies. Prices of goods, as well as the exchange rate, evolve over time toward the predictions of the models. Patterns of international trade were as predicted by the law of comparative advantage.

Ogaki, Masao

PD January 1995. TI Saving Behavior in Low- and Middle-Income Developing Countries: A Comparison. AU Ogaki, Masao; Ostry, Jonathan D.; Reinhart, Carmen M. AA Ogaki: Ohio State University. Ostry and Reinhart: International Monetary Fund. SR International Monetary Fund Working Paper: 95/3; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE E21, F41, O11, O16, O57. KW Interest Rates. Development Economics. Savings.

AB The impact of changes in real interest rates on saving and growth is a central issue in development economics. According to one familiar view, a financial liberalization program which increases real interest rates should encourage saving, thereby boosting investment and growth. While such liberalizations have indeed typically succeeded in raising real interest rates, their impact on private saving has been mixed. This paper uses macroeconomic data for a sample of countries with diverse income levels to estimate a model in which the intertemporal elasticity of substitution varies with the level of wealth. The estimated parameters are then used to calculate, in the context of a simple endogenous growth model, the responsiveness of saving to real interest rate changes for countries at differing stages of development.

Ostry, Jonathan D.

TI Saving Behavior in Low- and Middle-Income Developing Countries: A Comparison. AU Ogaki, Masao; Ostry, Jonathan D.; Reinhart, Carmen M.

Pagano, Ugo

PD September 1995. TI The Constructive Selection of Democratic Firms in a World of Self-Sustaining Institutions. AU Pagano, Ugo; Rowthorn, Robert E. AA Pagano: University of Siena. Rowthorn: University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP15; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 41. PR \$10.00. JE B41, D23, D50, E10, P12. KW Institutional Economics. Organizational Equilibrium. Technology. Property Rights.

AB The New Institutional economists assume that technology determines property rights, whilst radical economists assume that causality runs in the opposite direction. This paper introduces the concept of "organizational equilibrium" to show how these two approaches can be combined. In such an equilibrium, existing property rights are the most efficient for utilizing the current technique of production. At the same time, this technique is also optimal from the point of view of existing property owners. The paper demonstrates that more than one organizational equilibrium

may exist. To shift from one equilibrium to another will require a simultaneous change in both technology and property rights. This is likely to be difficult and may help to explain the persistence of inefficient productive arrangements. The paper concludes by comparing its analysis of multiple organizational equilibria with the biological theory of speciation.

Page, Scott E.

PD May 1995. TI A Comparison of Political Institutions in a Tiebout Model. AU Page, Scott E.; Kollman, Ken; Miller, John H. AA Page: California Institute of Technology. Kollman: University of Michigan. Miller: Carnegie Mellon University. SR Caltech Social Science Working Paper: 926; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 27. PR no charge. JE C51, C63, D71, D72. KW Tiebout Competition. Computational Models. Political Institutions.

AB In this paper, we construct a computational model of Tiebout competition. We show that the notion that Tiebout competition, as a result of enforcing efficiency, renders institutional arrangements unimportant does not preclude the possibility that political institutions may differ in their ability to sort citizens. In particular, institutions which perform poorly given a single location, may perform better when there are multiple locations because they allow for improved sorting. We demonstrate that insights from simulated annealing, a discrete nonlinear search algorithm, may explain this improvement.

PD May 1995. TI Two Measures of Difficulty. AA California Institute of Technology. SR Caltech Social Science Working Paper: 927; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 33. PR no charge. JE C61, C63. KW Complexity. Genetic Algorithms. Firms.

AB This paper constructs two measures of difficulty for functions defined over binary strings. The first of these measures, cover size, captures the difficulty of solving a problem in parallel. The second measure, ascent size, captures the difficulty of solving a problem in sequential. We show how these measures can help us to better understand the performance of genetic algorithms and simulated annealing, two widely used search algorithms. We also show how disparities in these two measures may shed light on the organizational structure of firms.

Parente, Pedro P.

TI Setting Up a Treasury in Economies in Transition. AU Ter-Minassian, Teresa; Parente, Pedro P.; Martinez-Mendez, Pedro.

Parsley, David C.

TI Purchasing Power Parity During the Floating Rate Period: Exchange Rate Volatility, Trade Barriers and Other Culprits. AU Wei, Shang-Jin; Parsley, David C.

Patel, Urjit

TI Budgetary Aspects of Stabilization and Structural Adjustment in India: The Painful Road to a Sustainable Fiscal-Financial-Monetary Plan. AU Buiters, Willem H.; Patel, Urjit.

Paxson, Christina H.

PD December 1994. TI The Dynamics of Dual-Job Holding and Job Mobility. AU Paxson, Christina H.

Sicherman, Nachum. AA Paxson: Princeton University and National Bureau of Economic Research. Sicherman: Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4968; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE J22, J63. KW Dual Job. Job Mobility. Second Job.

AB This article concerns the incidence and dynamics of dual-job holding, and its link to job mobility. The first section presents evidence on patterns of dual-job holding, hours changes, and job mobility in the United States, using data from the Panel Study of Income Dynamics and the Current Population Survey. The results indicate that most workers experience dual-job holding sometime during their working lives, and there is a great deal of movement into and out of dual-job holding. Mobility into and out of second jobs is associated with large changes in weekly and annual hours, and there is evidence that dual-job holding is prompted by hours constraints on the main job. The second section of the article turns to theories of dual-job holding. Much of the empirical literature on second jobs is motivated by a simple model of labor supply in which workers face upper constraints on main-job hours: a worker who would like to work more on his main job, but cannot, will take a second job provided the second-job wage is high enough. These models do not account for the fact that workers may also avoid hours constraints by finding new main jobs with higher hours. We develop a stochastic dynamic model of dual-job holding and job mobility in which decisions to take second jobs and/or change main jobs are made simultaneously. This model is consistent with our findings and provides new insights into the economics of dual-job holding and labor mobility.

Pazarbasioglu, Ceyla

TI The Nordic Banking Crises: Pitfalls in Financial Liberalization? AU Drees, Burkhard; Pazarbasioglu, Ceyla.

Pellechio, Anthony

TI The Reform of Tax Administration. AU Tanzi, Vito; Pellechio, Anthony.

Pendleton, A.

PD June 1995. TI Patterns of Employee Participation and Industrial Democracy in UK Employee Share Ownership Plans. AU Pendleton, A.; McDonald, J.; Robinson, A.; Wilson, N. AA University of Bradford. SR London School of Economics, Centre for Economic Performance Discussion Paper: 249; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 29. PR no charge. JE J54, L20. KW ESOPs. Employee Participation. Industrial Democracy.

AB This paper examines the institutional characteristics of UK Employee Share Ownership Plans (ESOPs) and considers the extent to which ESOPs extend employees participation and industrial democracy. It is suggested that ESOPs in themselves do not extend industrial democracy. Instead patterns of employee participation are substantially determined by the goals of those primarily responsible for establishing the ESOP. Three constellations of ESOPs are discerned on the basis of their participative characteristics: "technical ESOPs" where there is little or no development on industrial democracy; "paternalist ESOPs" which tend to develop individualistic forms

of employee participation; and "representative ESOPs" where new institutions are created to give some opportunity for involvement of employee representatives in top decisions.

Peng, Xizhe

PD June 1994. TI Recent Trends in China's Population and Their Implications. AA Fudan University. SR London School of Economics, Research Programme on the Chinese Economy: CP/30; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 35. PR no charge. JE J11, J13. KW Aging. China. Family Planning. Fertility.

AB The purpose of this paper is to review the recent demographic trends and developments in the birth control policy in China. A particular focus of the paper is the fall in the fertility rates by rural and urban areas, provinces, and various nationalities. The paper concludes with a discussion of the socio-economic implications of the fall in the fertility rate. These include the aging of population and the position of women.

Perotti, Roberto

TI Economic Risk and Political Risk in Fiscal Unions. AU Alesina, Alberto; Perotti, Roberto.

Pesenti, Paolo

TI A Center-Periphery Model of Monetary Coordination and Exchange Rate Crisis. AU Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo.

Peyzy, John

PD February 1995. TI Sustainable Development, Intergenerational Equity and Environmental Policy. AA University College London. SR University College London Discussion Paper: 95/01; Department of Economics, University College London, Gower Street, London WC1E, England. PG 65. PR 3.00 pounds. JE D91, H23, O41, Q32. KW Sustainable Development. Intergenerational Equity. Environmental Policy.

AB A definition of sustainable development as non-declining utility forever is compared with other approaches to intergenerational equity. Its implications are explored in growth models based on a privately-owned non-renewable resource with social amenity value. The environmental policy which internalizes this value makes sustainable development more likely, and uses the same instruments as a sustainable development policy, but its purpose and strength remain distinct. A sustainable development policy is hard to design in capital-accumulating economies where the incentive to save decreases over time; resource taxes are either infeasible or ineffective, and consumption or capital taxes must end up as subsidies.

PD February 1995. TI Concern for Sustainable Development in a Sexual World. AA University College London. SR University College London Discussion Paper: 95/02; Department of Economics, University College London, Gower Street, London WC1E, England. PG 43. PR 3.00 pounds. JE D64, D91, J12, Q38. KW Sustainability. Intergenerational Altruism. Exhaustible Resources.

AB A model of economic growth with separate generations, separate sexes and constant population, in a closed economy which depletes exhaustible but growing resources, is used to

explore concepts of individual sustainedness and collective sustainable development (SD). As well as always being concerned to see their children better off at any level of welfare, parents are assumed to have a specific concern to see that their children are as well off as either they themselves are (called "internal sustainedness"). If mating is random and bequests are shared between partners, both concerns can cause insufficient bequests of resources, because parents ignore the future benefit of their bequests to their children's mates' parents. A collective SD policy, such as consumption tax, may then be justified as long as parents do not value sustainability so much that they take individual action to achieve it. A conventional, asexual form of the model has to use a discount factor twice that of the sexual model, and hidden 'mating-bequest externalities' may provide a rationale for SD policies in the asexual model.

Piachaud, David

TI Designed for the Poor--Poorer by Design? The Effects of the 1986 Social Security Act on Family Incomes. AU Evans, Martin; Piachaud, David; Sutherland, Holly.

Pill, Huw

TI The Role of Foreign Currency Debt in Public Debt Management. AU De Fontenay, Patrick; Milesi-Ferretti, Gian Maria; Pill, Huw.

Pines, David

TI On the Optimal Structure of Local Governments. AU Hochman, Oded; Pines, David; Thisse, Jacques Francois.

Ping, Wang Ping

TI Chinese Rural Household Expenditure Analysis. AU Burgess, Robin; Ping, Wang Ping.

Pissarides, Christopher

TI Technological Progress, Job Creation and Job Destruction. AU Mortensen, Dale; Pissarides, Christopher.

Pitarakis, Jean-Yves

TI Comovements in Large Systems. AU Gonzalo, Jesus; Pitarakis, Jean-Yves.

TI On the Exact Moments of Non-Standard Asymptotic Distributions in Non Stationary Autoregressions with Dependent Errors. AU Gonzalo, Jesus; Pitarakis, Jean-Yves.

Plott, Charles R.

PD December 1993. TI Rational Individual Behavior in Markets and Social Choice Processes. AA California Institute of Technology. SR Caltech Social Science Working Paper: 862; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 29. PR no charge. JE C91, C92, D12, D81, D83. KW Rationality. Experimental Economics. Experiment.

AB This paper reviews a series of paradoxes that exist in the experimental economics literature. These paradoxes are instances in which otherwise accurate models of markets and social choice processes fail to capture the data for experiments. A loosely developed theory called The Discovered Preference Hypothesis is advanced in the paper as an explanation. Behavior seems to go through stages of rationality that begin with a type of myopia when faced with unfamiliar tasks. With incentives and practice, which might take the form of repeated

decisions in the experimental work, (but might include play, banter, discussions with others, stages of commitment, etc.) the myopia gives way to what appears to be a stage of more considered choices that reflect stable attitudes or preferences (as opposed to the labile attitudes identified by psychologists). Social institutions are seen as playing a role in the attainment of a third stage of rationality in which individual decisions incorporate the rationality of others, or the lack of it, in their own decisions.

TI Costly Offers and The Equilibration Properties of the Multiple Unit Double Auction Under Conditions of Unpredictable Shifts of Demand and Supply. AU Jamison, Julian C.; Plott, Charles R.

TI Exchange Economies and Loss Exposure: Experiments Exploring Prospect Theory and Competitive Equilibria in Market Environments. AU Myagkov, Mikhail; Plott, Charles R.

PD December 1994. TI Intertemporal Speculation Under Conditions of Uncertain Future Demand and an Endogenous, Nonpublic Number of Speculators and Speculative Activity: Experimental Results. AU Plott, Charles R.; Turocy, Theodore L. III AA California Institute of Technology. SR Caltech Social Science Working Paper: 911; Division of Humanities and Social Science, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 21. PR no charge. JE C92, D52, D81, D82, D84. KW Experimental. Speculation. Uncertainty. Double Auction.

AB This paper explores the behavior of markets in which a subset of agents can purchase commodities in one period and resell in the subsequent period. At the time of purchase the demand in the second period is unknown, and no limitations are placed on the number of units carried forward either by an individual agent or the agents as a group. The decisions take place in an environment in which speculative decisions are made without knowledge of demand and supply parameters, without knowledge of the number of other speculators and without knowledge of the number of units that might be carried forward by other agents. Received theory and existing experimental work suggests that the equilibrating properties of markets will coordinate decentralized decisions to speculate as if all information was public but it gives no theory about the mechanism through which such information transfer might take place. The results of the paper provide general support for the validity of the equilibration suggestion. The mechanisms of information transfer seem to be located in the local nature of the price formation and carry-forward decisions coupled with a tendency for traders to specialize their activities. The markets studied have all of the identified properties of multiple unit double auctions so nothing special in the price formation process caused by speculative activity could be identified as an additional mechanism for information transfer.

