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Program Report

International Finance and Macroeconomics

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This report on the activities of the Bureau's program in International Finance and Macroeconomics (IFM) is the first since the original program in International Studies was divided into IFM and International Trade and Investment two years ago. It discusses the program's research in six areas: the international integration of financial markets; the determination of exchange rates; open economy macroeconomics; European monetary integration; the world monetary system in historical perspective; and international aspects of economic reform and growth.

The International Integration of Financial Markets

The increasing integration of financial markets across national boundaries has been a central aspect of the Bureau's international research. We have approached the subject of integration from a number of directions.

One common approach is to examine the ability of international capital flows to eliminate differences in expected rates of return across countries. This process is known as *arbitrage*. In his work, IFM associate Richard C. Marston has continued to test interest rate parity, focusing on Japan–U.S. differentials in one study, and on the pre- and post-1973 periods in another.[1]

In This Issue

This issue of the *Reporter* highlights the Bureau's Program in International Finance and Macroeconomics. Next, Olivier J. Blanchard describes his research on European unemployment. After biographical sketches, news of NBER conferences, and other NBER news and reports, the *Reporter* concludes with short summaries of recent Working Papers.

An alternative approach is to look at the extent to which "representative agents" residing in different countries are able to smooth the variability of consumption over time, by taking advantage of the ability to borrow and lend internationally. This approach was pursued recently by Maurice Obstfeld, and by Andrew K. Rose and Assaf Razin.[2]

Stock markets, too, are becoming increasingly important as a vehicle for international financial integration. Work by Bernard Dumas has considered the implications of various empirical regularities in international equi-

[1] *R. C. Marston, "Determinants of Short-Term Real Interest Differentials Between Japan and the United States," NBER Working Paper No. 4167, September 1992, and "Interest Differentials Under Fixed and Flexible Exchange Rates: The Effects of Capital Controls and Exchange Risk," NBER Working Paper No. 4053, April 1992. Also J. A. Frankel, "Quantifying International Capital Mobility in the 1980s," in* National Saving and Economic Performance, *B. D. Bernheim and J. B. Shoven, eds., Chicago: University of Chicago Press, 1991, pp. 227–260; reprinted in J. A. Frankel,* On Exchange Rates, *Cambridge, MA: MIT Press, 1993.*

[2] *M. Obstfeld, "The Adjustment Mechanism," NBER Reprint No. 1766, January 1993, and in* A Retrospective on the Bretton Woods System, *M. D. Bordo and B. Eichengreen, eds. Chicago: University of Chicago Press, 1993, "Risktaking, Global Diversification, and Growth," NBER Working Paper No. 4093, June 1992, and in* American Economic Review, *forthcoming, and "Are Industrial Country Consumption Risks Globally Diversified?" NBER Working Paper No. 4308, March 1993, and in* Capital Mobility: Smoothing or Volatizing? *L. Leiderman and A. Razin, eds., Cambridge, England: Cambridge University Press, forthcoming; and A. K. Rose and A. Razin, "Business Cycle Volatility and Openness: An Exploratory Cross-Section Analysis," NBER Working Paper No. 4208, November 1992, and in* ibid., *forthcoming.*

ty markets for the choice between two models that describe those markets: the idealized representative agent model, in which all investors are the same; and an international version of the Capital Asset Pricing Model (CAPM).[3]

One of those empirical regularities is the tendency for investors in every country to hold far more domestic than foreign equities, despite the degree of internationalization that has taken place in recent years. Linda L. Tesar and Ingrid M. Werner document this phenomenon, which is known as *home country bias.*[4] To some degree, home country bias is created by the risk of exchange rate fluctuations. But that risk can be hedged easily in the forward exchange market. Kenneth A. Froot recently has shed new light on this strategy for the case of equities, and Richard M. Levich and Lee R. Thomas have done the same for the case of bonds.[5]

Logically, investors should pay a price for hedging, which would show up as a discrepancy between the forward exchange rate and the expected future spot rate. Three recent NBER papers by Bennett T. McCallum, Martin D. D. Evans and Karen K. Lewis, and Richard H. Clarida and Mark P. Taylor, have examined the well-known failure of the forward rate to forecast the future spot rate.[6] In related work, Dumas and Bruno Solnik show how to implement the international CAPM empirically with an allowance for exchange risk and hedging.[7] Tesar and Warner, however, argue that home country bias is too great to be explained by exchange risk.

