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In This Issue

Research Summaries

Deflation and the Liquidity Trap

Gauti Eggertsson

During the past decade, the fall in worldwide inflation has raised interest in the risks associated with negative inflation, or deflation. What gave the issue an element of urgency was the long-lasting recession in Japan, which was accompanied by mild but persistent deflation and short-term nominal interest rates close to zero. In such an environment, cutting short-term interest rates, the usual remedy for weak demand, was just not an option. This survey reviews IMF research on how to counter weak demand at low interest rates.

The first response of many economists to Japanese deflation was to suggest that the Bank of Japan simply print more money. It was believed that such a policy, sooner or later, would reverse the deflationary trend and stimulate demand. Over the years, however, while the Bank of Japan was printing money at an unprecedented rate, short-term interest rates were getting closer to zero, and the effect of money supply increases was modest at best. Since 1997, the Bank of Japan has more than doubled the economy's monetary base.

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Growth, Policies, Institutions, and Poverty

Poonam Gupta

One of the Millennium Development Goals set by the United Nations is to reduce extreme poverty by half by 2015. How can such a goal be reached? Can growth by itself be pro-poor, or does poverty reduction depend on macroeconomic policies? How effective are policies directly targeted at the poorer segments of the population? Is the quality of institutions important in determining poverty reduction strategies? This article summarizes recent IMF research on these critical issues.

Kraay (2004), using household survey data for a sample of 80 developing countries, looks at the relationship between economic growth and poverty reduction. He finds that most of the variation in poverty can be explained by average income growth, and argues that growth is indeed pro-poor. Instead of looking at income-based measures of poverty reduction, Moser and Ichida (2001) rely on human development indicators of poverty, such as life expectancy, infant mortality, and primary school enrollment. Using a panel data set for 46 countries in sub-Saharan Africa, they also find a strong and robust relationship between growth and poverty reduction.

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Deflation and the Liquidity Trap *(continued from page 1)*

Considerable research at the IMF has focused on how such a doubling of the monetary base could have had no effect on prices. The answer dates back to Keynes: Japan has found itself in a liquidity trap.

Eggertsson and Woodford (2003, 2004) show that a liquidity trap arises when temporary shocks make the zero interest rate bound binding. When this is the case, government bonds and money become perfect substitutes, and "quantitative easing" (the injection of liquidity through open market operations in government bonds), if it leaves expectations unchanged, has no real effects and only makes individuals substitute money for bonds in their asset portfolios. Monetary policy can still be effective, but only if it is able to change expectations about future interest rates and inflation.

Eggertsson (2003) shows that if the central bank is unable to commit to future policies, and minimizes a standard loss function, quantitative easing has no effect on expectations. Indeed, the public expects that any increase in the monetary base will be contracted as soon as the zero bound is no longer binding. This credibility problem, and the associated inability of a central bank to increase inflation expectations, produces a "deflation bias." The paper suggests several policies to solve this credibility problem, such as printing money and buying foreign exchange, and engaging in deficit spending. These policies credibly increase inflation expectations because they give the government an incentive to inflate in the future.

Jeanne and Svensson (2004) explore the same credibility problem but assume that the central bank is an independent identity. They find that printing money and buying foreign exchange can also solve the credibility problem as long as the central bank seeks to avoid capital losses. In this case, a successful intervention in the foreign exchange market, along with the appropriate manipulation of the central bank's balance sheet, leads to a depreciation and a corresponding increase in inflation expectations.

Ramaswamy and Samiei (2003), from an empirical standpoint, look at the effectiveness of foreign interventions in Japan between 1995 and 1999, when the interest rate was close to zero. During this period, on several occasions, the Japanese government tried to intervene in the foreign exchange market in response to deflationary risks. The authors find evidence that exchange rate interventions were successful over this period to depreciate the yen (and to strengthen it when the authorities wished so).