TI The Principles of Exchange Rate Determination in an International Finance Experiment. AU Noussair, Charles N.; Plott, Charles R.; Riezman, Raymond G.

Polishchuk, Leonid

PD April 1994. TI Rent Seeking as a Means of Allocation: The Case of Spontaneous Privatization. AA University of British Columbia and Institute of Economics of the Russian Academy of Science. SR University of British Columbia, Department of

Economics: 94/14; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 48. PR not available. JE D23, L14. KW Rent Seeking. Privatization. Equilibrium Model.

AB The paper deals with the transitional situation, when central planning surrenders its functions of capital allocation, but the capital market has not developed yet to take over. The paper considers as a possible solution the process of "spontaneous privatization", when control over capital can be secured by rent seeking efforts. Under the assumption of universality of entrepreneurial talent, spontaneous privatization entails not only cost of rent seeking, but also benefits of self-selection of able entrepreneurs. The paper studies an equilibrium model with the capital market replaced by rent seeking. It is demonstrated that, although rent seeking levies its toll, the equilibrium still features some desirable efficiency properties. The problems of entry control into rent seeking are discussed, including taxation as a means to prevent socially undesirable over enrollment into entrepreneurship. The paper concludes by considering spontaneous privatization as a trigger for conventional capital markets, which gradually replaces rent seeking.

Pollitt, Michael G.

TI Economics, Ethics and Unfair Competition. AU Jones, Ian W.; Pollitt, Michael G.

Polovin, Avraham

TI Inequality Among the Kibbutzim. AU Amiel, Yoram; Cowell, Frank; Polovin, Avraham.

Postel-Vinay, Gilles

TI What Do Notaries Do? Overcoming Asymmetric Information in Financial Markets: The Case of Paris, 1751. AU Hoffman, Philip T.; Postel-Vinay, Gilles; Rosenthal, Jean-Laurent.

Postlewaite, Andrew

TI Relative Income Concerns and the Rise in Married Women's Employment. AU Neumark, David; Postlewaite, Andrew.

Power, Anne

PD December 1994. TI Area-based Poverty, Social Problems and Resident Empowerment. AA London School of Economics. SR London School of Economics, Welfare State Programme: WSP/107; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 57. PR no charge. JE I38. KW Poverty. Council Estates. Area Segregation. Empowerment.

AB Substantial evidence indicates that there has been significant socio-economic and socio-tenurial polarization over the last fifteen years. Poverty, disadvantaged groups and social problems are increasingly concentrated in local areas, particularly in areas of council housing. Growing divisions between rich and poor and between areas affect not only the life chances of poor people living in very marginal areas, as they are segregated from the social and economic mainstream, but also society as a whole, which must bear the costs of rising crime and fear of crime, unemployment and lack of skills. Large scale, one-off, top-down attempts to improve conditions in marginal areas have often failed. However, conditions can be improved if changes are introduced across a broad front in partnership with residents, the most important local resource,

and if improvements are given ongoing support.

Prasad, Eswar

TI The Employment and Wage Effects of Oil Price Changes: A Sectoral Analysis. AU Keane, Michael; Prasad, Eswar.

Puga, Diego

PD October 1995. TI Preferential Trading Arrangements and Industrial Location. AU Puga, Diego; Venables, Anthony J. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 267; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 33. PR no charge. JE F12, F15, R12. KW Integration. Customs Union. Hub-and-Spoke. Agglomeration.

AB This paper considers the location effects of geographically discriminatory trade policy. A preferential move towards a customs union pulls industry into the integrating countries. When internal barriers fall below some critical level, input-output links between imperfectly competitive firms lead some customs union countries to gain industry at the expense of others. Closer integration can bring converging industrial development to the union. A hub-and-spoke arrangement favors location in the hub, with better reciprocal access to spoke nations than these to each other. Further liberalization induces agglomeration in the hub and may trigger disparities between the spokes.

Qizilbash, Mozaffar

PD June 1995. TI Ethical Development. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9512; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 37. PR no charge. JE O10. KW Development. Capabilities. Basic Needs. Prudential Value. Freedom.

AB The subject of this paper is the project of redefining development since the disenchantment of development economists with growth of per capita GNP as a paradigm of development. This project is termed "ethical development". It is argued that we are looking for a concept that involves improvements in the quality of human lives subject to the demands of social justice and freedom. Amartya Sen's capability approach, the basic needs school and the UNDP's conception of human development all fail to provide an adequate paradigm of development. Martha Nussbaum's version of the capability approach is stronger than Sen's but fails to provide the basis for a consensual view of development. The most promising approach is one that takes its lead from James Griffin's recent account of well-being.

PD July 1995. TI Capabilities, Well-Being and Human Development. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9515; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 26. PR no charge. JE O19. KW Concept of Development. Well-Being. Capability. Desire.

AB Economists have moved away from thinking of development in terms of growth of per capita GNP. The most influential alternative conception of development--due to Amartya Sen--involves judging the quality of life in terms of capabilities and viewing development as a 'capability

expansion'. This paper argues that Sen's approach is an inadequate account of development. It is argued that Nussbaum's and Frankfurt's philosophic writings each generate alternative capability approaches but fail as adequate accounts of the good life, acceptable for a consensual view of development. The most promising foundation for an account of human development derives from James Griffin's recent writings on well-being.

PD August 1995. TI Egalitarian Justice. Capability and Well-Being Prospects. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9516; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 35. PR no charge. JE D63, I13, D30, D80. KW Inequality. Opportunity. Capability. Well-Being. Imperfect Information.

AB What according to egalitarians ought we to equalize? One set of answers to this question (due to Amartya Sen, G.A. Cohen and Richard Arneson) advocate some form of equal "opportunity" for well-being. These answers, I argue, fail to capture the egalitarian ideal when people who start off with limited well-being prospects develop compensating abilities which help them flourish. Equal opportunities, I suggest, are best thought of as equal prospects or life chances for well-being. Equal prospects, however, are only a plausible candidate for equalization when planners and officials have adequate information and reasoning powers. If they do not, norms involving equal resources or primary goods may be more appropriate. However, all egalitarian norms (to avoid a damaging utopianism) must recognize the limits of human impartiality.

Quah, Danny T.

PD February 1995. TI Empirics for Economic Growth and Convergence. AA London School of Economics. SR London School of Economics, Econometrics: EM/95/281; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 42. PR no charge. JE C21, C22, C23, O41. KW Evolving Distributions. Polarization. Regional Dynamics. Unit Root.

AB The convergence hypothesis has generated a huge empirical literature. This paper critically reviews some of the earlier key findings, clarifies their implications, and relates them to more recent results. Particular attention is devoted to interpreting convergence empirics. The main findings are: (1) The much-heralded uniform 2 percent rate of convergence could arise for reasons unrelated to the dynamics of economic growth. (2) Usual empirical analyses--cross-section (conditional) convergence regressions, time series modeling, panel data analysis--can be misleading for understanding convergence; a model of polarization in economic growth clarifies those difficulties. (3) The data, more revealingly modeled, show persistence and immobility across countries. Some evidence supports Baumol's idea of "convergence clubs"; some evidence shows the poor getting poorer, and the rich getting richer, with the middle class vanishing. (4) Convergence, unambiguous up to sampling error, is observed across US states.

PD March 1995. TI Measuring Core Inflation. AU Quah, Danny T.; Vahey, Shaun P. AA Quah: London School of Economics and Bank of England. Vahey: Bank of England. SR London School of Economics, Econometrics:

EM/95/282; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 26. PR no charge. JE C31, C32, E31. KW Core Inflation. Vector Autoregression. Dynamic Restrictions.

AB In this paper, we argue that measured (RPI) inflation is conceptually mismatched with core inflation: the difference is more than just "measurement error". We propose a technique for measuring core inflation, based on an explicit long-run economic hypothesis. Core inflation is defined as that component of measured inflation that has no (medium to) long-run impact on real output--a notion that is consistent with the vertical long-run Phillips curve interpretation of the comovements in inflation and output. We construct a measure of core inflation by placing dynamic restrictions on a vector autoregression (VAR) system.

PD July 1995. TI Empirics for Economic Growth and Convergence. AA London School of Economics, and Centre for Economic Policy Research. SR London School of Economics, Centre for Economic Performance Discussion Paper: 253; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 23. PR no charge. JE C21, C22, C23, O41. KW Evolving Distributions. Polarization. Regional Dynamics. Stochastic Kernel.

AB The convergence hypothesis has generated a huge empirical literature: this paper critically reviews some of the earlier key findings, clarifies their implications, and relates them to more recent results. Particular attention is devoted to interpreting convergence empirics. The main findings are: (1) The much-heralded uniform 2 percent rate of convergence could arise for reasons unrelated to the dynamics of economic growth. (2) Usual empirical analyses--cross section (conditional) convergence regressions, time series modeling, panel data analysis--can be misleading for understanding convergence; a model of polarization in economic growth clarifies those difficulties. (3) The data, more revealingly modeled, show persistence and immobility across countries: some evidence supports Baumol's ideal of "convergence clubs"; some evidence shows the poor getting poorer, and the rich richer, with the middle class vanishing. (4) Convergence, unambiguous up to sampling error, is observed across US states.

PD July 1995. TI Measuring Core Inflation. AU Quah, Danny T.; Vahey, Shaun P. AA Quah: London School of Economics and Bank of England. Vahey: Bank of England. SR London School of Economics, Centre for Economic Performance Discussion Paper: 254; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 24. PR no charge. JE C30, E31, E32, E37. KW Core Inflation. Vector Autoregression. Dynamic Restrictions.

AB In this paper we argue that measured (RPI) inflation is conceptually mismatched with core inflation: the difference is more than just "measurement error". We propose a technique for measuring core inflation, based on an explicit long-run economic hypothesis. Core inflation is defined as that component of measured inflation that has no (medium-to) long-run effect on real output--a notion that is consistent with the vertical long-run Phillips curve interpretation of the comovements in inflation and output. We construct a measure of core inflation by placing dynamic restrictions on a vector autoregression (VAR) system.

PD August 1995. **TI** Aggregate and Regional Disaggregate Fluctuations. **AA** London School of Economics. **SR** London School of Economics, Econometrics: EM/95/290; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. **PG** 38. **PR** no charge. **JE** C32, C33, E32. **KW** Aggregate Disturbance. Business Cycle. Stochastic Kernel.

AB This paper models fluctuations in regional disaggregates as a nonstationary, dynamically evolving distribution. Doing so enables study of the dynamics of aggregate fluctuations jointly with those of the rich cross-section of regional disaggregates. For the US, the leading state-- regardless of which it happens to be--contains strong predictive power for aggregate fluctuations. This effect is difficult to understand if only aggregate disturbances affect aggregate business cycles through aggregate propagation mechanisms. Instead, a better picture might be one of a "wave" of regional dynamics, rippling across the national economy.

PD August 1995. **TI** Convergence Empirics Across Economics With Some Capital Mobility. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 257; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. **PG** 42. **PR** no charge. **JE** C23, F43, O47. **KW** Convergence Club. Distribution Dynamics. Polarization. Stochastic Kernel. Twin Peaks.

AB This paper uses a model of growth and imperfect capital mobility across multiple economies to characterize the dynamics of (cross- country) income distributions. This allows convenient study of the convergence hypothesis, and reveals, where appropriate, polarization and clumping within subgroups. The data show little cross-country convergence; instead, the importance features are persistence, immobility, and polarization, exemplified by "convergence club" or "twin peaks" dynamics.

Raff, Daniel M.G

PD February 1995. **TI** Quality-Adjusted Prices for the American Automobile Industry: 1906- 1940. **AU** Raff, Daniel M.G.; Trajtenberg, Manuel. **AA** Raff University of Pennsylvania and National Bureau of Economic Research. Trajtenberg: Tel Aviv University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5035; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** \$5.00. **JE** C43, N71, N72. **KW** Automobile. Hedonic Price.

AB We push the span of hedonic price calculations for automobiles backwards towards the industry's birth. Most of the real change that occurred between 1906 and 1982 occurred between 1906 and 1940. During these years, hedonic prices fell at an average annual rate of 5 percent. The pace was brisker still during the first 8-12 years. Our measured declines can be decomposed into price and quality components. Our calculations suggest that 60 percent of the overall decline 1906-1940 was due to process innovation and only 40 percent to product innovation or quality change per se. Regressors representing mechanical systems matter in these calculations.

Ramaswamy, Ramana

TI Recession and Recovery in the United Kingdom in the 1990s: A Vector Autoregression Approach. **AU** Catao, Luis;

Ramaswamy, Ramana.

Ramey, Gary

PD December 1994. **TI** Cross-Country Evidence on the Link Between Volatility and Growth. **AU** Ramey, Gary; Ramey, Valerie A. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4959; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** \$5.00. **JE** E32, O40, O47. **KW** Business Cycle. Growth. Volatility.

AB This paper presents empirical evidence against the standard dichotomy in macroeconomics that separates growth from the volatility of economic fluctuations. In a sample of 92 countries as well as a sample of OECD countries, we find that countries with higher volatility have lower growth. The addition of standard control variables strengthens the negative relationship. We also find that government spending-induced volatility is negatively associated with growth even after controlling for both time- and country-fixed effects.

Ramey, Valerie A.

TI Cross-Country Evidence on the Link Between Volatility and Growth. **AU** Ramey, Gary; Ramey, Valerie A.

Rauch, James E.