Another possible explanation for the failure of investors to diversify fully is the existence of remaining restrictions on cross-border investment. René M. Stulz and Walter Wasserfallen explore such restrictions, looking specifically at Switzerland.[8] The ultimate test of inter-

[3] *B. Dumas, "Partial- Versus General-Equilibrium Models of the International Capital Market," NBER Working Paper No. 4446, September 1993.*

[4] *L. L. Tesar and I. M. Werner, "Home Bias and the Globalization of Securities Markets," NBER Working Paper No. 4218, November 1992.*

[5] *K. A. Froot, "Currency Hedging Over Long Horizons," NBER Working Paper No. 4355, May 1993, and R. M. Levich and L. R. Thomas, "Internationally Diversified Bond Portfolios: The Merits of Active Currency Risk Management," NBER Working Paper No. 4340, April 1993.*

[6] *B. T. McCallum, "A Reconsideration of the Uncovered Interest Parity Relationship," NBER Working Paper No. 4113, July 1992; M. D. D. Evans and K. K. Lewis, "Trends in Expected Returns in Currency and Bond Markets," NBER Working Paper No. 4116, July 1992; and R. H. Clarida and M. P. Taylor, "The Term Structure of Forward Exchange Premiums and the Forecastability of Spot Exchange Rates: Correcting the Errors," NBER Working Paper No. 4442, August 1993.*

[7] *B. Dumas and B. Solnik, "The World Price of Foreign Exchange Risk," NBER Working Paper No. 4459, September 1993.*

[8] *R. M. Stulz and W. Wasserfallen, "Foreign Equity Investment Restrictions and Shareholder Wealth Maximization," NBER Working Paper No. 4217, November 1992.*

market frictions is to study prices of shares in the same company, in cases where they are cross-listed, as Alan W. Kleidon and Werner have done.[9]

The Bureau recently held a conference on "The Internationalization of Equity Markets," which examined many of these issues in depth. A summary of the conference appears in the Fall 1993 issue of the *NBER Reporter.* Many of the papers, including an editor's introduction, will appear soon as NBER Working Papers, and the volume should be published next year by the University of Chicago Press.

The Determination of Exchange Rates

Some Bureau economists recently have studied the empirical aspects of exchange rate determination. Martin S. Eichenbaum and Charles Evans focused on those changes in the money supply that can be identified specifically as the result of policy changes, and found a significant (lagged) effect on the exchange rate.[10] Vittorio U. Grilli and Nouriel Roubini extend this approach to include monetary policy in other major industrialized countries.[11] Michael Dooley, Peter Isard, and Mark Taylor found some predictive ability from gold prices, as well.[12]

A number of Bureau researchers also have examined intervention in the foreign exchange markets by central banks, since it became more common with the 1985 Plaza Accord. The conventional wisdom is that—precisely because international financial markets are well developed, highly integrated, and subject to diversification—central bank purchases or sales of foreign exchange are unlikely to be large enough to have much of an effect on the exchange rate, except to the extent that they change money supplies, in which case they are simply a variety of monetary policy. Some years ago, however, Michael L. Mussa—an IFM program member currently on leave at the International Monetary Fund as Director of the Research Department and Economic Counsellor—suggested the *signaling* effect of intervention. This channel requires that intervention is reported to market participants and that they then interpret it as conveying information on future monetary policy. Michael W. Klein offers evidence relevant to the first proposition, and Graciela L. Kaminsky and Lewis offer evidence relevant to the second.[13] Kathryn M. Dominguez and I have found evidence of intervention effects through both the signaling channels and the traditional portfolio channel.[14]