The classic solution to the credibility problems discussed above is a rule-based policy, à la Kydland and Prescott (1977). In this spirit, Hunt and Laxton (2003) support the introduction of a price-level-targeting rule to stabilize the economy when the zero bound is binding. They find that such a rule has useful properties in a liquidity trap. Indeed, by allowing a central bank to credibly commit to a price-level target, any deflation is going to be associated with expectations of future inflation. Since higher inflation expectations are the way to reduce the real interest rate, the rule will be effective in boosting demand when the zero bound is binding.

Hunt and Laxton (2003) also explore the effectiveness of expansionary fiscal policy in periods in which the zero bound is binding and find that such a policy can largely eliminate output losses. Eggertsson and Woodford (forthcoming) come to a similar conclusion but consider the use of distortionary taxes as a policy instrument instead. On the empirical front, Kalra (2003) studies the effectiveness of fiscal policy in Japan from 1960 to 2000. Using a structural vector auto regression framework, he finds that short-term fiscal multipliers have remained relatively stable over the past years although they have declined over longer horizons.

The problem of excessive deflation has not been isolated to Japan. During the past several years, Hong Kong SAR has experienced deflation as well. N'Diaye (2003) and Schellekens (2003) study the experience of Hong Kong SAR with deflation. Both authors find that the main culprits have been cyclical shocks amplified by balance sheet and wealth effects. N'Diaye (2003) uses a structural vector error correction modeling approach, while Schellekens (2003) looks at the price dynamics between Hong Kong SAR and Shenzhen, a neighboring city in mainland China. Kumar and others (2003) study the danger of deflation throughout the world, with a comprehensive review of earlier work and several new findings. They find that the danger of deflation in the United States is fairly small, but it is higher in countries such as Japan, Hong Kong SAR, Taiwan, and Germany. Finally, Baig (2003) looks at deflationary episodes in Sweden and the United States in the 1930s and, from such a historical perspective, argues for more aggressive and sustained quantitative easing than what has so far been undertaken by the Bank of Japan.

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Visiting Scholars, July–September 2004

Christopher Adam; University of Oxford, U.K.; 7/19/04–7/23/04

Godwin Akpokodje; Nigerian Institute of Social and Economic Research, Nigeria; 7/26/04–9/3/04

Olivier Blanchard; Massachusetts Institute of Technology; 9/17/04–9/17/04

Michael Bordo; Rutgers University; 8/19/04–8/25/04

Edward Buffie; Indiana University; 7/19/04–7/23/04

Adeola Carim; Nigerian Institute of Social and Economic Research, Nigeria; 8/31/04–10/8/04

James Cassing; University of Pittsburgh; 6/23/04–7/2/04

Jean Chateau; CEPII, France; 6/28/04–7/9/04

Ehsan Choudhri; Carleton University, Canada; 7/12/04–7/16/04

Charles Engel; University of Wisconsin; 8/16/04–9/3/04

Harold James; Princeton University; 8/16/04–8/23/04

Jiandong Ju; University of Oklahoma; 8/9/04–8/13/04

Philip Lane; Trinity College Dublin, Ireland; 9/20/04–9/24/04

Pablo Lopez-Murphy; University of California at Los Angeles; 9/7/04–9/17/04

Allechi M’Bet; Centre Ivoirien de Recherche Economique et Sociale, Côte d’Ivoire; 7/29/04–9/8/04