PD December 1994. **TI** Bureaucracy, Infrastructure, and Economic Growth: Evidence From U.S. Cities During the Progressive Era. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4973; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** \$5.00. **JE** D72, D73, H41, H54. **KW** Bureaucracy. Infrastructure. Progressive Era.

AB Recent work in the sociology of economic development has emphasized the establishment of a professional bureaucracy in place of political appointees as an important component of the institutional environment in which private enterprise can flourish. I hypothesize that establishment of such a bureaucracy will lengthen the period that public decision makers are willing to wait to realize the benefits of expenditures, leading to allocation of a greater proportion of government resources to long-gestation period projects such as infrastructure. This hypothesis can be tested using data generated by a "natural experiment" in the early part of this century, when a wave of municipal reform transformed the governments of many U.S. cities. Controlling for city and time effects, adoption of Civil Service is found to increase the share of total municipal expenditure allocated to road and sewer investment. Other estimates imply that this increased share raises the growth of city manufacturing employment by one-half percent per year.

Razin, Assaf

PD November 1994. **TI** Resisting Migration: Wage Rigidity and Income Distribution. **AU** Razin, Assaf; Sadka, Efraim. **AA** Tel-Aviv University. **SR** Tel-Aviv Foerder Institute for Economic Research Working Paper: 28/94; The Eitan Berglas School of Economics, Tel-Aviv University. **PG** 30. **PR** not available. **JE** F22, H11. **KW** International Migration. Investment. Human Capital. Labor.

AB Like any trade activity, migration tends to generate gains

to all parties involved, the migrants as well as the native-born population. However, with a mal-functioning labor market, migration will exacerbate the imperfections in the market. Consequently, it may lead to losses to the native-born population which typically are quite sizable. Another economic problem raised by migration is the additional toll imposed on the welfare-state income-distribution institutions. Being unable to exclude migrants from the various entitlement programs and public services, the modern welfare state can find migration rather costly. These two economic considerations may help explain the resistance to migration despite the pure gains-from-trade benefits created by it. Immigration could be more beneficial to the native-born population when the labor markets are better-functioning and the welfare programs are less comprehensive.

PD February 1995. **TI** Capital Income Taxation and Long Run Growth: New Perspectives. **AU** Razin, Assaf; Yuen, Chi-Wa. **AA** Razin: Tel Aviv University and National Bureau of Economic Research. **Yuen**: Hong Kong University of Science and Technology. **SR** National Bureau of Economic Research Working Paper: 5028; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** \$5.00. **JE** F21, F32, J13, O16, O41. **KW** Capital Income. Growth. Population. Taxation.

AB We study the effects of capital income taxation on long run growth in an endogenous growth framework with two distinguishing features: endogenous population and international capital mobility. Endogenizing population growth introduces a new channel for taxes to affect economic growth and enables us to discriminate the effects of taxes on total versus per capita income growth. Allowing for capital mobility in the open economy, we show how the effects of taxes on population growth and income growth across countries will vary in specific ways, depending on the international income tax regimes and the relative preference bias of people towards the 'quantity' and 'quality' of children. The numerical results based on our calibrated model for the G-7 also indicate that, although the effects of liberalizing capital flows on long run growth may not be very sizable, the growth effects of changes in capital income tax rates can be tremendously magnified by cross-border capital flows and cross-border spillovers of policy effects.

TI Fiscal Restructuring in the Group of Seven Major Industrial Countries in the 1990s: Macroeconomic Effects. **AU** Bartolini, Leonardo; Razin, Assaf; Symansky, Steve.

Reichelstein, Stefan

TI Holdups, Standard Breach Remedies, and Optimal Investment. **AU** Edlin, Aaron S.; Reichelstein, Stefan.

Reinhart, Carmen M.

TI Saving Behavior in Low- and Middle-Income Developing Countries: A Comparison. **AU** Ogaki, Masao; Ostry, Jonathan D.; Reinhart, Carmen M.

Reinhart, Vincent

TI Auction Format Matters: Evidence on Bidding Behavior and Seller Revenue. **AU** Feldman, Robert A.; Reinhart, Vincent.

Riani, Marco

TI The Modelling and Seasonal Adjustment of Weekly

Observations. **AU** Harvey, Andrew; Koopman, Siem Jan; Riani, Marco.

Richards, Anthony

PD April 1995. **TI** Growth, Nontradables, and Price Convergence in the Baltics. **AU** Richards, Anthony; Tersman, Gunnar. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/45; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 11. **PR** not available. **JE** F41, F43. **KW** Exchange Rates. Currency. Inflation.

AB This paper reviews the recent real exchange rate appreciation observed in the three Baltic countries. Until now, this phenomenon may be viewed primarily as a consequence of the undervalued real exchange rates of the new currencies. Looking ahead, a tendency for continued real appreciation is to be expected as part of the transition process toward higher income levels, due in part to differential productivity growth rates in the tradable and nontradable sectors. In the absence of an appreciation of the nominal exchange rate, this real appreciation will occur through inflation rates that are higher than in industrial countries. Provided that the current prudent economic policies are continued, such higher inflation will not threaten macroeconomic objectives and may indeed be viewed as an indication that the transition process is progressing as expected.

Richardson, David H.

PD June 1994. **TI** Social Security Policy Options: Validation, Offset, or Return to Pay-As-You-Go. **AA** University of British Columbia and St. Lawrence University. **SR** University of British Columbia, Department of Economics: 94/20; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 31. **PR** not available. **JE** D91, E17, H31, H55. **KW** Social Security. Simulation Model. Life Cycle. Consumption.

AB This paper analyzes U.S. social security policy in the context of a simple long-run simulation model which incorporates life-cycle consumption behavior. Alternative policies are evaluated by comparing rest-of-life utility for individual age cohorts. One of the major conclusions is that if the utility of public consumption is ignored then a policy of offsetting projected social security surpluses is inferior to either validating the surpluses or returning the system to pay-as-you-go.

PD August 1994. **TI** Changes in the Distribution of Wages in Canada, 1981-1992. **AA** University of British Columbia and St. Lawrence University. **SR** University of British Columbia, Department of Economics: 94/22; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. **PG** 50. **PR** not available. **JE** J21, J31. **KW** Wage Inequality. Lorenz Curve. Canada.

AB This article uses microdata to study changes in the distribution of weekly wages in Canada from 1981 to 1992. It is shown that wage inequality increases during recessions and falls during expansion and, after accounting for changes due to the business cycle, has increased over time. A decomposition analysis of the change in inequality between 1981 and 1989 shows that changes in the composition of the work force by gender, age, or education, acting separately, do not explain the increase in inequality. The Canadian distributions for men and women are compared to corresponding distributions for the United States.

Richter, Andrea

TI How Much Unemployment is Needed for Restructuring?: The Russian Experience. AU Layard, Richard; Richter, Andrea.

Riezman, Raymond G.

TI The Principles of Exchange Rate Determination in an International Finance Experiment. AU Noussair, Charles N.; Plott, Charles R.; Riezman, Raymond G.

Riordan, Michael H.

PD September 1994. TI Exclusion and Integration in the Market for Video Programming Delivered to the Home. AU Riordan, Michael H.; Salant, David J. AA Riordan: Boston University. Salant: GTE Laboratories, Waltham, MA. SR Boston University, Industry Study Program Discussion Paper: 51; Department of Economics, Boston University, 270 Bay State Road, Boston, MA 02215. PG 24. PR no charge. JE L13, L82. KW Exclusive Contracts. Vertical Integration. Video Programming.

AB In a four-tier model of the market for video programming, competitive program producers create premium programming (e.g., movies) and sell exhibition rights to oligopolistic packages (e.g., HBO and Showtime), who distribute programming to exhibitors in local markets (e.g., cable system operators), who in turn market video entertainment to final consumers. The model isolates certain incentives for exclusive contracts and vertical integration. Oligopolistic packagers can have a non-cooperative incentive to provide exhibitors exclusive rights, and this can create barriers to entry in downstream exhibition markets. Therefore, by effectively banning exclusive exhibition agreements, the 1992 Cable Act can have the intended effect of encouraging entry into downstream exhibition markets. However, a ban can decrease the amount of programming available to consumers. Finally, exhibitors can have a strategic bargaining incentive to integrate vertically with packagers, and this increases their incentive to acquire programming. Vertical integration decreases the cost of acquiring programming from non-affiliated packagers.

Robinson, A.

TI Patterns of Employee Participation and Industrial Democracy in UK Employee Share Ownership Plans. AU Pendleton, A.; McDonald, J.; Robinson, A.; Wilson, N.

Robinson, Peter

PD August 1995. TI The Decline of the Swedish Model and the Limits to the Active Labour Market Policy. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 259; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 67. PR no charge. JE J68, P52. KW Sweden. Unemployment. Labor Market. UK.

AB The paper argues that the 1990-93 recession in Sweden offered a natural experiment to test hypotheses about Sweden's success in maintaining low unemployment in the 1980s. The paper identifies a fundamental shift in the macroeconomic policy regime in 1991 as the main cause of the subsequent deterioration in employment. That shift was undertaken in part because of an exaggerated belief in the efficacy of active labor market policy (ALMP). By 1991 most of the policy instruments

of the Swedish Model had already been undermined and ALMP was left with sole responsibility for maintaining employment. There is strong body of research finding modest positive effects on the subsequent employment experience of participants for improved placement services and assistance with job search, but the results for the other components of ALMP, such as training, are at best ambiguous. This suggests that policy in Britain in recent years has been moving in the right direction, with more emphasis on the programs run by the Employment Service, less emphasis on training and a skeptical approach to the large scale implementation of wage subsidies. The key lesson from the experience of Sweden in the early 1990s is that an inflated view of the efficacy of ALMP can lead to the fatal neglect of other policy instruments.

PD August 1995. TI The British Disease Overcome? Living Standards, Productivity and Education Attainment, 1979-1994. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 260; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2EA, UK. PG 36. PR no charge. JE O47, O57. KW Living Standards. Education. Productivity. Manufacturing. OECD.

AB The paper sets out to show two things. Firstly, average living standards in Britain are not that far out of line with other Western European countries. One source of data shows that by 1993 the gap in manufacturing productivity between Britain and Germany, France and the Netherlands had been more or less eliminated. Secondly, the paper casts doubt on the link which is usually postulated to exist between the attainment of educational qualifications and levels of whole economy productivity. For the OECD countries there does, however, appear to be an association between the attainment of educational qualifications and the proportion of the adult population in employment. It is this which produces an association between educational qualifications and per capital GDP. In addition, there is no strong evidence that variations in productivity across different manufacturing industries in Germany and Britain are associated with the German superiority in the attainment of vocational qualifications.

Rodrik, Dani

PD December 1994. TI Getting Interventions Right: How South Korea and Taiwan Grew Rich. AA Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4964; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 46. PR \$5.00. JE O40, O53. KW Export. Growth. Investment. South Korea. Taiwan.

AB Most explanations of Korea's and Taiwan's economic growth since the early 1960s place heavy emphasis on export orientation. However, it is difficult to see how export orientation could have played a significant causal role in these countries' growth. The measured increase in the relative profitability of exports during the 1960s is too insignificant to account for the phenomenal export boom that ensued. Moreover, exports were initially too small to have a significant effect on aggregate economic performance. A more plausible story focuses on the investment boom that took place in both countries. In the early 1960s both economies had an extremely well-educated labor force relative to their physical capital stock, rendering the latent return to capital quite high. By

subsidizing and coordinating investment decisions, government policy managed to engineer a significant increase in the private return to capital. An exceptional degree of equality in income and wealth helped by rendering government intervention effective and keeping it free of rent seeking. The outward orientation of the economy was the result of the increase in demand for imported capital goods.

Rogoff, Kenneth

TI Perspectives on PPP and Long-Run Real Exchange Rates. AU Froot, Kenneth A.; Rogoff, Kenneth.

Rose, Andrew K.

TI Explaining Forward Exchange Bias. AU Lyons, Richard K.; Rose, Andrew K.

TI A Panel Project On Purchasing Power Parity: Mean Reversion Within and Between Countries. AU Frankel, Jeffrey A.; Rose, Andrew K.

Rose, David

TI Capacity Constraints, Inflation and the Transmission Mechanism: Forward-Looking Versus Myopic Policy Rules. AU Clark, Peter; Laxton, Douglas; Rose, David.

TI Asymmetry in the U.S. Output-Inflation Nexus: Issues and Evidence. AU Clark, Peter; Laxton, Douglas; Rose, David.

Rose, Nancy L.

TI CEO Pay and Firm Performance: Dynamics, Asymmetries, and Alternative Performance Measures. AU Joskow, Paul L.; Rose, Nancy L.

TI Political Constraints on Executive Compensation: Evidence From the Electric Utility Industry. AU Joskow, Paul L.; Rose, Nancy L.; Wolfram, Catherine D.

TI Do Airplanes in Chapter 11 Harm Their Rivals?: Bankruptcy and Pricing Behavior in U.S. Airline Markets. AU Borenstein, Severin; Rose, Nancy L.

Rosen, Sherwin

PD January 1995. TI Public Employment, Taxes and the Welfare State in Sweden. AA University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5003; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 40. PR \$5.00. JE H31, H42, I38, P22, P23. KW Household Goods. Household Production. Sweden. Welfare State.

AB All employment growth in Sweden since the early 1960s is attributable to labor market entry of women, working in local public sector jobs that implement the Welfare State. Sweden has "monetized" or "nationalized" the family. Women are paid at public expense to provide household services for other families. Subsidizing purchased household services encourages labor force participation of women through substitution of market- for self-provided services. It also reduces the marginal cost prices of household goods and encourages substitution of household goods for material goods. A kind of social cross-hauling occurs: when subsidies are increased and taxes raised to finance them, production of material goods declines and production of household goods increases. Women enter the market and work more in each other's households and less in

the material goods sector. Efficiency distortions of current child policies in Sweden may be as large as half of total expenditures on child care. The current 90 percent subsidies to public child care probably involve large deadweight losses. A one percent decline in the rate of subsidy accompanied by balanced budget tax decreases would reduce the deadweight losses of tax distortions by one percent, at current policy levels.