Still, the overall empirical track record for macroeconomic models of exchange rate determination remains poor, despite the isolated examples of success with regard to specific aspects. Recently, Robert P. Flood and Rose have shown that the failure of the macro models transcends particular problems of parameter estimation.[15] Charles M. Engel, too, has found yet another example of the surprising difficulty in forecasting exchange rates better than a "random walk."[16]

Such findings are persuading some IFM members to turn to an entirely different sort of approach: microstructure models of the foreign exchange market that include variables, such as trading volume, bid–ask spreads, and trader heterogeneity, that the macro models omit. Richard K. Lyons, in particular, has made progress with this approach.[17] The Bureau is planning a conference on the new topic of "Foreign Exchange Microstructure" next June, cosponsored with the Bank of Italy and the Centre for Economic Policy Research.

Open Economy Macroeconomics

International financial markets have implications for the real economy. Razin recently reviewed a popular theory of the current account measure of the balance of payments, in which it is determined by optimization on the part of consumers across time.[18] Reuven Glick and

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[9]*A. W. Kleidon and I. M. Werner, "Round-the-Clock Trading: Evidence from U.K. Cross-Listed Securities," NBER Working Paper No. 4410, July 1993.*

[10]*M. S. Eichenbaum and C. Evans, "Some Empirical Evidence on the Effects of Monetary Policy Shocks on Exchange Rates," NBER Working Paper No. 4271, February 1993.*

[11]*V. U. Grilli and N. Roubini, "Liquidity and Exchange Rates: Puzzling Evidence from the G-7 Countries," presented August 1993.*

[12]*M. Dooley, P. Isard, and M. Taylor, "Exchange Rates, Country Preferences, and Gold," NBER Working Paper No. 4183, October 1992.*

[13]*M. W. Klein, "The Accuracy of Reports of Foreign Exchange Intervention," NBER Working Paper No. 4165, September 1992; G. L. Kaminsky and K. K. Lewis, "Does Foreign Exchange Intervention Signal Future Monetary Policy?"' NBER Working Paper No. 4298, March 1993; and K. K. Lewis, "Are Foreign Exchange Intervention and Monetary Policy Related and Does It Really Matter?" NBER Working Paper No. 4377, June 1993.*

[14]*K. M. Dominguez and J. A. Frankel, "Does Foreign Exchange Intervention Matter? Disentangling the Portfolio and Expectation Effects,"* American Economic Review *(December 1993).*

[15]*R. P. Flood and A. K. Rose, "Fixing Exchange Rates: A Virtual Quest for Fundamentals," NBER Working Paper No. 4503, October 1993.*

[16]*C. M. Engel, "Can the Markov Switching Model Forecast Exchange Rates?" NBER Working Paper No. 4210, November 1992.*

[17]*R. K. Lyons, "Optimal Transparency in a Dealership Market with an Application to Foreign Exchange," NBER Working Paper No. 4467, September 1993, and "Tests of Microstructural Hypotheses in the Foreign Exchange Market," NBER Working Paper No. 4471, September 1993.*

[18]*A. Razin, "The Dynamic-Optimizing Approach to the Current Account: Theory and Evidence," NBER Working Paper No. 4334, April 1993.*

Kenneth Rogoff have examined the implications of productivity shocks in this model, while David K. Backus, Patrick J. Kehoe, and Fynn E. Kydland have examined its implications for the business cycle and the terms of trade.[19]

The real exchange rate often is defined as the price of internationally traded goods in terms of the price of goods and services that stay at home, such as ice cream (which is perishable), or haircuts. Rogoff used such a framework to examine the long-run real appreciation of the yen; as the Japanese grow richer, golf-club memberships increase steadily in price relative to automobiles.[20] José de Gregorio and Alberto Giovannini used it to examine inflation, and Philip Brock and Stephen J. Turnovsky to examine the role of capital goods.[21]