Warwick McKibbin; Australian National University; 6/28/04–7/5/04

Francis Mwega; University of Nairobi, Kenya; 9/7/04–10/15/04

Kanda Naknoi; Stanford University; 8/2/04–8/11/04

Rose Ngugi; University of Nairobi, Kenya; 6/21/04–7/30/04

Stephen O’Connell; Swarthmore College; 7/19/04–7/23/04

Francis Nathan Okurut; Makerere University, Uganda; 9/14/04–10/22/04

Carmen Reinhart; University of Maryland; 5/3/04–9/3/04

Alvaro Riascos; Banco de la Republica de Colombia; 8/9/04–8/27/04

Krislert Samphantharak; University of California, San Diego; 8/2/04–8/6/04

Nathan Sussman; Hebrew University, Israel; 6/21/04–7/2/04

Thierry Verdier; Delta, France; 7/6/04–7/16/04

Kenji Wada; Keio University, Japan; 7/26/04–7/30/04

IMF Staff Papers

Growth, Policies, Institutions, and Poverty *(continued from page 1)*

Linking poverty reduction to macroeconomic performance, Epaulard (2003) looks at how poverty has been affected in a number of boom and bust episodes in developing and transition economies. She shows that the elasticity of poverty reduction to growth (i.e., by how much a percentage increase in growth will translate into a percentage increase in poverty reduction) depends on the initial levels of both per capita income and income inequality. The higher the average income level, the higher the elasticity; and the higher the inequality, the lower the elasticity. The paper also finds the poverty response to growth to be symmetric across positive and negative macroeconomic shocks. Ghura, Leite, and Tsangarides (2002) also show that though growth is important for poverty reduction, the income of the poor does not rise one to one with per capita income. In addition to growth, macroeconomic policies, especially those aiming at lowering inflation, deepening the financial sector, and raising educational achievements, are important in reducing poverty.

The link between macroeconomic policies and poverty is further explored by Cashin and others (2001). Looking at the changes in the United Nations Development Program's Human Development Index (HDI) between 1975 and 1998 in a large sample of developing countries, the paper shows that a macroeconomic environment leading to low and stable inflation, low budget deficits, low levels of external debt, openness to trade, rule of law, and higher education levels seems to be associated with greater improvements in HDI. However, the paper could not conclusively relate improvements in HDI with changes in specific macroeconomic policies. Berg and Krueger (2003) survey the literature that links trade policies to growth and poverty. They show that an increase in openness is an important contributor to growth, and that trade-led growth does not systematically worsen the income distribution. Combining these two propositions, they argue that trade openness would likely reduce poverty through its impact on growth.

Looking at the link between financial development and poverty alleviation, Holden and Prokopenko (2001) conclude that while financial development can contribute to poverty alleviation through the promotion of growth, two necessary conditions for the development of the financial sector are macroeconomic stability and strong institutions, particularly those concerned with the guarantee of property rights. Looking at the role of institutions, and indexing the quality of institutions through an indicator of corruption, Gupta, Davoodi, and Alonso-Terme (1998), using cross-country regressions, show that corruption increases income inequality and poverty through lower growth, lower social spending, poor targeting of social programs, biased tax systems, and increased inequality. One implication of the analysis is that policies that reduce corruption will also lower income inequality and poverty.

How is poverty affected during financial crises? Using cross-country and household survey data for Mexico during the 1994 crisis, Baldacci, De Mello, and Inchauste (2002) show that financial crises in developing and transition economies are associated with an increase in poverty and income inequality. They also show that, as expected, the provision of targeted safety nets and the protection of specific social programs from fiscal retrenchment can be pro-poor during financial crises. Loko, Nallori, and Kalonji (2003) analyze the link between external indebtedness and poverty in low-income countries. They show that the external debt has a small but significant effect on human development indicators, such as life expectancy, infant mortality, and primary school enrollment. To explain this finding, they suggest that high debt servicing crowds out government's social spending, and is therefore associated with a worse outcome in term of HDIs.

Shedding light on the debate on poverty numbers in India, Aziz (2002) looks at state-level data for India in 1978–97 and shows that, while overall poverty declined, it increased somewhat during the early years of the 1990s reform period. He also shows that the states with higher growth and lower inflation have experienced faster reduction in poverty. In another case study, Thomas and Canagarajah (2002) look at the dynamics of poverty in Nigeria between 1985 and 1992 and examine the impact of macroeconomic policies on economic growth and welfare. Their main finding is that the decline in poverty during this period can be attributed mostly to the growth of the economy, rather than to changes in the income distribution.