Rosenberg, Christoph B.

PD February 1995. TI Fiscal Policy Coordination in the WAEMU After the Devaluation. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/25; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE E62, F15, H87. KW Fiscal Policy. Politics. Monetary Union.

AB This paper examines the economic implications of fiscal policy coordination in the West African Economic and Monetary Union (WAEMU) in the light of the January 1994 devaluation of the CFA franc. Diverging tax, tariff, and budgetary politics are identified and it is argued that the resulting fiscal externalities have prevented the zone from reaping the full benefits of a monetary union. The paper shows that the devaluation makes it more desirable than ever to have a closer policy coordination to prevent such detrimental fiscal externalities. Recent efforts in this field are reviewed and evaluated. Finally, the paper offers some recommendations with respect to the optimal design of tax and tariff rate structures, and choice of budgetary convergence criteria.

Rosenberg, Joshua

TI Hedging Options in a GARCH Environment: Testing the Term Structure of Stochastic Volatility Models. AU Engle, Robert F.; Rosenberg, Joshua.

Rosenthal, Jean-Laurent

TI What Do Notaries Do? Overcoming Asymmetric Information in Financial Markets: The Case of Paris, 1751. AU Hoffman, Philip T.; Postel-Vinay, Gilles; Rosenthal, Jean-Laurent.

Rosenthal, Robert W.

PD August 1995. TI Simultaneous Auctions with Synergies and Common Values. AU Rosenthal, Robert W.; Wang, Ruqu. AA Rosenthal: Boston University. Wang: Queen's University. SR Boston University, Industry Study Program Discussion Paper: 60; Department of Economics, Boston University, 270 Bay State Road, Boston, MA 02215. PG 22. PR no charge. JE C78, D44. KW Auctions. Strategy.

AB In this paper, we study a simultaneous-auction model with synergies, common values, and overlapping interests. We construct strategies in which bidders of different types randomize over different bid intervals and provide necessary and sufficient conditions for such strategies to be equilibria.

Rota, Paola

PD May 1995. TI Labour Demand with Fixed Adjustment Costs. AA University College London and Università di Brescia. SR University College London Discussion Paper: 95/04; Department of Economics, University College London, Gower Street, London WC1E, England. PG 38. PR 3.00 pounds. JE J32, C23. KW Fixed

Costs. Labor Demand. GMM.

AB We analyze the dynamics which underlie fixed costs of adjusting employment. We consider a dynamic structural model where, in each period, companies face a choice of whether to vary the labor input or whether to postpone the adjustment to the future. We characterized companies' intertemporal employment choices by adding a single forward-looking term to the static marginal productivity condition. In this way we obtain a marginal productivity equilibrium relation which takes into account the future alternatives of adjustment or non-adjustment that firms face as the result of the presence of fixed adjustment costs. This variable accounts for the intertemporal nature of the decision problem. The model provides a simple and direct test for forward-looking behavior.

Rotemberg, Julio J.

PD December 1994. **TI** Prices, Output and Hours: An Empirical Analysis Based on a Sticky Price Model. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4948; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$5.00. **JE** E31, E32, E33, E52, E58. **KW** Business Cycles. Sticky Prices. Output.

AB I show that a simple sticky price model based on Rotemberg (1982) is consistent with a variety of facts concerning the correlation of prices, hours and output. In particular, I show that it is consistent with a negative correlation between the detrended levels of output and prices when the Beveridge-Nelson method is used to detrend both the price and output data. Such a correlation is present (and very strong) in U.S. data. Consistent with the model, this correlation is stronger than correlations between prices and hours of work. I also study the size of the predictable price movements that are associated with predictable output movements as well as the degree to which there are predictable movements in monetary aggregates associated with predictable movements in output. These facts are used to shed light on the degree to which the Federal Reserve has pursued a policy designed to stabilize expected inflation.

Roubini, Nouriel

TI Growth Effects of Income and Consumption Taxes: Positive and Normative Analysis. **AU** Milesi-Ferretti, Gian Maria; Roubini, Nouriel.

Rowthorn, Robert E.

TI Employment in the United Kingdom: Trends and Prospects. **AU** Coutts, Kenneth; Rowthorn, Robert E.

PD May 1995. **TI** Capital Formation and Unemployment. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP7; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 28. **PR** \$10.00. **JE** E22, E24, E31. **KW** Capital Formation. Unemployment. OECD.

AB The paper examines the relationship between capital stock and investment, on the one hand, and employment and unemployment, on the other, both theoretically and using regression analysis of empirical data for OECD countries. It considers the causes of low capital investment, especially in manufacturing, in industrialized economies and argues that this has been a significant factor in the rise of unemployment in

Western Europe.

PD May 1995. **TI** A Simulation Model of North-South Trade. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP9; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 52. **PR** \$10.00. **JE** F11, F17, J31. **KW** North-South Trade. Productivity. Unemployment. Wages. **AB** Using a three-sector, two-labor-category general equilibrium simulation model of North-South trade, based on Wood (1994), the paper explores relationships between production, trade and employment in more developed Northern and less developed Southern economies. The results are related to recent empirical findings on Western Europe, and suggest a range of significant implications for understanding North-South trends in labor-intensive and capital-intensive production, levels of skilled and unskilled employment, productivity and wages.

PD September 1995. **TI** The Role of Manufacturing in the National Economy. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP13; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 81. **PR** \$10.00. **JE** F10, F20, F40, L60. **KW** Investment. Labor. Manufacturing. Global Trade. Unemployment.

AB The paper analyses recent manufacturing and structural economic changes in advanced economies, in relation to the international division of labor between advanced and developing countries, the role of new technology, and the growth of the service sector. It argues that the economic growth of developing countries will create substantial new markets for sophisticated manufactured goods, and that advanced countries will export 'knowledge intensive' goods and services in return for 'labor intensive' goods and services from developing countries. Trade between advanced economies will be concentrated into regional blocs. High, and rising unemployment in advanced countries reflects poor manufacturing performance in the context of both new technology and imports from developing countries, and requires increased manufacturing investment, in capital stock, education and training.

TI The Constructive Selection of Democratic Firms in a World of Self-Sustaining Institutions. **AU** Pagano, Ugo; Rowthorn, Robert E.

PD October 1995. **TI** Korea at the Cross-Roads. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP11; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 35. **PR** \$10.00. **JE** F23, O53. **KW** Korea. Industrial Policy.

AB The paper presents employment projections and reviews the major economic problems which are likely to face Korea in the next two decades. These are the decline of agricultural employment and the rural economy, rising wage costs and pressures for immigration of lower-cost workers, and the growth of overseas investment by large Korean firms with negative effects on the Korean economy itself. It concludes by discussing policy implications and possible policy responses to these problems.

Rubinstein, Ariel

TI The Design of Organizations for Collecting Information from Conformist Agents. AU Glazer, Jacob; Rubinstein, Ariel.

PD November 1994. TI John Nash: The Master of Economic Modeling. AA Tel-Aviv University. SR Tel-Aviv Foerder Institute for Economic Research Working Paper: 29/94; The Eitan Berglas School of Economics, Tel-Aviv University. PG 13. PR not available. JE B31, C72. KW Nash. Nobel Prize. Economic Modeling. Game Theory.

AB John Nash has been awarded the Nobel prize 1994 for his pioneering analysis of equilibria in the theory of non-cooperative games. The paper evaluates the event and points out the unique characteristics of Nash's style of economic modeling.

Ruhm, Christopher J.

PD February 1995. TI Is High School Employment Consumption or Investment?. AA University of North Carolina Greensboro and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5030; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE I21, J24. KW Experience. High School. Human Capital. Vocational Training.

AB Using data from the National Longitudinal Survey of Youth, this study examines whether employment by high school students improves or worsens economic attainment 6 to 9 years after the scheduled date of high school graduation. There is no indication that light to moderate job commitments ever have a detrimental effect and hours worked during the senior grade are positively correlated with future earnings, fringe benefits, and occupational status. These results are robust across a variety of specifications and suggest that employment increases net investments in human capital and facilitates the school-to-work transition, particularly towards the end of high school and for students not continuing on to college.

Russell, Jeffrey R.

TI Forecasting Transaction Rates: The Autoregressive Conditional Duration Model. AU Engle, Robert F.; Russell, Jeffrey R.

Russell, R. Robert

TI The Aggregation and Disaggregation of Efficiency Indices. AU Blackorby, Charles; Russell, R. Robert.

TI Two Notes on Budgeting. AU Blackorby, Charles; Russell, R. Robert.

Saavalainen, Tapio O.

PD April 1995. TI Stabilization in the Baltic Countries: A Comparative Analysis. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/44; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE not available. KW not available.

AB not available.

Sacerdote, Bruce

TI Crime and Social Interactions. AU Glaeser, Edward L.; Sacerdote, Bruce; Scheinkman, Jose A.

Sachs, Jeffrey D.

PD February 1995. TI Economic Convergence and Economic Policies. AU Sachs, Jeffrey D.; Warner, Andrew M. AA Sachs: Harvard University and National Bureau of Economic Research. Warner: Harvard University. SR National Bureau of Economic Research Working Paper: 5039; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR \$5.00. JE D23, O47. KW Convergent Growth Paths. Efficiency. Property Rights.

AB Many of the crucial debates in development economics are encapsulated in the question of economic convergence. Is there a tendency for the poorer countries to grow more rapidly than the richer countries, and thereby to converge in living standards? Some recent research on endogenous growth has emphasized increasing returns as a possible reason not to expect convergence. Other research has suggested that convergence may be achieved only after poor countries attain a threshold level of income or human capital. This paper presents evidence that a sufficient condition for higher-than-average growth of poorer countries, and therefore convergence, is that poorer countries follow reasonably efficient economic policies, mainly open trade and protection of private property rights.

Sadka, Efraim

TI Resisting Migration: Wage Rigidity and Income Distribution. AU Razin, Assaf; Sadka, Efraim.

Sahay, Ratna

PD January 1995. TI Inflation and Stabilization in Transition Economies: A Comparison with Market Economies. AU Sahay, Ratna; Vegh, Carlos A. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/8; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 40. PR not available. JE F41, P22, P51. KW Inflation. Stabilization. Transition Economies.

AB A simple model is developed to understand inflationary pressures and stabilization in nonmarket economies. In light of the model, the paper reviews the inflation and stabilization experiences of several transition economies in Eastern Europe and the former Soviet Union. These experiences are then compared to those of high inflation market economies. The paper concludes that, despite significant differences in the economic structure and institutional framework, the inflation and stabilization experiences in transition and market economies are similar in many respects. In particular, monetary accommodation and lack of fiscal discipline are critical in sustaining inflation, and exchange rate-based anchors seem more successful than money anchors in bringing down inflation. On the other hand, wage policies appear to be more critical in reigning inflation in transition economies than in market economies.

TI Capital Flows in Central and Eastern Europe: Evidence and Policy Options. AU Calvo, Guillermo A.; Sahay, Ratna; Vegh, Carlos A.

TI Internal Migration, Center-State Grants and Economic Growth in the States of India. AU Cashin, Paul; Sahay, Ratna.

PD September 1995. TI Dollarization in Transition Economies: Evidence and Policy Implications. AU Sahay, Ratna; Vegh, Carlos A. AA International Monetary Fund.

SR International Monetary Fund Working Paper: 95/96; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** F41. **KW** Foreign Currency. Transitional Economies.

AB After most restrictions on foreign currency holdings were relaxed in the early 1990s, foreign currency deposits in transition economies have been increasing rapidly. This paper takes a first look at the evidence on dollarization for 15 transition economies, and then discusses some key conceptual and policy implications. Depending on the institutional constraints, foreign currency deposits as a proportion of broad money reached a peak of between 30 and 60 percent in 1992-1993. Unlike what has been observed in Latin America, however, dollarization has fallen substantially in the aftermath of successful stabilization plans in Estonia, Lithuania, Mongolia, and Poland. Since foreign currency deposits reflect mainly a portfolio choice, the fall in dollarization can be primarily attributed to higher real returns on domestic-currency assets, as a result of lower inflation and more market-determined interest rates.

Saito, Makoto

TI Growth, Convergence, and Risk-Sharing with Incomplete International Asset Markets. **AU** Devereux, Michael B.; Saito, Makoto.

Sala-i-Martin, Xavier

TI Measuring Aggregate Human Capital. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier.

TI A Labor-Income-Based Measure of the Value of Human Capital: An Application to the States of the United States. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier.

Salant, David J.

TI Exclusion and Integration in the Market for Video Programming Delivered to the Home. **AU** Riordan, Michael H.; Salant, David J.

Samiei, Hossein

TI International Evidence on the Determinants of Private Saving. **AU** Masson, Paul R.; Bayoumi, Tamim; Samiei, Hossein.

TI Hysteresis in Exports. **AU** Giovannetti, Giorgia; Samiei, Hossein.

Samuelson, Larry

TI Mudding Through Noisy Equilibrium Selection. **AU** Binmore, Ken; Samuelson, Larry.

Santaella, Julio A.

PD July 1995. **TI** Four Decades of Fund Arrangements: Macroeconomic Stylized Facts before the Adjustment Programs. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/74; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 31. **PR** not available. **JE** F32, F33, F34. **KW** Balance of Payments. Financial Arrangements.