Several Bureau researchers have taken a more microeconomic approach to examining exchange rates and prices. Engel has found a striking empirical fact: the consumer price of a good (for example, television sets, relative to bananas) within a country tends to be much less variable than the price of that good relative to similar goods in other major countries.[22] Robert C. Feenstra, Joseph E. Gagnon, and Michael M. Knetter have continued to explore pricing-to-market. This is a phenomenon whereby exporters, for example in Japan, when faced with a change in the exchange rate, pass it through only partially to dollar import prices in the United States.[23]

Another aspect of firms' reactions to exchange rate changes is the decision of where to invest in plant and equipment. Klein and Eric Rosengren test competing hypotheses regarding foreign direct investment into the United States, while Jose Campa and Linda S. Goldberg study investment by U.S. firms, and Joshua Aizenman looks at the effect of exchange rate volatility on both sorts of investment.[24] Froot organized a conference on this subject for the Bureau in May 1992.[25]

European Monetary Integration

Developments in Europe continue to provide ample subject matter for Bureau researchers. David Folkerts-Landau and Peter M. Garber have looked at the role of the ECU (European Currency Unit) and at the design of the planned European Central Bank.[26] Barry Eichengreen has studied what the historical U.S. federation of states can tell Europe about prospects for successful monetary union and the design of a unified central bank.[27] Alessandra Casella has studied some of the theoretical issues.[28]

The collapse of the European Exchange Rate Mechanism in a sense is not surprising, in light of standard international monetary theory. Standard theory says that national monetary independence is incompatible with truly fixed exchange rates and open financial markets. Many Bureau researchers studied the track record of the European Monetary System, and concluded that the possibility of realignment of the exchange rates always has been important, regardless of what policymakers

[19] *R. Glick and K. Rogoff, "Global Versus Country-Specific Productivity Shocks and the Current Account," NBER Working Paper No. 4140, August 1992; D. K. Backus, P. J. Kehoe, and F. E. Kydland, "International Business Cycles: Theory and Evidence," NBER Working Paper No. 4493, October 1993, and "Dynamics of the Trade Balance and the Terms of Trade: The S-Curve," NBER Working Paper No. 4242, December 1992.*

[20] *K. Rogoff, "Traded Goods, Consumption Smoothing, and the Random Walk Behavior of the Real Exchange Rate," NBER Working Paper No. 4119, July 1992, and Bank of Japan,* Monetary and Economic Studies *(November 1992), pp. 1–30.*

[21] *J. de Gregorio, A. Giovannini, and H. C. Wolf, "International Evidence on Tradables and Nontradables Inflation," NBER Working Paper No. 4438, August 1993; and P. Brock and S. J. Turnovsky, "The Dependent Economy Model with Both Traded and Nontraded Capital Goods," NBER Working Paper No. 4500, October 1993.*

[22] *C. M. Engel, "Real Exchange Rates and Relative Prices: An Empirical Investigation," NBER Working Paper No. 4231, December 1992, and* Journal of Monetary Economics *32, pp. 35–50.*

[23] *R. C. Feenstra, J. E. Gagnon, and M. M. Knetter, "Market Share and Exchange Rate Pass-Through in World Automobile Trade," NBER Working Paper No. 4399, July 1993; J. E. Gagnon and M. M. Knetter, "Markup Adjustment and Exchange Rate Fluctuations: Evidence from Panel Data on Automobile Exports," NBER Working Paper No. 4123, July 1992; and M. M. Knetter, "Exchange Rates and Corporate Pricing Strategies," NBER Working Paper No. 4151, August 1992, "Is Price Adjustment Asymmetric? Evaluating the Market Share and Marketing Bottlenecks Hypothesis," NBER Working Paper No. 4170, September 1992, and "Market Share and Exchange Rate Pass-Through in World Automobile Trade," NBER Working Paper No. 4399, July 1993.*