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IMF Study on Chile

Chile: Institutions and Policies Underpinning Stability and Growth

By Eliot Kalter, Steven Phillips, Marco A. Espinosa-Vega, Rodolfo Luzio, Mauricio Villafuerte, and Manmohan Singh

Chile's steady implementation of sound—and at times innovative—policies has led to unprecedented growth and stability over the last 20 years. Further, over the last several years, the authorities have introduced a number of policy refinements including a free floating exchange rate, an inflation-targeting framework, and a fiscal policy aimed at holding constant the government's structural balance. In addition, Chile is known for its aggressive trade liberalization efforts. This paper takes stock of Chile's economic trajectory in the last two decades by critically reviewing the country's accomplishments and challenges.

Section I provides an overview. Section II reviews the role of institutional factors in allowing the country to adopt and sustain sound policies over two decades. Section III summarizes key aspects of Chile's current macropolicy framework. Section IV reviews the development of domestic capital markets and corporate financing by drawing on the role of macroeconomic policies and structural reforms as driving factors in the development of local securities markets. Section V focuses on recent developments in the Chilean banking system, highlighting the sources of its stability and dependability as a source of credit to the private sector. Section VI provides a risk assessment of Chile's external position, integrating information on the country's international investment position and the structure of its external debt. Section VII examines the financial position of the Chilean public sector, focusing on those aspects of the public sector balance sheet that have helped prevent crises in the country. Section VIII discusses the role of exports in growth of the Chilean economy, especially that of the natural resources–based exports in helping develop new comparative advantages and thus contributing to sustained economic growth.

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Area Study

Central European Countries

Nada Choueiri

Eight central European countries—the Czech Republic, Hungary, Poland, the Slovak Republic, Slovenia, Estonia, Latvia, and Lithuania—became members of the European Union (EU) on May 1, 2004. This milestone underscored the end of the transition period, but was also a wake-up call for the substantial effort these countries must still undertake to meet the requirements for euro adoption. This article summarizes recent IMF cross-country research on the first five countries in the above list (CEC5) that helps understand their current economic environment and the challenges they face as they strive for membership in the euro area.

A decade of transition has transformed the economies of the CEC5 into a market-based model. As Weder (2001) points out, their institutions are now similar to those of Western European countries. In the late 1990s, the CEC5 increasingly aligned their financial sector legislation with that of the EU; Wagner and Iakova (2001) describe how the countries reinforced their banking systems—which provide the bulk of financial services—through stronger supervision, greater transparency, and foreign participation. According to Morales (2001), the Polish and Czech currencies now seem entirely integrated into global currency markets. Chan-Lau and Morales (2003) even argue that currency derivative markets in both countries seem more efficient than in mature markets.

However, deeper and more liberalized financial markets could yield greater volatility and spillovers across the CEC5 and require tight supervision. According to Kóbor and Székely (2004), the correlation between the Hungarian and Polish currency markets increases in periods of relatively high volatility, and the same holds for the Czech and Slovak Republics. Nevertheless, Bulíř (2004) argues that short-run exchange rate volatility need not raise concerns in liberalized markets as exchange rate deviations from equilibrium could attract stabilizing capital flows. On the other hand, according to Cottarelli, Dell'Ariccia, and Vladkova-Hollar (2003), the boom in bank credit to the private sector that coincided with market liberalization could be worrisome. This phenomenon, which should persist with ongoing financial deepening, requires further strengthening of regulations and supervision.

The CEC5 should further consolidate their economic transformation. Allan and Parry (2003) indicate that fiscal transparency must be enhanced and the legal and business environment must be improved to support growth. Perhaps most important, policies are needed to sharply reduce unemployment. Schiff and others (forthcoming) report that enterprise restructuring led to a surge in unemployment. Employment failed to pick up thereafter as productivity was largely driven by growth and as reforms stumbled against labor market obstacles. However, high unemployment, although entrenched, could be reduced through appropriate labor market policies and institutional reforms—including by avoiding high minimum wages and labor tax wedges, improving the business climate to facilitate the development of small and medium-sized enterprises, and encouraging labor mobility.