AB This paper analyzes the initial conditions before Fund financial arrangements are adopted. Evidence from 324 Fund arrangements in 78 developing countries during 1973-91 indicates that there are important differences in the characteristics between program episodes and a control group.

Program episodes exhibit weaker balance of payments, output growth, investment, external conditions and fiscal policy than the control group; they are also characterized by a higher degree of external indebtedness and inflation, and their exchange rates are more depreciated in both nominal and real terms. Only in the case of the growth rates of money and credit do the two groups appear to be statistically similar.

Sarel, Michael

PD May 1995. **TI** Nonlinear Effects of Inflation on Economic Growth. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/56; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 13. **PR** not available. **JE** E31, O41, O42. **KW** Economic Growth. Inflation.

AB This paper examines the possibility of nonlinear effects of inflation on economic growth. It finds evidence of a significant structural break in the function that relates economic growth to inflation. The break is estimated to occur when the inflation rate is 8 percent. Below that rate, inflation does not have any effect on growth, or it may even have a slightly positive effect. When the inflation rate is above 8 percent, however, the estimated effect of inflation on growth rates is significant, robust and extremely powerful. The paper also demonstrates that when the existence of the structural break is ignored, the estimated effect of inflation on growth is biased by a factor of three.

PD September 1995. **TI** Growth in East Asia: What We Can and What We Cannot Infer From It. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/98; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 21. **PR** not available. **JE** O47, O53. **KW** Growth. East Asia.

AB This paper examines the different arguments raised by the studies that addressed the East Asian growth experience. The original arguments presented in this paper are all on the negative side, highlighting problems associated with some of the possible explanations for the East Asian miracle. The paper concentrates mainly on four dimensions of the debate about the East Asian growth experience: (i) the nature of economic growth intensive or extensive; (ii) the role of public policy and of selective interventions; (iii) the role of high investment rates and a strong export orientation as possible engines of growth; and (iv) the importance of the initial conditions and their relevance for policy.

Savouri, Savvas

TI Regional Migration in Britain 1975-1992: A Re-Examination of Distance and Contiguity Effects. **AU** Jackman, Richard; Savouri, Savvas.

Schadler, Susan

TI The Macroeconomic Effects of ESAF-Supported Programs: Revisiting Some Methodological Issues. **AU** Dicks-Mireaux, Louis; Mecagni, Mauro; Schadler, Susan.

Schaffer, Mark E.

TI The Provision of Social Benefits in State-Owned, Privatized and Private Firms in Poland. **AU** Estrin, Saul; Schaffer, Mark E.; Singh, I.J.

TI Enterprise Adjustment in Poland: Evidence from a

Survey of 200 Private, Privatized, and State-Owned Firms. AU Belka, Marek; Estrin, Saul; Schaffer, Mark E.; Singh, I.J.

TI Banks, Firms, Bad Debts and Bankruptcy in Hungary 1991-94. AU Bonin, John P.; Schaffer, Mark E.

Scheinkman, Jose A.

TI Neither a Borrower nor a Lender Be: An Economic Analysis of Interest Restrictions and Usury Laws. AU Glaeser, Edward L.; Scheinkman, Jose A.

TI Economic Growth in a Cross-Section of Cities. AU Glaeser, Edward L.; Shleifer, Andrei; Scheinkman, Jose A.

TI Crime and Social Interactions. AU Glaeser, Edward L.; Sacerdote, Bruce; Scheinkman, Jose A.

Schoenbaum, Michael

TI The Illusion of Failure: Trends in the Self-Reported Health of the U.S. Elderly. AU Waidmann, Timothy; Bound, John; Schoenbaum, Michael.

Schwalbach, Joachim

TI Management Consultancy in Europe. AU Keeble, David; Schwalbach, Joachim.

Schwartz, Aba

PD September 1994. TI The Dynamics and Interrelations of Series of Wage and Employment Evidence from Micro Data. AA Tel-Aviv University. SR Tel-Aviv Foerder Institute for Economic Research Working Paper: 25/94; The Eitan Berglas School of Economics, Tel-Aviv University. PG 32. PR not available. JE J22, J31. KW Wage, Employment. AB The paper analyzes the behavior and interrelations of series of wage and employment at two levels of aggregation. The lower level is composed of individual firms. The higher level is composed of aggregates of these firms into homogeneous groups. The relation of the wage series to each other is characterized at the two levels of aggregation. The relation of employment and wage is characterized at the lower (firm) level. At each aggregation level the analysis is performed on monthly, quarterly, and annual data frequencies. The data supports the existence of wage leadership within homogenous groups of firms. The wage series display a time uniform hierarchy at the higher level of aggregation which disappears at the firm level. Yet the wage ranking is quite persistent even at the firm level. The majority of the firms in the sample display a negative relation between their series of relative wage and relative employment. The rates of change of these series display a similar negative relation which is, however, much weaker.

Schwartz, Amy Ellen

TI Spatial Productivity Spillovers From Public Infrastructure: Evidence From State Highways. AU Holtz-Eakin, Douglas; Schwartz, Amy Ellen.

Schwartz, Gerd

PD August 1995. TI The Distributional Effects of Public Expenditure: Update and Overview. AU Schwartz, Gerd; Ter-Minassian, Teresa. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/84; International Monetary Fund, 700 19th Street, Washington, DC

20431. PG 19. PR not available. JE D31, E62, H61. KW Income Distribution. Economic Policy.

AB It is commonly agreed that economic policies, including budgetary policies, can have potentially strong distributional effects. Traditional economic analysis held that economic policies affected the income distribution primarily through their impact on the rate of growth. More recently, it has come to be recognized that qualitative aspects of economic growth are probably more important than the rate of growth itself. While recent research has confirmed the potential role of expenditure policies as a redistributive tool, it has also shown that redistribution does not necessarily have to come at the expense of economic growth and efficiency. Although there are substantial analytical and technical problems to be faced in the design of equitable and cost-effective public expenditure programs, unfavorable distributional outcomes of these programs can usually be traced more to political and institutional pressures than to purely technical factors.

TI Government Subsidies: Concepts, International Trends, and Reform Options. AU Clements, Benedict; Hugoumenq, Rejane; Schwartz, Gerd.

Segal, Uzi

TI Preferences Over Solutions to the Bargaining Problem. AU Border, Kim C.; Segal, Uzi.

Sen, Amartya

PD November 1994. TI Beyond Liberalization: Social Opportunity and Human Capability. AA Lamont University and Harvard University. SR London School of Economics, Development Economics Research Programme: DEP/58; STICERD, London School of Economics, Houghton Street, London WC2A 2AE. PG 36. PR no charge. JE H11, H41, I12, I28, O11. KW India. Social Sector. Education. Public Health.

AB Policy debates in India have to be taken away from the overwhelming concentration on issues of liberalization and marketization. The nostalgia of the old debates "are you for or against the market?", or "are you in favor or against state activities?" seem to have an odd "hold" on all sides, so that we concentrate only on some issues and ignore many, often more important, ones. While the current economic reforms take good note of the diagnosis that India has too much government in some fields, they ignore the fact that India also has too little government activity in many other fields, including basic education and basic health care, which makes people's lives miserable and which also severely limits the possibility of economic expansion.

Shadbegian, Ronald J.

TI Pollution Abatement Costs, Regulation, and Plant-Level Productivity. AU Gray, Wayne B.; Shadbegian, Ronald J.

Shepherd, George B.

TI The Causes and Effects of Liability Reform: Some Empirical Evidence. AU Campbell, Thomas J.; Kessler, Daniel P.; Shepherd, George B.

Shin, Hyun Song

TI Informational Events Which Trigger Currency Attacks. AU Morris, Stephen; Shin, Hyun Song.

TI A Violation of Dominance and the Consumption Value of

Gambling. AU Johnson, Johnnie E.V.; Shin, Hyun Song.

PD October 1995. TI Defining a Notion of Confidence in an Economy with Differential Information. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9526; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 28. PR no charge. JE D82, E12. KW Common Knowledge. Incomplete Information. Confidence.

AB It is common practice to classify explanations of low levels of economic activity into two camps--those based on fundamentals, and those based on coordination failures. However, this dichotomy may be misleading. It is possible that, the fundamentals of the economy are consistent with high activity and everyone knows this, and yet there is not equilibrium with high activity. Thus, it is not valid to argue from the feasibility of a good outcome to the conclusion that this good outcome could have been obtained as an equilibrium. When there is differential information concerning the fundamentals and there is a consequent failure of common knowledge of these fundamentals, unrealized states which are known not to have occurred exercise an influence on the equilibrium outcome. We offer a device for quantifying such effects by means of a Markov chain induced on the set of types of the typical agent in the incomplete information game. The effect of unrealized states is reflected in the transition probabilities of this chain.

PD October 1995. TI Comparing the Robustness of Trading Systems to Higher Order Uncertainty. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9527; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 33. PR no charge. JE D82. KW Common Knowledge. Trading Volume.

AB This paper compares the performance of a decentralized market with that of a dealership market when traders have differential information. Trade occurs as a result of equilibrium actions in a Bayesian game, where uncertainty is captured by a finite state space and information is represented by partitions on this space. In the benchmark case of trade with common knowledge of endowments, the two mechanisms deliver virtually identical outcomes. However, with differential information, the dealership market has strictly higher trading volume, and yields an efficient post-trade allocation in most states. In contrast, the decentralized market suffers from suboptimal trading volume. The reason for this poor performance is the vulnerability of the decentralized market to higher order uncertainty concerning the fundamentals of the market. Traders may know that mutually beneficial trade is feasible, and perhaps know that they know, and yet a failure of common knowledge that this is so precludes efficient trade. The dealership market is robust to this type of uncertainty.

PD October 1995. TI Informational Efficiency versus Economic Efficiency in a Market with Differential Information. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9528; Department of Economics, University of Southampton, Southampton S09 5NH, England. PG 30. PR no charge. JE D82. KW Differential Information. Volume. Volatility. Efficient Market Hypothesis.

AB Informational efficiency has to do with whether prices

"reflect all available information". Economic efficiency is concerned with the payoffs of the interested parties. Although it has been conventional to treat informational efficiency as a normative criterion in making welfare judgments, the two notions of efficiency are logically distinct concepts. This paper exhibits a market with differential information in which there is a trade-off between the two notions of efficiency. When prices are more informationally efficient, payoffs are lower for all traders. Conversely, when prices are less efficient, payoffs are higher for all traders. An empirical implication of the analysis is a strong positive correlation between the volatility of the price, as measured by its variance, and the volume of trade. This correlation between volatility and volume has been confirmed in numerous empirical studies of financial markets. In our model, price volatility, far from being something bad, is a good sign, indicating high ex ante payoffs for all traders.

TI The Rationality and Efficacy of Decisions Under Uncertainty and the Value of an Experiment. AU Morris, Stephen; Shin, Hyun Song.

Shirai, Sayuri

PD January 1995. TI The Pattern of International Trade Between Japan and the Pacific Basin Countries: A Comparison between 1975 and 1985. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/9; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 57. PR not available. JE F14. KW International Labor. Trade Structure. Japan.

AB Using the international input-output tables between Japan and five Pacific Basin countries (Indonesia, Korea, Malaysia, Singapore, and Thailand) for the years 1975 and 1985, the paper examines the trade structure in 1975 and how it had shifted by 1985. It shows that intra-industry trade in manufactured products expanded as Japan increased imports of more capital-intensive products from these countries. Intra-industry trade of intermediate inputs increased substantially more than of final products, reflecting a trend by manufacturers to subdivide the production process of intermediate inputs and to shift their locations to different countries. This suggests a more active development of international labor in the intermediate stages of production and a deepening of regional linkages.

Shleifer, Andrei

TI Economic Growth in a Cross-Section of Cities. AU Glaeser, Edward L.; Shleifer, Andrei; Scheinkman, Jose A.

Shome, Parthasarathi

TI Poverty Alleviation in a Financial Programming Framework: An Integrated Approach. AU Chand, Sheetal K.; Shome, Parthasarathi.

PD August 1995. TI Financial Transactions Taxes. AU Shome, Parthasarathi; Stotsky, Janet G. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/77; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 14. PR not available. JE G12, G18, H22, H23. KW Taxation. Capital Flows. Financial Markets.

AB Financial transactions taxes have recently gained attention as a possible means to influence the behavior of financial markets and to reduce destabilizing capital flows. One

variation is a tax on all foreign currency conversions, often termed a "Tobin tax." This paper suggests that these taxes would probably not produce the desired effects and would be difficult to design and implement. It is unclear that the possible advantages in reducing some short-term speculative trading would outweigh the possible disadvantages in impairing the efficiency of financial markets. From an administrative perspective, without a broad international consensus and application, these taxes are likely to be easily avoided.

Sicherman, Nachum

TI The Dynamics of Dual-Job Holding and Job Mobility.
AU Paxson, Christina H.; Sicherman, Nachum.

Singh, I.J

TI The Provision of Social Benefits in State-Owned, Privatized and Private Firms in Poland. AU Estrin, Saul; Schaffer, Mark E.; Singh, I.J.

TI Enterprise Adjustment in Poland: Evidence from a Survey of 200 Private, Privatized, and State-Owned Firms. AU Belka, Marek; Estrin, Saul; Schaffer, Mark E.; Singh, I.J.

Slade, Margaret E.

PD May 1994. TI Hotelling Confronts CAPM: A Test of the Theory of Exhaustible Resources. AU Slade, Margaret E.; Thille, Henry. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/16; #997- 1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 43. PR not available. JE C23, G12, L71, Q30. KW Exhaustible Resources. Resource Depletion. CAPM.