[24] *M. W. Klein and E. Rosengren, "The Real Exchange Rate and Foreign Direct Investment in the United States: Relative Weath Versus Relative Wage Effects," NBER Working Paper No. 4192, October 1992; J. Campa and L. S. Goldberg, "Investment in Manufacturing, Exchange Rates, and External Exposure," NBER Working Paper No. 4378, June 1993; and J. Aizenman, "Exchange Rate Flexibility, Volatility, and Domestic and Foreign Direct Investment," NBER Reprint No. 1787, May 1993.*

[25] *K. A. Froot,* Foreign Direct Investment, *Chicago: University of Chicago Press, 1993.*

[26] *D. Folkerts-Landau and P. M. Garber, "The Private ECU: A Currency Floating on Gossamer Wings," NBER Working Paper No. 4017, March 1992, and "The European Central Bank: A Bank or a Monetary Policy Rule," NBER Working Paper No. 4016, March 1992.*

[27] *For example, B. Eichengreen, "Designing a Central Bank for Europe: A Cautionary Tale from the Early Years of the Federal Reserve System," in* Establishing a Central Bank: Issues in Europe and Lessons from the United States, *M. Canzoneri, V. U. Grilli, and P. R. Masson, eds. Cambridge, England: Cambridge University Press, 1992.*

[28] *A. Casella, "Participation in a Currency Union,"* American Economic Review *(September 1992), pp. 847–863.*

said ahead of time.[29] Nevertheless, the collapse caught most people by surprise, as Rose and Lars E. O. Svensson have documented.[30] Svensson argues that the ability of European countries to bring down their inflation rates by means of exchange rate stabilization had been overestimated.[31]

In the wake of the crisis in which Italy and the United Kingdom were forced to drop out of the Exchange Rate Mechanism, Grilli and Alberto Alesina consider the suggestion that it might be more practical for the European countries to approach monetary union at different speeds.[32,33]

The World Monetary System in Historical Perspective

Several recent NBER projects have sought to place international monetary developments in a broader historical and political context. In 1993, the University of Chicago Press published *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform,* edited by Bordo and Eichengreen. These proceedings of an earlier NBER conference included overviews of the period by both editors, and a look at the origins of the system by Giovannini.[34] Dominguez analyzed the theory behind the creation of the International Monetary Fund and World Bank at the famous 1944 meeting.[35] Alan C. Stockman studied international transmission among industrialized economies during 1944–71, and Sebastian Edwards and Julio A. Santaella considered devaluations among less developed countries .[36]

Some of these same themes, regarding the history of differing international monetary regimes, have been pursued further by these and other authors.[37] For example, McCallum has studied the use of multicountry simulations in evaluating proposed international policy regimes.[38]

A new book, edited by NBER President Martin Feldstein, examines the history and politics behind U.S. economic policymaking during the Reagan administration. It includes, among many other topics, my review of exchange rate policymaking during the decade, as well as recollections on the subject by Paul A. Volcker, C. Fred Bergsten, Mussa, and Feldstein himself.[39]

Some observers believe that the world is breaking into three currency blocs: a yen bloc, a dollar bloc, and a mark bloc. A third just-released NBER book examines the question of whether Japan is forming a yen bloc in East Asia, and related questions concerning the political economy of that region. I, like several of the authors represented, look at data on bilateral trade and financial

[29] *S. M. Collins, "The Expected Timing of EMS Realignments: 1979–83," NBER Working Paper No. 4068, May 1992; L. E. O. Svensson, "Assessing Target Zone Credibility: Mean Reversion and Devaluation Expectations in the EMS, 1979–92," NBER Working Paper No. 3795, July 1991, and* European Economic Review *(May 1993); Z. Chen and A. Giovannini, "Estimating Expected Exchange Rates Under Target Zones," NBER Working Paper No. 3955, January 1992, and "The Determinants of Realignment Expectations Under the EMS: Some Empirical Regularities," NBER Working Paper No. 4291, March 1993; A. Drazen and P. R. Masson, "Credibility of Policies Versus Credibility of Policymakers," NBER Working Paper No. 4448, September 1993; and B. Dumas, L. P. Jennergren, and B. Näslund, "Realignment Risk and Currency Option Pricing in Target Zones," NBER Working Paper No. 4458, September 1993. Many of these papers are modifications of the seminal theory developed by Paul R. Krugman in "Target Zones and Exchange Rate Dynamics," formerly an NBER Working Paper, reprinted in* Currencies and Crises, *Cambridge, MA: MIT Press, 1992.*