As new EU members, the CEC5 are committed to eventually adopting the euro, a step that could potentially yield significant long-term gains. Schadler and others (forthcoming) underscore that the gains from joining a currency union in terms of trade and growth opportunities appear certain and could be substantial, while the costs of relinquishing independent monetary policy seem small. Moreover, according to Borghijs and Kuijs (2004), exchange rate variability has been more destabilizing by propagating monetary shocks than stabilizing by absorbing real shocks—additional evidence of the benefits from euro adoption. In addition, Lipschitz, Lane, and Mourmouras (2002) demonstrate that exchange rate flexibility need not protect monetary policy independence when capital markets are open and inflation is targeted. The costs of losing the monetary policy tool are directly related to the degree of synchronization of supply and demand shocks (and associated dynamics) of the entering countries with the euro area members. Frenkel and Nickel (2002) find that while there are differences in this regard between the CEC5 and the euro area, the differences are less important between individual countries—Poland, Hungary, and Slovenia—and some euro area countries.

Notwithstanding these benefits, euro adoption could be delayed by obstacles to the fulfillment of the Maastricht criteria or to successful membership in the Exchange Rate Mechanism (ERM2), both preconditions for euro adoption. Setbacks could come from the lack of strong fiscal adjustment plans and disinflation policies to reduce fiscal deficits and inflation to Maastricht levels. Feldman and others (2002) and Schadler and others (forthcoming) suggest that the CEC5 will need to exert a substantial fiscal effort—primarily expenditure reducing—to curtail large budgetary imbalances. Structural factors could also jeopardize disinflation. De Broek and Sløk (2001), Feldman and others (2002), and Schadler and others (forthcoming) argue that differing productivity growth between traded and nontraded sectors could raise average inflation by about 1 or 2 percentage points annually. Čihák and Holub (2001) show that the convergence of the price structure in the CEC5 to that of the EU countries will create inflation. Also, if a country's real exchange rate is far from equilibrium, this would endanger participation in ERM2. Bulíř and Šmídková (forthcoming) note that the Czech, Hungarian, and Polish currencies were significantly overvalued in 2003; hence, converging toward equilibrium could compromise the adherence of these countries' exchange rates to ERM2 rules. Large and volatile capital flows could also undermine attempts to meet the exchange rate criterion.

IMF research has also helped identify policies that maximize the chances of a successful membership in ERM2 and the euro area. Feldman and others (2002) note that completing price liberalization before joining ERM2 would minimize subsequent inflation shocks, and flexible labor markets would support stabilization and growth objectives given nominal rigidities imposed by ERM2 and euro adoption. Schadler and others (forthcoming) advise countries to enter ERM2 only when the Maastricht criteria are within reach and to limit their stay within that system to the required two-year period. These authors indicate that, while a number of exchange rate regimes would be compatible with ERM2, more rigid systems would be more demanding on other policies to support a country's goals under ERM2 and euro adoption. They conclude that successful participation in Europe's Economic and Monetary Union would be ensured if fiscal deficits are well below the 3 percent Maastricht benchmark; fiscal subsidies and transfers are low; wages and prices are flexible; economic activity shows strong linkages across the Union's member countries; financial market supervision is strong; and competitiveness, as implied by the central parity set within ERM2, is adequate.

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IMF Trade Research Conference

Trade Conference Addresses Challenges Facing Developing Countries

Stephen Tokarick

Developing countries face the following quandary: how should they structure their trade policies to maximize the benefits of expanding trade? Should they join a regional trade arrangement or rely on multilateral trade agreements? Have preference schemes helped or hurt them? How would tariff reductions affect their public finances? Would they really benefit from the liberalization of agricultural trade? These are the intriguing questions that were addressed at the Trade Research Conference, sponsored by the Trade Unit in the Research Department of the IMF, on October 19, 2004.