AB A theoretical model of pricing natural-resource commodities that integrates financial and product markets is derived and tested. In the model, price-taking firms extract from a deposit of an exhaustible resource; production is risky, and investors own shares in the mine. Investors can diversify their risk by holding a portfolio of other assets. The model thus unifies two strands of the economic and financial literature: one that builds on the Hotelling model of resource depletion and the other that extends the Capital Asset Pricing Model. Tests of the theoretical predictions make use of shadow prices that were estimated from a panel of fourteen small Canadian copper mines. The rate of growth of shadow prices is related to technological variables such as the rate of change of costs due to depletion and to financial variables such as the risk-free rate of return, the rate of return on the market portfolio, and the rate of growth of macroeconomic aggregates. Our tests fail to reject the theoretical restrictions that are implied by the Hotelling/CAPM model.

PD May 1994. TI Contracting in Space. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/17; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 34. PR not available. JE C12, C13, C25, L13, L14. KW Spatial Statistics. Generalized Residuals. Generalized Method of Moments. Gasoline.

AB Spatial statistics are used here to detect symmetric or asymmetric patterns of organizational form. I develop tests for spatial-residual correlation and methods of estimation in the presence of such correlation for discrete-choice models. The tests, which are based on the notion of a generalized residual, are a set of orthogonality conditions that a properly specified

model should satisfy. When the restrictions are rejected, the full model can be estimated by generalized method of moments. These techniques are used to evaluate spatial patterns in retail-gasoline contracts. In other words, I examine whether the spatial configuration is random or whether there is a tendency towards clustering or dispersion of contract types. The data consist of all contracts between integrated oil companies and their branded service stations in the city of Vancouver. Four metrics or measures of closeness are examined: Euclidean distance, competition along arteries, a combination of the first two, and a nearest-neighbor norm. The pattern of spatial correlation that is uncovered is consistent with a market where strategic-agency motives for delegating the pricing decision outweigh attempts to differentiate stations from nearby rivals.

Slemrod, Joel

PD August 1995. TI The Costs of Taxation and the Marginal Cost of Funds. AU Slemrod, Joel; Yitzhaki, Shlomo. AA Slemrod: University of Michigan and International Monetary Fund. Yitzhaki: The Hebrew University and International Monetary Fund. SR International Monetary Fund Working Paper: 95/83; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE H21, H26. KW Taxation. Deadweight Loss. Policy Evaluation.

AB It is argued that taxation causes three kinds of deadweight losses and two types of direct costs. The deadweight losses arise from substitution, evasion, and avoidance activities while the direct costs are administrative and compliance costs. Some of these social costs tend to be discontinuous and/or nonconvex. Because most models of taxation ignore some components of the social costs of taxation, their conclusions cannot be of a general nature. An alternative approach to policy evaluation is to rely on a marginal efficiency cost of funds rule which can indicate appropriate directions of reforms. The paper discusses its merits, applicability, and limitations, as well as its relationship to other concepts.

Smeaton, Deborah

TI An Exploration of Entry to and Exit From Self-Employment. AU Abell, Peter; Khalaf, Haifa; Smeaton, Deborah.

Smith, R. Todd

PD July 1995. TI Markets for Corporate Debt Securities. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/67; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 77. PR not available. JE E44, G15, G32. KW International Markets. Corporate Debt.

AB This paper surveys markets for corporate debt securities in the major industrial countries and the international markets. The discussion includes a comparison of the sizes of the markets for various products, as well as the key operational, institutional, and legal features of primary and secondary markets. Although there are some signs that debt markets may be emphasized in the future by some countries, it remains true that North American debt markets are the most active and liquid in the world. The international debt markets are, however, growing in importance. The paper also investigates some of the reasons for the underdevelopment of domestic bond markets and the consequences of firms shifting debt

financing needs from banks to securities markets.

TI Recent Turmoil in Emerging Markets and the Behavior of Country-Fund Discounts: Renewing the Puzzle of the Pricing of Closed-End Mutual Funds. **AU** Kramer, Charles; Smith, R. Todd.

Snower, Dennis J.

PD January 1995. **TI** The Simple Economics of Benefit Transfers. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/5; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** J23, J24, J31, J32, J64. **KW** Employment Vouchers. Inflation. Unemployment Benefits.

AB The paper examines the employment and unemployment implications of permitting unemployed people to use part of their unemployment benefits to provide employment vouchers to the firms that hire them. This opportunity to transfer unemployment benefits into employment subsidies--"benefit transfers" for short--would help replace the unemployment trap by an incentive to work. The vouchers rise with people's unemployment durations and with the amount of training provided. The policy would be costless to the government since the cost of the employment vouchers is set equal to the amount saved on unemployment benefits. It would not be inflationary since the long-term unemployed, on whom the vouchers are targeted, have little influence on wage setting.

PD January 1995. **TI** Evaluating Unemployment Policies: What do the Underlying Theories Tell Us? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/7; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 34. **PR** not available. **JE** E32, E63, J21, J32, J64. **KW** Unemployment Policies. Macroeconomic Theory. Laissez Faire.

AB The paper surveys unemployment policies for advanced market economies and evaluates them by examining the predictions of the underlying macroeconomic theories. The basic idea is that, for the most part, different unemployment policy prescriptions rest on different macroeconomic theories, and our confidence in the prescriptions should depend--at least in part--on the theories' ability to predict some salient stylized facts about unemployment behavior. The paper considers four types of policies: laissez faire, demand-management, supply-side, and structural policies.

PD July 1995. **TI** Unemployment Benefits Versus Conditional Negative Income Taxes. **AA** Birkbeck College, University of London, Centre for Economic Policy Research, and International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/65; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** E62, H21, H31, J23, J31. **KW** Taxation. Unemployment Benefits.

AB The paper analyzes the wage-employment effects of replacing unemployment benefits by negative income taxes. It first surveys the major equity and efficiency effects of unemployment benefits versus negative income taxes, and summarizes the salient features of many European unemployment benefit systems in this light. Second, it presents a simple theoretical model that focuses on the relative wage-employment effects of unemployment benefits versus negative income taxes. Finally, it provides some empirical groundwork for assessing this relative effect.

Snyder, James M. Jr

TI The Impact of Federal Spending on House Election Outcomes. **AU** Levitt, Steven D.; Snyder, James M. Jr.

Sorsa, Piritta

PD January 1995. **TI** Environmental Protectionism, North-South Trade, and the Uruguay Round. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/6; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 19. **PR** not available. **JE** F13, Q18. **KW** GATT. Developing Countries. Environmental Taxes.

AB The paper seeks to provide an overview of the present state of debate on trade, environment, and the GATT for developing countries. Potential for green protectionism and relevant GATT rules are discussed in three areas: i) environmental product regulations including eco-labeling and other product measures with effects on production processes and border adjustment of environmental taxes; ii) extraterritorial use of trade measures to influence environmental behavior in other countries; and iii) the use of trade measures with international environmental agreements. The conclusion of the Uruguay Round will have a number of direct and indirect effects on trade and environment and the GATT debate on it.

PD May 1995. **TI** The Burden of Sub-Saharan African Own Commitments in the Uruguay Round--Myth or Reality? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/48; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** F13, F14. **KW** Border Protection. Uruguay Round. Africa.

AB The paper reviews Sub-Saharan Africa's (SSA) (i) own market access commitments in the Uruguay Round, and (ii) the nature of the constraints on SSA policies set by the Uruguay Round. It concludes that SSA failed to use the Uruguay Round to lock domestic reforms to an international anchor. Apart from South Africa, most SSA countries made few substantial liberalization commitments on border protection. The new rules set few immediate constraints on SSA policies as developing countries benefit from long and extendable transition periods. The main impact of the new rules will be increased transparency of policies from increased notification requirements. Further trade liberalization will have to rely on unilateral initiatives.

Spahn, Paul Bernd

PD June 1995. **TI** International Financial Flows and Transactions Taxes: Survey and Options. **AA** University of Frankfurt/Main and International Monetary Fund. **SR** International Monetary Fund Working Paper: 95/60; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** G15, G28, H21, H87. **KW** Exchange Rates. Volatility. Taxation. Liquidity.

AB Tobin has suggested that exchange rate volatility be controlled through a tax on international financial transactions. This analysis shows that the Tobin tax as a pure transaction tax is not viable. The tax would impair financial operations and create international liquidity problems. It is also unlikely to deter speculation. However, a possible alternative would be a two-tier rate structure--consisting of a low-rate transaction tax plus an exchange surcharge. The exchange rate could move freely within a "crawling" exchange rate band, but overshooting

the band would trigger a tax on an "externality," which is the discrepancy between the market exchange rate and the closest margin of the band. The scheme is inspired by the European Monetary System. However, exchange rates would be kept within the target range through a tax, not through interest policy or central bank sterilization and, eventually, the depletion of international reserves.

Staiger, Robert W.

PD December 1994. TI International Rules and Institutions for Trade Policy. AA University of Wisconsin and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4962; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 58. PR \$5.00. JE F13, F15, F17. KW GATT. Trade Agreement. Trade Policy.

AB What are the potential benefits from establishing international rules for the conduct of trade policy and how should these rules be designed? These questions are of central importance to the evolution of national trade policies in the post-war era, a period in which an elaborate system of international rules has evolved to facilitate the process of reciprocal trade liberalization. Yet the theory of trade policy has traditionally had little to say about these rules and the issues that underlie them. Below I review and synthesize several of the currents for a growing literature that is concerned with these questions. I attempt to accomplish three objectives: To describe the basic structure of international trade agreements as they exist in practice; to explore theoretically the normative consequences of actual and alternative trade agreements; and to offer some theoretically-based explanation for the structure of trade agreements that we observe. I attempt to achieve the first objective by describing the importance features of the General Agreement on Tariffs and Trade. I attempt to achieve the latter two objectives by reviewing a body of literature and drawing out its implications as they relate to these issues.

Stambaugh, Robert F.

TI On the Predictability of Stock Returns: An Asset-Allocation Perspective. AU Kandel, Shmuel; Stambaugh, Robert F.

Stein, Jerome L.

PD July 1995. TI The Fundamental Determinants of the Real Exchange Rate of the U.S. Dollar Relative to Other G-7 Currencies. AA Brown University and International Monetary Fund. SR International Monetary Fund Working Paper: 95/81; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE F21, F31, F32, F34. KW Exchange Rates. Productivity. Currency.

AB This paper provides a consistent theoretical framework to explain the fundamental determinants of the evolution in the medium to longer run of the real effective exchange rate of the United States relative to the currencies of the other G-7 countries. The fundamental determinants are productivity and thrift in the United States and the other major industrial countries. The real rate generated by these fundamentals is referred to as the natural real exchange rate (NATREX). Then, using cointegrating and error correction analysis, the paper examines the explanatory power of the NATREX model to explain the evolution of the real exchange rate of the U.S.

dollar during the floating exchange rate period.

Stewart, Mark

TI Trade Unions and Financial Performance. AU Machin, Steve; Stewart, Mark.

Stotsky, Janet G.

TI Financial Transactions Taxes. AU Shome, Parthasarathi; Stotsky, Janet G.

Summers, Victoria P.

PD January 1995. TI An Analysis of Value-Added Taxes in Russia and Other Countries of the Former Soviet Union. AU Summers, Victoria P.; Sunley, Emil M. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/1; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 42. PR not available. JE H21, H24, O23. KW Transition Countries. Value-Added Taxes. Russia.

AB Since the dissolution of the Soviet Union at the end of 1991, Russia and the other countries which were members of the USSR have adopted value-added taxes. The value-added tax now provides a very significant portion of total revenue in all of these countries. Ideally, the value-added tax will serve as a relatively efficient, neutral, revenue source at the national level. The Russian value-added tax, however, contains a number of unique provisions, reflected in the laws of many of the other transition countries, which cause it to fall short of this standard. These countries also must decide how their value-added taxes are to apply to trade among themselves. This paper describes several of the provisions unique to the Russian value-added tax and analyzes their probable effects. It then discusses the development of arrangements which have evolved to date with countries, and suggests possible answers to the vexing questions raised by this issue.

Sunley, Emil M.

TI An Analysis of Value-Added Taxes in Russia and Other Countries of the Former Soviet Union. AU Summers, Victoria P.; Sunley, Emil M.

Sutherland, Holly

TI Designed for the Poor--Poorer by Design? The Effects of the 1986 Social Security Act on Family Incomes. AU Evans, Martin; Piachaud, David; Sutherland, Holly.

Svensson, Lars E. O.

TI The Operation and Collapse of Fixed Exchange Rate Regimes. AU Garber, Peter M.; Svensson, Lars E. O.

PD January 1995. TI The Swedish Experience of an Inflation Target. AA Stockholm University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4985; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 19. PR \$5.00. JE E31, E52, E58, F31. KW Floating Exchange Rate. Inflation Target. Sweden.

AB The paper gives a brief account of the Swedish experience of an inflation target in a floating exchange rate regime; identifies, documents and discusses the current problems in Swedish monetary policy and their origins; considers what can be done to remedy the problems; and draws some general conclusions. The two main current problems are

the lack of credibility of the target and the significant risk that the target will be missed. The reasons for the lack of credibility include the fiscal situation, the institutional setup of monetary policy, the political division about monetary policy, and the insufficient transparency of and commitment to the current inflation-targeting policy.

Symansky, Steve

TI Fiscal Restructuring in the Group of Seven Major Industrial Countries in the 1990s: Macroeconomic Effects. AU Bartolini, Leonardo; Razin, Assaf; Symansky, Steve.

Tait, Alan A.

PD February 1995. TI Excess Wages Tax. AU Tait, Alan A.; Erbas, S. Nuri. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/17; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 29. PR not available. JE H25, H32, D21, E24. KW Taxation. Income Policy. Monopsony. Wages.