[30] *A. K. Rose and L. E. O. Svensson, "European Exchange Rate Credibility Before the Fall," NBER Working Paper No. 4495, October 1993. Also, J. A. Frankel and S. Phillips, "The European Monetary System: Credible at Last?" NBER Working Paper No. 3819, August 1991, and* Oxford Economic Papers *44 (April 1992).*

[31] *L. E. O. Svensson, "Fixed Exchange Rates as a Means to Price Stability: What Have We Learned?" NBER Working Paper No. 4504, October 1993.*

[32] *A. Alesina and V. U. Grilli, "On the Feasibility of a One- or Multi-Speed European Monetary Union," NBER Working Paper No. 4350, April 1993.*

[33] *See also, J. Von Hagen, "Monetary Union, Money Demand, and Money Supply: A Review of the German Monetary Union,"* European Economic Review *(May 1993).*

[34] *M. B. Bordo, "The Bretton Woods International Monetary System: A Historical Overview," NBER Reprint No. 1774, March 1993; B. Eichengreen, "Three Perspectives on the Bretton Woods System," NBER Working Paper No. 4141, August 1992; and A. Giovannini, "Bretton Woods and Its Precursors: Rules Versus Discretion in the History of International Monetary Regimes," in the conference volume.*

[35] *K. M. Dominguez, "The Role of International Organizations in the Bretton Woods System," NBER Working Paper No. 3951, January 1992.*

[36] *A. C. Stockman, "International Transmission Under Bretton Woods," NBER Working Paper No. 4127, July 1992; and S. Edwards and J. A. Santaella, "Devaluation Controversies in the Developing Countries: Lessons from the Bretton Woods Era," NBER Working Paper No. 4047, April 1992.*

[37] *M. B. Bordo, "Gold Standard, Bretton Woods, and Other Monetary Regimes: A Historical Appraisal," NBER Reprint No. 1818, October 1993; B. Eichengreen, "The Endogeneity of Exchange Rate Regimes," NBER Working Paper No. 4361, May 1993; T. Bayoumi and B. Eichengreen, "Macroeconomic Adjustment Under Bretton Woods Float: An Impulse-Response Analysis," NBER Working Paper No. 4169, September 1992.*

[38] *B. T. McCallum, "Specification of Policy Rules and Performance Measures in Multicountry Simulation Studies," NBER Working Paper No. 4233, December 1992.*

[39] *J. A. Frankel, "The Making of Exchange Rate Policy in the 1980s," and M. Feldstein, "The Dollar and the Trade Deficit in the 1980s: A Personal View," NBER Working Paper No. 4325, April 1993, both in* American Economic Policy in the 1980s, *M. Feldstein, ed. Chicago: University of Chicago Press, 1993.*

influences to see if there is indeed a trend toward regional blocs; Froot and David Yoffie look at the implications of foreign direct investment for the trading bloc question; Takatoshi Ito looks at U.S. influence in the region.[40]

With Shang-Jin Wei, I have extended the study of bilateral trade and currency blocs, as have Eichengreen and Douglas A. Irwin.[41] One of these papers was presented at the May 1993 meeting of the InterAmerican Seminar in Macroeconomics (IASE), in Caracas.[42] IASE meets annually in Latin America, and is organized by Sebastian Edwards of the NBER and Edmar Bacha of the Pontifica Universidad Católica in Rio De Janeiro. Joining Edwards as local coorganizer for the sixth meeting this year was Gustavo Marquez of the Instituto de Estudios Superiores de Administracion in Caracas.

