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Editor's Note

This issue marks the departure of Tito Cordella from his service as Editor, and of David Einhorn as Assistant Editor. With their energy and dedication, they have contributed to the success of the *Bulletin*. As the new Editor, I am looking forward to maintaining continuity and building on my predecessors' excellent work. I welcome any suggestions or other feedback from readers (which may be e-mailed to resbulletin@imf.org).

—Antonio Spilimbergo

Research Summaries

Housing Prices and Macroeconomics

Marco Terrones

Housing prices in industrial countries have increased unusually rapidly in recent years. In some cases—notably Australia, Ireland, the Netherlands, Spain, Sweden, and the United Kingdom—housing prices adjusted for inflation have risen by 60 percent or more since 1997, increases that are difficult to explain in terms of economic fundamentals alone. In addition, a number of housing indicators—including the housing affordability ratio, and the ratios of housing prices to rent and mortgage debt—have reached record high levels in several countries. This has led many observers to suggest that a housing price correction is imminent, with potentially adverse effects on the economy. What is the relationship between housing prices and the economy on the whole? What are the implications of a bust in the price of housing? To address these questions, this article surveys recent IMF research on housing prices and their interlinkages with the economy in industrial countries.

By affecting households' net wealth and capacity to borrow and spend, large housing price movements can influence aggregate demand and output.

(continued on page 2)

Workers' Remittances

Nikola Spatafora

Workers' remittances, which broadly include all unrequited transfers from migrant workers to family or friends in their country of origin, have grown steadily over the past 30 years. In 2005, recorded remittances to developing countries are likely to reach $160 billion. Until very recently, there was remarkably little awareness of the magnitude of remittance flows; as a consequence, research interest was also extremely limited. Three key questions currently stand out. First, how large are unrecorded remittances, and how can their measurement and regulation be improved? Second, what are the determinants of remittances, and in particular what are the key obstacles to further increases in such flows? Third, do remittances have an important development impact, and how can it be maximized? This article provides an overview of recent IMF research on these issues.

Workers' remittances to developing countries have been growing rapidly, and their rising trend is likely to persist as populations continue to age, and as pressures mount for migration from developing to advanced economies. For many developing economies, remittances constitute the single largest source of foreign exchange, exceeding export revenues, foreign direct investment, and other private capital inflows. Moreover, remittances have proved

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Housing Prices and Macroeconomics

(continued from page 1)

Edison (2002) and Bayoumi and Edison (2003) report that household consumption in industrial countries is directly related to housing wealth. For every dollar increase in housing wealth in those countries, consumption increases by 5 cents. In addition, changes in housing wealth have a higher effect on consumption in countries with a market-based financial system than those with a bank-based financial system, and the wealth effects on consumption have increased over time. Ludwig and Sløk (2002) found broadly similar results. The housing price effects on consumption are also a function of the age of the population and home ownership rates. Campbell and Cocco (2004), using micro data for the United Kingdom, find that as the population becomes older and home ownership more concentrated in the older age group, changes in housing prices have a stronger effect on consumption. Movements in housing prices also affect residential investment by altering the ratio between house prices and costs (Tobin's *q*). The strength of this relation, however, has been difficult to assess (Girouard and Blöndal, 2001). Faulkner-MacDonagh and Mühleisen (2004) argue that recent strong consumer spending in the United States in part reflects increases in (housing) wealth and mortgage refinancing.

Similarly, housing prices can be affected by changes in macroeconomic conditions (i.e., disposable income) and financial conditions (i.e., credit and interest rates). There is evidence that the growth rate of housing prices in industrial countries is positively affected by real income growth and credit availability and negatively affected by interest rates (Milesi-Ferretti and Kodres, 2004; and Terrones, 2004). In addition, housing prices show a long-run reversion to fundamentals, as prices tend to fall when they are out of line with income levels. Housing prices also depend on the structure of mortgage markets and other structural factors—evidence suggests that countries with predominantly adjustable-rate mortgage contracts have had greater housing price growth and volatility than countries with predominantly fixed-rate mortgages (Kodres, 2004). Innovations in mortgage markets can also affect house prices—Schnure (2005) reports evidence suggesting that the process of securitization of the U.S. mortgage market may have contributed to dampening of the country's house price fluctuations.