AB Excess wages tax (EWT) is a tax-based incomes policy instrument introduced in many centrally-planned economies and still used in some FSU and Eastern European countries in transition. The main macroeconomic goal of EWT is to curb inflationary pressures by penalizing through taxation the "excessive" wage awards granted by enterprises in the course of wage and price liberalization. In this paper, effects of EWT on the behavior of a profit-maximizing enterprise under monopsony, its incidence on wages and profits, and its impact on inflation are analyzed. The effect of EWT on an enterprise that maximizes workers' income is also examined with some observations on EWT's impact on managerial behavior. Finally, recent experience with EWT is assessed and compared to that suggested by the model.

Tanzi, Vito

PD February 1995. TI The Reform of Tax Administration. AU Tanzi, Vito; Pellechio, Anthony. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/22; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE H22, H26, K42, P35. KW Income Distribution. Macroeconomic Stability. Taxation. Resource Allocation.

AB Tax administration plays a crucial role in determining a country's real (or effective) tax system. Unfortunately, tax administrations in many countries do not function optimally and distort the intention of tax laws. In order for taxation to have its intended effect on the allocation of resources, the distribution of income, and macroeconomic stability and growth, the tax administration must function effectively and efficiently. This paper addresses tax administration reform by describing briefly the causes for inefficient tax administration, identifying the essential elements of successful reform, and presenting measures to improve the tax administration. The common thread of a reform strategy is to focus administrative resources on problems in the tax collection system through promotion of voluntary taxpayer compliance and adoption of a logical sequence of procedures for efficiently identifying and handling instances of noncompliance.

PD May 1995. TI The Taxation of Financial Assets: A Survey of Issues and Country Experiences. AU Tanzi, Vito; King, John. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/46;

International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE E21, G12, H22, H23. KW Taxation. Investment. Savings. Financial Intermediation.

AB Taxes affect the degree and efficiency of financial intermediation in many different ways. This paper summarizes the main tax provisions in OECD countries that affect the overall "tax wedge" between pre-tax returns on investments, and the post-tax yield on the savings that finance them. This tax wedge is shown to vary widely, in individual countries, according to the different ways in which savings are channeled through financial markets. The paper then discusses alternative criteria for assessing tax regimes for financial assets, and summarizes recent trends in OECD countries.

PD May 1995. TI Fiscal Deficit and Public Debt in Industrial Countries, 1970-1994. AU Tanzi, Vito; Fanizza, Domenico. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/49; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE E43, E63, H62, H63. KW Fiscal Deficit. Saving. Public Debt.

AB This paper assembles a set of relevant fiscal data, for both the individual countries and for the aggregate G-7 and 18 industrial countries, which covers a period long enough to allow an assessment of trends and the conduct of econometric tests. The "world" fiscal deficit has been rising since the 1970s and reached a historic high in 1993-94; the rise of the deficit has been accompanied by a significant decline in world saving. The paper argues that the increase in public debt, which has been the consequence of the accumulation of the fiscal deficits, has pushed up worldwide interest rates. Econometric evidence in support of this relationship is presented on the basis of panel data for the period 1970-93.

PD September 1995. TI Human Capital Accumulation and Public Sector Growth. AU Tanzi, Vito; Zee, Howell H. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/95; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 9. PR not available. JE H11, O41. KW Wagner's Law. Economic Development. Human Capital.

AB The present paper takes a fresh theoretical and empirical look into the relationship between Wagner's law and economic development. It introduces human capital into a classic two-sector model of unbalanced growth. It shows that, as an economy develops, changes in the relative returns to human capital and unskilled labor, as a result of changes to their relative scarcities, could have a significant impact on the size of the government sector, depending in part also on the difference in relative factor intensities between outputs of the private and government sectors. This conjecture is broadly supported by empirical evidence based on a cross-section analysis of a large sample of developed and developing countries.

PD October 1995. TI Government Role and the Efficiency of Policy Instruments. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/100; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 15. PR not available. JE H11, H21, H31. KW Taxation. Public Expenditure. Fiscal Instruments.

AB Comparisons about the role of the government in an economy are usually made by reference to the share of tax revenue or of public expenditure in the gross domestic product.

However, governments often use other tools for pursuing their objectives. The paper discusses these other tools, shows the extent to which they can replace the traditional fiscal instruments, and assesses their quantitative importance. Various highly speculative hypotheses are advanced about the role of these other tools in countries at different levels of development.

Taylor, M. Scott

TI International Trade and Open Access Renewable Resources: The Small Open Economy Case. AU Brander, James A.; Taylor, M. Scott.

TI International Trade and Open Access Renewable Resources: The Small Open Economy Case. AU Brander, James A.; Taylor, M. Scott.

Ter-Minassian, Teresa

PD February 1995. TI Setting Up a Treasury in Economies in Transition. AU Ter-Minassian, Teresa; Parente, Pedro P.; Martinez-Mendez, Pedro. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/16; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 56. PR not available. JE H61, H63. KW Government Resources. Financial Management. National Treasury.

AB The primary mandate of a national Treasury is to promote an optimal financial management of government resources, by ensuring that spending agencies are provided, in a timely manner, the resources needed for a smooth provision of public services, while minimizing the cost of government financing. However, international experience shows that agencies that go by the same name (the Treasury) assume a variety of responsibilities within the gamut of functions encompassed by government financial management. This paper argues that, in countries facing substantial economic and financial adjustment problems and/or rapid institutional change, it is desirable to give the Treasury a broader (rather than narrower) range of responsibilities in transition, in which under central planning Treasury functions were dispersed among different agencies, including the Central Bank. The paper presents an overview of the main issues governments are likely to face in setting up a national Treasury, in particular in economies in transition. It begins with an analysis of the main Treasury functions. It then discusses the Treasury's basic organization and structure, information system, and relationships with other public entities.

TI The Distributional Effects of Public Expenditure: Update and Overview. AU Schwartz, Gerd; Ter-Minassian, Teresa.

Tersman, Gunnar

TI Growth, Nontradables, and Price Convergence in the Baltics. AU Richards, Anthony; Tersman, Gunnar.

Thille, Henry

TI Hotelling Confronts CAPM: A Test of the Theory of Exhaustible Resources. AU Slade, Margaret E.; Thille, Henry.

Thisse, Jacques Francois

TI On the Optimal Structure of Local Governments. AU Hochman, Oded; Pines, David; Thisse, Jacques Francois.

Thomas, Alun

TI Wage Dispersion in the 1980s: Resurrecting the Role of

Trade Through the Effects of Durable Employment Changes. AU Buckberg, Elaine; Thomas, Alun.

Trajtenberg, Manuel

TI Quality-Adjusted Prices for the American Automobile Industry: 1906- 1940. AU Raff, Daniel M.G.; Trajtenberg, Manuel.

Turocy, Theodore L. III

TI Intertemporal Speculation Under Conditions of Uncertain Future Demand and an Endogenous, Nonpublic Number of Speculators and Speculative Activity: Experimental Results. AU Plott, Charles R.; Turocy, Theodore L. III

Tyler, Peter

TI Enterprising Behavior and the Urban-Rural Shift. AU Keeble, David; Tyler, Peter.

Ucer, E. Murat

TI Exchange Market Reform, Inflation, and Fiscal Deficits. AU Agenor, Pierre-Richard; Ucer, E. Murat.

Ulph, Alistair

PD September 1995. TI International Environmental Regulation When National Governments Act Strategically. AA University of Southampton. SR University of Southampton, Discussion Paper in Economics and Econometrics: 9518; Department of Economics, University of Southampton, Southampton SO9 5NH, England. PG 33. PR no charge. JE F20, F12, F13, Q28. KW Eco-Dumping. Environmental Policy. Harmonization. Asymmetric Information.

AB Recent debates over trade liberalization have raised the concern that if governments are unable to use trade instruments to influence trade they may distort other policies such as environmental policies to give their domestic producers a competitive advantage. In particular there is concern that governments will relax their environmental policies--"eco-dumping". While such concerns have been challenged, in this paper I take such concerns as given, and set up a model where in non-co-operative game governments set environmental policies which are less strict than would be set in a co-operative equilibrium. The question I then address is how a supra-national authority, such as the European Commission, say, could design environmental policies which would counter the incentives for eco-dumping. In particular I examine two particular approaches which have been widely discussed--the harmonization of environmental policies and the setting of minimum environmental standards. Consistent with previous literature I show that harmonization will not result in a Pareto improvement over the non-co-operative outcome if countries are sufficiently asymmetric, and I show, for the particular model used that the required degree of asymmetry is not very large. However I also show, contrary to previous results that the use of minimum standards will also fail to deliver a Pareto improvement if governments use emission standards as their policy instrument, although the use of minimum emission taxes can produce a Pareto improvement. The question remains why the Commission does not just implement the co-operative solution, and I assume that there maybe asymmetries of information about environmental damage costs between the Commission and national governments which may prevent the Commission implementing the full- information co-operative

solution. I then analyze the co-operative and non-co-operative solutions under asymmetric information and show that such asymmetries may require less difference in environmental policies across countries than would be the case with full information. In this rather limited sense asymmetric information may provide some justification for a move towards harmonization of environmental policies.

PD January 1996. **TI** Global Warming, Irreversibility and Learning. **AU** Ulph, Alistair; Ulph, David. **AA** Ulph, A.: University of Southampton and CSERGE. Ulph, D.: University College London and CSERGE. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9601; Department of Economics, University of Southampton, Southampton SO9 5NH, England. **PG** 28. **PR** no charge. **JE** D81, D99, Q25, Q28, Q48. **KW** Global Warming. Irreversibility Effect. Uncertainty. Learning.

AB Analysis of policies to deal with global warming is complicated by three features of the problem: uncertainty about the extent of damages from global warming, the fact that global warming depends on stocks of greenhouse gases, which introduces an element of irreversibility into the problem, and the fact that decision makers in the future are likely to have better information about the possible damages from global warming. This raises the question whether the possibility of getting better information in the future about damages from global warming should lead policy makers to take more or less action now to abate emissions of greenhouse gases. A number of economists have argued that the literature on the "irreversibility effect", based on seminal papers by Arrow and Fisher (1974), Henry (1974a,b), suggests that society should take stronger action now to abate greenhouse gas emissions when there is the possibility of obtaining better information than would be the case if there was no possibility of obtaining better information. This view seems to be commonly held by those advising policy makers about policies towards climate change. However, Epstein (1980) showed that the analysis of the irreversibility effect by Arrow and Fisher, Henry and others was based on special cases, and he derived sufficient conditions for the irreversibility effect to hold, and for the opposite of the irreversibility effect to hold. In this paper we show that even the simplest model of global warming does not satisfy either of Epstein's sufficient conditions, so it is not possible to use Epstein's analysis to tell whether the irreversibility effect applies to models of global warming. We then derive our own sufficient condition for the irreversibility effect to hold. Finally we adapt an empirical model of global warming due to Maddison (1994) to include uncertainty, learning and irreversibility and show that for most parameter values current abatement of emissions of greenhouse gases should be lower when we allow for the possibility of obtaining better information about damages caused by global warming than when there is no possibility of obtaining better information.

Ulph, David

TI Global Warming, Irreversibility and Learning. **AU** Ulph, Alistair; Ulph, David.

Urias, Michael S.

TI Diversification, Integration and Emerging Market Closed-End Funds. **AU** Bekaert, Geert; Urias, Michael S.

Vaessen, Peter

PD February 1995. **TI** Growth-Oriented SMEs in Unfavorable Regional Environments. **AU** Vaessen, Peter; Keeble, David. **AA** Vaessen: University of Utrecht. Keeble: University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP6; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 45. **PR** \$10.00. **JE** R11, R58, O18, L11. **KW** Small Firm Growth. Regional Development. Regional Policy.

AB In this paper the research focus is on 'counterfactual' cases of growth-oriented SMEs in peripheral regions of Britain (Scotland, Northern England, Wales, and Merseyside). These firms are systematically compared to three control groups. Apart from some performance measures such as profits and exports, three key characteristics of the firms are analyzed. These are the extent of competition in the markets served, levels of innovation and R&D, and work force and labor market characteristics. The results provide considerable grounds for questioning the strong link between firm and environment implied by regional development theory and for greater emphasis on the ways in which organizations may counteract and overcome comparative environmental disadvantages.

Vahey, Shaun P.

TI Measuring Core Inflation. **AU** Quah, Danny T.; Vahey, Shaun P.

TI Measuring Core Inflation. **AU** Quah, Danny T.; Vahey, Shaun P.

Van Garderen, Kees Jan

PD September 1995. **TI** Testing Hypotheses in Curved Exponential Models. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9521; Department of Economics, University of Southampton, Southampton SO9 5NH, England. **PG** 61. **PR** no charge. **JE** C12. **KW** Wald Test. Point Optimal Tests. Enveloping Regions.

AB This paper analyses the effects of statistical curvature on classical tests in curved exponential models. If a model is curved, then there does not exist a uniformly most powerful test. Consequently, any test necessarily comprises power against different alternatives. We assess the virtues and vices of classic compromises by considering, graphically and analytically, the partitioning of the sample space into the critical region and acceptance region they induce. The exposition is valid for all sample sizes, considers the whole of the parameter-and sample space, and avoids differential geometrical details. The Lagrange multiplier and point optimal test give a straight boundary of the critical region regardless of the model curvature. The Wald test, plus a geometric counterpart called the geodesic test, give a curved boundary, but must contend with practical and fundamental drawbacks. Finally it is shown that the likelihood ratio test gives a curved boundary which trades off the global curvature against the local curvature of the model and can be given an interpretation as "weighted sum of best critical regions". If a model is not too curved then any of the test gives a reasonable solution to the non existence of a uniformly most powerful test, but if the model is seriously curved then the likelihood ratio test appears the clear favorite.