International Aspects of Economic Reform and Growth

Economic reform has swept many parts of the world where it would have been thought unlikely. A number of Bureau economists—including Jeffrey D. Sachs and Andrei Shleifer—have participated actively in currency reform and other aspects of the economic transition to a market economy on the part of countries in Eastern Europe and the Former Soviet Union (FSU). *The Transition in Eastern Europe,* edited by Olivier J. Blanchard, Froot, and Sachs—the fruits of a large-scale research project and conference on this subject—will be published in two volumes by the University of Chicago Press in early 1994.

For some topics, datasets are too short and events too fast-breaking to allow serious research. But one topic in which the data already accumulate fast enough to permit meaningful statistics is the foreign exchange market: the data are daily and many countries have not one but several foreign exchange markets. Linda S. Goldberg has studied black markets in Russia, recent currency reforms, and the prospects for a wider ruble zone in the FSU.[43]

When a country experiencing a high inflation rate undertakes monetary stabilization, fixing the exchange rate is considered a useful component of the plan. Edwards has analyzed the advisability of this approach with empirical applications to some highly indexed economies: Chile, Mexico, and Yugoslavia in one paper, and Venezuela in another. He finds that fixing the exchange rate, on its own, will not reduce the degree of inflation inertia.[44] Federico Sturzenegger also examines hyperinflation and indexation, in economies where U.S. dollars circulate side-by-side with the local currency. This phenomenon is known as "currency substitution" and also has been studied recently by Giovannini and Bart Turtelboom.[45] Casella and Eichengreen have studied the precedent of stabilization in Europe in 1947–8.[46]

Rudiger Dornbusch has just published a collection of his papers of the preceding five years on the topic of monetary stabilization and economic reform in developing and transition economies; many of these originally appeared as NBER Working Papers.[47] Michael Bruno's work identified a 20-year cycle of disinflation and recovery, which he considers applicable to many countries in Latin America and elsewhere.[48]

Some countries undertake trade liberalization at the same time as monetary stabilization; Dani Rodrik studies the combination of the two.[49] Edwards studies the connection to economic growth, and the political econo-

[40] *J. A. Frankel, "Is Japan Creating a Yen Bloc in East Asia and the Pacific?"; K. A. Froot and D. Yoffie, "Trading Blocs and the Incentive to Protect: Implications for Japan and East Asia"; and T. Ito, "U.S. Political Pressure and Economic Liberalization in East Asia"; all in* Regionalism and Rivalry: Japan and the United States in Pacific Asia, *J. A. Frankel and M. Kahler, eds. Chicago: University of Chicago Press, 1993.*

[41] *B. Eichengreen and D. A. Irwin, "Trade Blocs, Currency Blocs, and the Disintegration of World Trade in the 1930s," NBER Working Paper No. 4445, August 1993; J. A. Frankel and S.-J. Wei, "Yen Bloc or Dollar Bloc? Exchange Rate Policies of the East Asian Economies," in* Macroeconomic Linkages, *T. Ito and A. B. Krueger, eds., Chicago: University of Chicago Press, forthcoming, and "Trade Blocs and Currency Blocs," NBER Working Paper No. 4335, April 1993.*

[42] *J. A. Frankel, E. Stein, and S.-J. Wei, "Trading Blocs: The Natural, the Unnatural, and the Supernatural," NBER Working Paper No. 4588, December 1993.*

[43] *L. S. Goldberg, "Moscow Black Markets and Official Markets for Foreign Exchange: How Much Flexibility in Flexible Rates?" NBER Working Paper No. 4040, March 1992; and L. S. Goldberg and I. Karimov, "Black Markets for Currency, Hoarding Activity, and Currency Reform," NBER Working Paper No. 4153, August 1992.*

[44] *S. Edwards, "Exchange Rates as Nominal Anchors," NBER Working Paper No. 4246, December 1992, and "Exchange Rates, Inflation, and Disinflation: Latin American Experiences," NBER Working Paper No. 4320, April 1993.*