One major theme that emerged at the conference is that preferential trade policies—whether in the form of regional trade agreements or tariff reductions on exports from developing countries—are not equivalent to trade liberalization. Both John Romalis and Çağlar Özden presented the view that preferential policies are discriminatory because they are not extended to all countries. They also pointed out that the welfare effects of regional agreements are ambiguous and depend on the relative size of the trade-diversion and trade-creation effects. With respect to preferential access schemes for exports from low-income countries, they argued that such schemes might actually reduce recipient countries' incentives to reduce their own trade barriers. In any case, since the schemes often come with many strings attached, they are only seldom fully used, and thus it is unlikely that they benefit recipient countries as much as they could.

It was underscored in the discussion that regional trade agreements are a fact of life: they are here to stay. So, the focus should be on trying to lessen their negative effects. Several participants thought that this could be done by encouraging countries that do enter into a regional agreement to extend benefits to nonmembers over time. The IMF could play a role in this process through the surveillance function.

If developing countries decide to embark on trade liberalization, the question remains of how they will cope with adjustment issues, such as the potential loss of tax revenue from tariff reductions. Michael Keen noted that this is a critical issue for many countries, especially in Africa. He pointed out that, at least in theory, it is possible to design a system of taxation that, by substituting indirect taxes for trade taxes, would lead to both higher real income and tax revenue. In his preliminary empirical work, Keen looked at whether countries that reduced their tariffs recouped revenue from other sources. In general, he found less than full offset: only about 30–50 percent of revenue was recouped.

Another key issue for developing countries is how they will cope with the liberalization of trade in agricultural products. Some studies suggest that developing countries would reap large gains from liberalization, but this may not be true. Using a general equilibrium model of world trade, Stephen Tokarick argued that the main beneficiaries of agricultural liberalization are not the developing countries but the rich ones. Furthermore, he showed that while in aggregate developing countries would gain from such liberalization, there may be individual countries that lose—mainly the net-agricultural-importing countries. However, the issue is complicated by the possibility that the net-importing countries could become net exporters if world prices rise sufficiently in the aftermath of liberalization.

Overall, the conference made the point that preferential trade policies may not be "liberalizing" after all—and thus they may actually hurt the countries that adopt them. The program and selected papers can be found at *http://www.imf.org/external/np/res/seminars/2004/101904.htm.*

IMF Working Papers

Working Paper No. 04/142
Choosing the Correct Currency Anchor for a Small Economy: The Case of Nepal
Yelten, Sibel

Working Paper No. 04/143
Fiscal Adjustment in EU Countries: A Balance Sheet Approach
Milesi-Ferretti, Gian M.; Moriyama, Kenji

Working Paper No. 04/144
Regional Economic Disparities in Australia
Ramakrishnan, Uma; Cerisola, Martin D.

Working Paper No. 04/145
A Re-examination of Korea's Trade Flows: What Has Changed and What Explains These Changes?
Cheng, Kevin C.

Working Paper No. 04/146
Ghostbusting: Which Output Gap Measure Really Matters?
Billmeier, Andreas

Working Paper No. 04/147
Structural Factors Affecting Exchange Rate Volatility: A Cross-Section Study
Canales Kriljenko, Jorge I.; Habermeier, Karl F.