Reflecting these interlinkages, housing prices in industrial countries are procyclical—rising in a boom and falling in a recession—and, more surprisingly, synchronized across countries, as these prices tend to move in tandem. Analyses suggest that the synchronization of housing prices reflects the key role played by global factors, primarily through interest rates and global economic activity (Terrones and Otrok, 2004; and Otrok and Terrones, forthcoming). Indeed, global developments explain a large share of housing price movements. Across individual countries, the effects of global factors on these prices vary significantly and are especially important in the United Kingdom and the United States. Not surprisingly, in the countries where housing prices are less synchronized, country-specific forces affecting housing market developments play a significant role. This seems particularly true in Australia, Italy, New Zealand, and Switzerland. An important implication of these findings is that, just as the current upswing in housing prices has largely been a global phenomenon, any downturn is also likely to be highly synchronized across countries, with corresponding implications for the world economy.

> ***"Just as the current upswing in housing prices has largely been a global phenomenon, any downturn is also likely to be highly synchronized across countries, with corresponding implications for the world economy."***

But what are economic implications of a bust in housing prices? Helbling and Terrones (2003a and b) and Helbling (2004) have studied booms and busts in residential housing in industrial countries. To qualify as a bust, a house price contraction had to exceed 14 percent; and using this measure, there were 20 housing price busts between the first quarter of 1971 and the third quarter of 2002. Analysis of these events suggests that price busts were associated with substantial negative output gaps, as output growth decreased noticeably. As a result, the output level three years after the beginning of a bust in housing prices was about 8 percent below the level that would have prevailed during the three years up to the bust. Hunt (2005), using simulation analysis for the United Kingdom, finds smaller output losses. The beginning of the output slowdown after a housing price bust coincided roughly with the beginning of the bust itself, which is consistent with the finding that all but one of the housing price busts were associated with recessions. The slowdown and fall in output growth mainly reflected the sharp effects of a bust in housing prices on consumption and residential investment. Interestingly, in most cases, short-term interest rates rose prior to the bust and remained about constant thereafter, which is consistent with the notion that the bust may reflect a tightening of monetary policy. Housing price busts also were associated with important adverse effects on the banking sector, as banks faced deterioration in the quality of their portfolios, a decline in profits, and solvency problems. Indeed, there is evidence that all major banking crises in industrial countries during the postwar period coincided with housing price busts. Not surprisingly, bank-based financial systems tended to suffer larger output losses than market-based financial systems during housing price busts, given the high exposure of banks to real estate lending.

Should policymakers react to large housing (or, more generally, asset) price movements to control the damaging effects associated with price busts? This is an area hotly debated. Some researchers argue that the monetary authority should not pay attention to the movements of asset prices per se, except if these prices contain information on future inflation (Bernanke and Gertler, 2001). Others argue in favor of a more proactive policy stance to changes in asset prices—for instance, Bordo and Jeanne (2002) make the case that monetary policy should react to large changes in asset prices as insurance against the risk of an economic dislocation associated with an asset price bust, which is a low-probability event. Although this approach has some appeal, one important problem is how to make it operational. Hunt (2005) suggests that in the event of sharp reduction in housing prices (i.e., by 30 percent), strong policy action—preferably through a large reduction in interest rates—helps mitigate the negative effects on the economy. While the balance of opinion has been tilting in favor of a monetary policy geared only toward controlling inflation, it may not be sensible to overlook sharp movements in housing prices. This is certainly an area for further research.

References

Bayoumi, Tamin, and Hali Edison, 2003, “Is Wealth Increasingly Driving Consumption?” De Nederlandsche Bank Staff Report No. 101.