[45] *F. Sturzenegger, "Hyperinflation with Currency Substitution: Introducing an Indexed Currency," NBER Working Paper No. 4184, October 1992; and A. Giovannini and B. Turtelboom, "Currency Substitution," NBER Working Paper No. 4232, December 1992.*

[46] *A. Casella and B. Eichengreen, "Halting Inflation in Italy and France After World War II," in* Monetary Regimes in Transition, *M. Bordo and F. Capia, eds. Cambridge, England: Cambridge University Press, 1992.*

[47] *R. Dornbusch,* Stabilization, Debt, and Reform, *Englewood Cliffs, NJ: Prentice-Hall, 1993.*

[48] *M. Bruno, "Inflation and Growth in an Integrated Approach," NBER Working Paper No. 4422, August 1993.*

[49] *D. Rodrik, "Trade Liberalization in Disinflation," NBER Working Paper No. 4419, August 1993.*

my of inflation and stabilization.[50] He and Dornbusch also organized a Bureau conference on "Stabilization, Economic Reform, and Growth," in Washington, in December 1992.

IFM members also have been intrigued by the question of why some countries grow faster than others. Alesina, Sule Özler, Roubini, and Phillip Swagel have studied the connection between political instability and growth across countries.[51] Rodrik has shown that a poor country might be able to get a capital-intensive, high-tech sector growing, through a high-wage policy.[52] Clarida; Razin and Chi-Wa Yuen; and Alesina, Grilli, and Gian Maria Milesi-Ferretti all have been studying government regulation of international capital flows and the implications for growth.[53] John F. Helliwell has studied factors including international openness, which may be more important for economic growth in East Asia than among countries that industrialized earlier.[54] The NBER also has an annual conterence series on East Asia, the East Asian Seminar on Economics (EASE), organized by Ito and Anne O. Krueger. This year's meeting, which was held in June, focused on economic growth. Faculty Research Fellows Wei and Alwyn Young were among the authors seeking to explain growth in specific East Asian countries.[55] The preceding meeting of EASE was held in Sapporo, Japan; the proceedings are forthcoming from the University of Chicago Press.

The NBER also cosponsors an annual conference in Japan with the Tokyo Center for Economic Research and the Centre for Economic Policy Research, organized by Ito and Hiroshi Yoshikawa. The theme of the January 1992 meeting was "Growth and Development: New Theory and Evidence." The proceedings were published in the December 1992 issue of the *Journal of the Japanese and International Economies.*

A number of the NBER's international researchers are currently on loan to governments and institutions. Edwards is now at the World Bank, where he is Chief Economist for Latin America. Bruno is Chief Economist of the World Bank.

IFM associate Robert E. Cumby is also on leave in Washington; he joins several other Bureau members at the President's Council of Economic Advisers. Two other IFM ssociates, Giovannini and Francesco Giavazzi, are currently on leave in the Italian Treasury, dealing with issues of fiscal and monetary stabilization.

The Summer Institute

Each year since 1979, the international studies program has held an intensive series of workshops and seminars in Cambridge as part of the NBER's Summer Institute. With the international studies program now divided in two, the IFM group has decided to meet in mid-July, to facilitate interaction with Monetary Economics, Asset Pricing, and Economic Fluctuations. The Summer Institute provides an especially important opportunity for the IFM group to gather, because its members are quite dispersed geographically. In 1992, I organized the meeting with the help of Froot. In 1993, Obstfeld and Rogoff were the organizers.

Research Summary

European Unemployment

Olivier J. Blanchard

The unemployment rate in the EC increased sharply in the early 1980s, rising from 5.7 percent in 1979 to 10.9 percent in 1985. Why it increased is not mysterious: it was the result of a general shift toward anti-inflation policies, adopted first in England and then a couple of years later on the Continent. Indeed, the increase in unemployment was associated with a large decrease in

[50] *S. Edwards, "Trade Policy, Exchange Rates, and Growth," NBER Working Paper No. 4511, October 1993, and "The Political Economy of Inflation and Stabilization in Developing Countries," NBER Working Paper No. 4319, April 1993.*

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