Working Paper No. 04/148
Country Insurance
Cordella, Tito; Levy Yeyati, Eduardo

Working Paper No. 04/149
Bank Consolidation and Performance: The Argentine Experience
Basu, Ritu; Druck, Pablo; Marston, David; Susmel, Raul

Working Paper No. 04/150
Identifying Threshold Effects in Credit Risk Stress Testing
Gasha, Giancarlo; Morales, Armando

Working Paper No. 04/151
Analysis of Recent Growth in Low-Income CIS Countries
Loukoianova, Elena; Unigovskaya, Anna

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What Are the Potential Economic Benefits of Enlarging the Gulf Cooperation Council?
Chami, Saade; Elekdag, Selim; Tchakarov, Ivan

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Fifth IMF Jacques Polak Annual Research Conference

Policies, Institutions, and Instability

> If the IMF is to do its work well, it must keep apprised of the best ideas everywhere, and get to know the people behind the ideas. We also, from our side, need to share, particularly our new ideas on policy issues, with external researchers and policymakers.
>
> *Jacques Polak*, Opening Remarks, Fifth Annual Research Conference 2004

The Fifth Annual Research Conference was held at the IMF headquarters in Washington on November 4–5, 2004. From this year onward, this annual event has been named after Jacques Polak, Director of the IMF Research Department from 1958 to 1966.

The conference was inaugurated by Agustín Carstens, IMF Deputy Managing Director, followed by brief remarks by Jacques Polak. The first session, dedicated to finance issues, included the following presentations: "Systemic Risk and Growth," by Romain Rancière, Aaron Tornell, and Frank Westermann, discussed by Carmen Reinhart; and "Financial Liberalization and Consumption Volatility in Developing Countries," by Andrei Levchenko, discussed by Fernando Alvarez. The second session, "Debt: Micro," included presentations by Hoyt Bleakley and Kevin Cowan on "Maturity Mismatch and Financial Crises: Evidence from Emerging Market Corporations"; and by Fernando Broner, Guido Lorenzoni, and Sergio Schmukler on "Why Do Emerging Economies Borrow Short Term?" These papers were discussed by Peter Garber and Olivier Jeanne, respectively.

The third session was dedicated to globalization and included presentations by Irina Tytell and Shang-Jin Wei on "Does Financial Globalization Induce Better Macroeconomic Policies?" discussed by Hélène Rey; and by Rachel Glennerster and Yongseok Shin on "Is Transparency Good for You?" discussed by Campbell Harvey. The last session of the day was dedicated to the ever-important topic of banking. The first presentation during this session was on "The Real Effect of Banking Crises," by Giovanni Dell'Ariccia, Enrica Detragiache, and Raghuram Rajan, discussed by Philip Strahan; the second was on "A Political Agency Theory of Central Bank Independence," by Gauti Eggertsson and Eric Le Borgne, discussed by Allan Drazen. The day closed with a reception and dinner.

The last day of the conference began with a session on growth, which covered papers by Dani Rodrik and Arvind Subramanian on "From 'Hindu Growth' to Productivity Surge: The Mystery of the Indian Growth Transition," discussed by T.N. Srinivasan; and by Reza Baqir, Rodney Ramcharan, and Ratna Sahay on "IMF Program Design and Growth: Is Optimism Deliberate? Is It Defensible?" discussed by Michael A. Clemens. The final session was dedicated to exchange rates and covered papers by Parag Pathak and Jean Tirole on "Pegs, Risk Management, and Financial Crises," discussed by Roberto Chang; and by Tamim Bayoumi, Michael Kumhof, Douglas Laxton, and Kanda Naknoi on "Exchange Rate Regimes, International Linkages, and the Macroeconomic Performance of the New Member States," discussed by Christopher Erceg.

The day ended with the Fifth Mundell-Fleming Lecture; on this occasion it was delivered by Jeffrey Frankel on "Contractionary Currency Crashes in Developing Countries."

The organizing committee for the Fifth IMF Jacques Polak Annual Research Conference was integrated by Robert Flood (Chair), Catherine Pattillo, Simon Johnson, and Carlos Végh. Copies of the papers are available at *http://www.imf.org/external/pubs/ft/staffp/2004/00-00/arc.htm*. Videotapes of the entire conference are available from Rosalind Oliver (e-mail: roliver@imf.org).