PD September 1995. **TI** Variance Inflation in Curved Exponential Models. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9522; Department of Economics, University of Southampton, Southampton SO9 5NH, England. **PG** 49. **PR** no charge. **JE** C13. **KW** Curvature. Sensitive Regions. Critical Points. Relative Distance.

AB This paper analyses the effects of statistical curvature on estimation and proposes a new statistic, called the relative distance auxiliary. We show that curvature gives rise to sensitive areas in the sample space, where small changes in the observation lead to large changes in the estimate. Consequently, for observations in the sensitive regions, there is more uncertainty associated with the estimate than for observations elsewhere. The auxiliary statistic we propose, reveals whether an observation falls in a sensitive-, ordinary-, or less sensitive region, and is used to indicate how the variance is inflated (or deflated) over and above the inverted Fisher information. A connection is made between numerical stability and statistical uncertainty. Examples confirm that the variance changes significantly with the relative distance auxiliary. The deeper purpose of the paper is to provide a very direct argument for conditional inference. Necessity for conditional inference follows directly from the fact that the model is curved, not from the existence of (approximate) ancillary statistics.

PD October 1995. **TI** Optimal Prediction In Loglinear Models. **AA** University of Southampton. **SR** University of Southampton, Discussion Paper in Economics and Econometrics: 9523; Department of Economics, University of Southampton, Southampton SO9 5NH, England. **PG** 31. **PR** no charge. **JE** C53. **KW** Unbiased. Laplace Transform.

AB This paper derives the exact optimal predictor in loglinear models under quadratic loss. That is, after taking logs the model is a standard linear regression model, but prediction is required of the variable in its original form. The inverse transformation of the optimal predictor in the loglinear form gives a biased predictor for the original variable. We derive an unbiased predictor that takes into account the random nature of the variable being forecast, as well as the random variation due to the estimation process. The optimality and uniqueness of the predictor follow from the completeness of the maximum likelihood estimator. On a practical level, and more importantly, the result gives a simple exact procedure that is easy to implement.

Van Nort, Kyle D.

TI Sex Discrimination in Restaurant Hiring: An Audit Study. **AU** Neumark, David; Bank, Roy J.; Van Nort, Kyle D.

Van Reenen, John

PD November 1994. **TI** The Creation and Capture of Rents: Wages and Innovation in a Panel of UK Companies. **AA** University College London. **SR** University College London Discussion Paper: 94/15; Department of Economics, University College London, Gower Street, London WC1E, England. **PG** 40. **PR** 3.00 pounds. **JE** J51, O33. **KW** Wages. Technical Change. Rent-Sharing.

AB This paper examines the impact of technological innovation on wages using a panel of British manufacturing firms. We utilize a headcount measure of major innovations

between 1945-83 combined with share price and accounting information. Innovating firms are found to have higher average wages, but rival innovation tends to depress own wages. This appears consistent with a model where wages are partly determined by a sharing in the rents generated by innovation. In other words innovation may be a good instrument for proxies for rents such as profitability, quasi-rents or Tobin's *q*. Instrumental variable estimates of the elasticity between wages and quasi-rents are about 0.3, remarkably close to the recent findings of Abowd and Lemieux (1993).

Van Rijckeghem, Caroline

TI Wage Expenditures of Central Governments. **AU** Hewitt, Daniel; Van Rijckeghem, Caroline.

TI Employment and Wages in the Public Sector--A Cross-Country Study. **AU** Kraay, Aart; Van Rijckeghem, Caroline.

Van Soest, Arthur

TI Generalized Switching Regression Analysis of Private and Public Wage Structures in Germany. **AU** Dustmann, Christian; Van Soest, Arthur.

Vegh, Carlos A.

TI Inflation and Stabilization in Transition Economies: A Comparison with Market Economies. **AU** Sahay, Ratna; Vegh, Carlos A.

TI Capital Flows in Central and Eastern Europe: Evidence and Policy Options. **AU** Calvo, Guillermo A.; Sahay, Ratna; Vegh, Carlos A.

TI Dollarization in Transition Economies: Evidence and Policy Implications. **AU** Sahay, Ratna; Vegh, Carlos A.

TI Disinflation and the Recession-Now-Versus-Recession-Later Hypothesis: Evidence from Uruguay. **AU** Hoffmaister, Alexander W.; Vegh, Carlos A.

Venables, Anthony J.

TI Multinational Firms and the New Trade Theory. **AU** Markusen, James R.; Venables, Anthony J.

TI Preferential Trading Arrangements and Industrial Location. **AU** Puga, Diego; Venables, Anthony J.

Vermaelen, Theo

TI Market Underreaction to Open Market Share Repurchases. **AU** Ikenberry, David; Lakonishok, Josef; Vermaelen, Theo.

Vickers, John

TI The Access Pricing Problem: A Synthesis. **AU** Armstrong, Mark; Doyle, Chris; Vickers, John.

Victoria-Feser, Maria-Pia

TI Robustness Properties of Poverty Indices. **AU** Cowell, Frank; Victoria-Feser, Maria-Pia.

Villanueva, Delano

TI The Peace Dividend: Military Spending Cuts and Economic Growth. **AU** Knight, Malcolm; Loayza, Norman; Villanueva, Delano.

Wagner, Nancy

PD February 1995. TI A Review of PPP-Adjusted GDP Estimation and its Potential Use for the Fund's Operational Purposes. AA International Monetary Fund. SR International Monetary Fund Working Paper: 95/18; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE C43, E31, F31. KW Economic Aggregates. Exchange Rates. Purchasing Power Parity.

AB International comparison of economic aggregates, expressed in domestic currencies, requires their conversion into a common numeraire currency such as the U.S. dollar or the SDR. Since market (or official) exchange rates are subject to fluctuations which may result in comparisons that do not reflect cross-country differences in real economic activity, it is often recommended that purchasing power parity (PPP) rates be used for conversion instead of exchange rates. It is generally agreed that PPP rates are conceptually appropriate conversion factors. However, their practical implementation raises questions regarding the quality of the PPP indices which are currently available. This paper reviews the data and methodology underlying the construction of PPP indices, with particular emphasis on the PPP-based estimates of GDP used in the Fund's World Economic Outlook and the World Bank's World Development Report, and examines some of the issues associated with the use of such PPP-based estimates of GDP for the Fund's operational purposes (such as quota calculations or determination of SAF or ESAF eligibility).

Waidmann, Timothy

PD February 1995. TI The Illusion of Failure: Trends in the Self-Reported Health of the U.S. Elderly. AU Waidmann, Timothy; Bound, John; Schoenbaum, Michael. AA Waidmann and Schoenbaum: University of Michigan. Bound: University of Michigan and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5017; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE I12, I18. KW Elderly. Health. Self-Report.

AB Data from the National Health Interview Survey and elsewhere showed a trend toward worsening self-reported health among American men and women in middle age and older during the 1970s. This evidence--combined with the significant declines in age-specific mortality observed since the 1960s--led some researchers to suggest that, on average, the health of the older population is declining. We examine recent trends in self-reported health and find that the health declines observed during the 1970s generally reversed during the 1980s. This shift would appear to belie the notion that lower adult mortality necessarily implies worse health. We argue further that the reversals observed during the 1980s also call into question whether trends in self-reported health during the 1970s reflected actual health declines. We suggest that changes in the social and economic forces influencing the options available for responding to health problems, combined with earlier diagnosis of pre-existing conditions, provide a more plausible explanation for these trends--an explanation that is consistent with data from both the 1970s and 1980s.

Wang, Jiang

TI Differential Information and Dynamic Behavior of Stock Trading Volume. AU He, Hua; Wang, Jiang.

Wang, Ruqu

TI Simultaneous Auctions with Synergies and Common Values. AU Rosenthal, Robert W.; Wang, Ruqu.

Warner, Andrew M.

TI Economic Convergence and Economic Policies. AU Sachs, Jeffrey D.; Warner, Andrew M.

Wechsler, Henry

TI Price, Tobacco Control Policies and Smoking Among Young Adults. AU Chaloupka, Frank J.; Wechsler, Henry.

Wei, Shang-Jin

PD February 1995. TI Purchasing Power Disparity During the Floating Rate Period: Exchange Rate Volatility, Trade Barriers and Other Culprits. AU Wei, Shang-Jin; Parsley, David C. AA Wei: Harvard University and National Bureau of Economic Research. Parsley: Vanderbilt University. SR National Bureau of Economic Research Working Paper: 5032; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$5.00. JE F13, F14, F15, F31, F33. KW Exchange Rate Volatility. Floating Exchange Rate. Purchasing Power Parity.

AB Using a panel of 12 tradable sectors in 91 OECD country pairs (14 countries), we study the deviations from the purchasing power parity during the recent floating exchange rate period. (1) We find some evidence that the deviations are positively related to exchange rate volatility as well as to transportation costs. (2) Once we have controlled for these two factors, free trade areas such as the EC and the EFTA do not seem to reduce significantly the deviations from PPP relative to other OECD countries. (3) Although only using the post-1973 data, we are able to find strong evidence of mean reversion towards PPP. The estimated half lives of the deviation from PPP are about four years and three quarters for the non-EMS countries in the sample, and four years and one quarter for the EMS countries. (4) We find evidence of non-linearity in the larger rate of mean reversion: the convergence occurs faster for country pairs with larger initial deviations.

Weymark, John A.

PD June 1994. TI Aggregating Ordinal Probabilities on Finite Sets. AA University of British Columbia. SR University of British Columbia, Department of Economics: 94/19; #997-1873 East Mall, Vancouver, B.C. V6T 1Z1. PG 32. PR not available. JE C43, D71, D81. KW Aggregation. Arrow's Theorem. Ordinal Probability. Social Choice.

AB This article considers the aggregation of individual probability binary relations (ordinal probabilities) into a consensus relation when the set of states is finite. The structure imposed on such an aggregation function by unanimity and independence conditions found in the social choice literature is determined.

Whited, Toni M.

TI The Effect of Uncertainty on Investment: Some Stylized Facts. AU Leahy, John V.; Whited, Toni M.

Wilcox, David W.

TI Do Firms Smooth the Seasonal in Production in a Boom?

Theory and Evidence. AU Cecchetti, Stephen G.; Kashyap, Anil K.; Wilcox, David W.

Wilkinson, F.

TI Contracts, Cooperation and Trust: The Role of the Institutional Framework. AU Deakin, S.; Wilkinson, F.

Wilson, N.

TI Patterns of Employee Participation and Industrial Democracy in UK Employee Share Ownership Plans. AU Pendleton, A.; McDonald, J.; Robinson, A.; Wilson, N.

Witte, Ann Dryden

TI Economic Effects of Quality Regulations in the Daycare Industry. AU Chipty, Tasneem; Witte, Ann Dryden.

Wolfram, Catherine D.

TI Political Constraints on Executive Compensation: Evidence From the Electric Utility Industry. AU Joskow, Paul L.; Rose, Nancy L.; Wolfram, Catherine D.

Wood, Peter

PD December 1995. TI Business Services, the Management of Change and Regional Development in the UK: A Corporate Client Perspective. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP23; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 34. PR \$10.00. JE L20, L14, L86, R11. KW Great Britain. Consultancies. Corporate Change. Management Expertise. Regional Restructuring. AB The expansion of business services in the UK since 1981 is reviewed in relation to general patterns of corporate management control. The results of a survey of strategic expertise exchange between consultancies and managers of major companies are presented. Consultancies are employed most by large, growing, decentralized service corporations, in Southern England, and by those already experienced in change management. The reasons for the employment of different types of consultancy in corporate change are also examined. Clients emphasize their control over consultancies, but are also increasingly dependent on them. Consultancy growth marks a developing social division of 'elite' management labor which as significance for rates of economic restructuring, and the continuing focus of control functions in southern England.

Woodland, Steve

TI Gender Segregation and Male/Female Wage Differences. AU Millward, Neil; Woodland, Steve.

Yang, Chun-Lei

PD November 1994. TI Evolution of Cooperation with a Knowledgeable Mutant. AA Boston University. SR Boston University, Industry Study Program Discussion Paper: 53; Department of Economics, Boston University, 270 Bay State Road, Boston, MA 02215. PG 26. PR no charge. JE B41, C73, D82. KW Prisoners' Dilemma. Cautious Dove. Attracting Sets.

AB How a society manages to solve the problem of cooperation in a prisoners' dilemma situation has been a main theme in economic theory. In the present paper, we develop an

evolutionary model with a structural mutant called knowledgeable (or cautious) dove who is dove in nature but programmed to invest fitness to gain the ability of identifying the hawks and therefore avoiding their exploitation. We show that cooperative behavior can persist within a large class of admissible and compatible dynamics in the long run, either in the form of an asymptotically stable mixed population equilibrium or in the form of a stable cycle. Discussing other conceivable mutants, we argue that this persistence result is robust which also meets our everyday observation regarding both the persistence and the differentiation of the cooperative behavior quite well.

TI The Robustness of a Sophisticated Mutant in an Evolutionary Model of Cooperation. AU Amann, Erwin; Yang, Chun-Lei.

Yitzhaki, Shlomo

TI The Costs of Taxation and the Marginal Cost of Funds. AU Slemrod, Joel; Yitzhaki, Shlomo.

Yuen, Chi-Wa

TI Capital Income Taxation and Long Run Growth: New Perspectives. AU Razin, Assaf; Yuen, Chi-Wa.

Zee, Howell H.

TI Human Capital Accumulation and Public Sector Growth. AU Tanzi, Vito; Zee, Howell H.

Zhuang, Juzhong

TI Impact of Reform on Wage and Employment Determination in Chinese State Enterprises, 1986-1991. AU Hussain, Athar; Zhuang, Juzhong.