Bernanke, Ben, and Mark Gertler, 2001, “Should Central Banks Respond to Movements in Asset Prices?” *American Economic Review*, Vol. 91, No. 2, pp. 253–57.

Bordo, Michael, and Olivier Jeanne, 2002, “Monetary Policy and Asset Prices: Does ‘Benign Neglect’ Make Sense?” IMF Working Paper 02/225.

Campbell, John, and Joao Cocco, 2004, “How do House Prices Affect Consumption? Evidence from Micro Data,” Department of Economics, Harvard University. Mimeo.

Edison, Hali, 2002, “Is Wealth Increasingly Driving Consumption?” in *World Economic Outlook May 2004* (Washington: International Monetary Fund).

Faulkner-MacDonagh, Chris, and Martin Mühleisen, 2004, “Are U.S. Households Living Beyond Their Means?” *Finance & Development,* Vol. 41, No. 1 (March).

Girouard, Nathalie, and Sveinbjörn Blöndal, 2001, “House Prices and Economic Activity,” Organization for Economic Development and Cooperation Working Paper No. 279.

Helbling, Thomas, 2004, “Housing Price Bubbles—A Tale Based on Housing Price Booms and Busts,” Bank for International Settlements Papers No. 21 (April).

Helbling, Thomas, and Marco Terrones, 2003a, “Real and Financial Effects of Bursting Asset Price Bubbles” in *World Economic Outlook April 2003* (Washington: International Monetary Fund).

———, 2003b, “Asset Price Booms and Busts—Stylized Facts from the Last Three Decades of the 20th Century,” paper presented at a European Central Bank workshop entitled “Asset Prices and Monetary Policy,” Frankfurt, 11–12 December.

Hunt, Ben, 2005, “How Should Policymakers Respond to a Decline in House Prices?” in *United Kingdom: Selected Issues,* IMF Country Report No. 05/81 (Washington: International Monetary Fund).

Kodres, Laura, 2004, “Adjustable- or Fixed-Rate Mortgages: What Influences a Country’s Choices?” in *World Economic Outlook September 2004* (Washington: International Monetary Fund).

Ludwig, Alexander, and Torsten Sløk, 2002, “The Impact of Changes in Stock Prices and House Prices on Consumption in OECD Countries,” IMF Working Paper 02/1.

Milesi-Ferretti, Gian Maria, and Laura Kodres, 2004, “Housing Markets in Industrial Countries,” *World Economic Outlook May 2004* (Washington: International Monetary Fund).

Otrok, Christopher, and Marco E. Terrones, forthcoming, “House Prices, Interest Rates and Macroeconomic Fluctuations: International Evidence,” IMF Working Paper.

Schnure, Calvin, 2005, “Boom-Bust Cycles in Housing: The Changing Role of Financial Structure,” IMF Working Paper 05/200.

Terrones, Marco, 2004, “What Explains the Recent Run-Up in House Prices?” in *World Economic Outlook September 2004* (Washington: International Monetary Fund).

Terrones, Marco, and Chris Otrok, 2004, “The Global House Price Boom,” in *World Economic Outlook September 2004* (Washington: International Monetary Fund).

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Volume 53, Number 1

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Rent Seeking
Era Dabla-Norris and Shankha Chakraborty

Exchange Rate Regimes, Location, and Specialization
Luca Antonio Ricci

Exchange Rate Pass-Through in the Euro Area
Hamid Faruqee

Parity Reversion in Real Exchange Rates: Fast, Slow, or Not at All?
Paul Cashin and C. John McDermott

New Estimates of Government Net Capital Stocks for 22 OECD Countries, 1960–2001
Christophe Kamps

The IMF and Russia in the 1990s
John Odling-Smee

Workers' Remittances *(continued from page 1)*

remarkably resilient in the face of economic downturns and crises. As a result, interest in remittances and their impact is rapidly growing in policy circles, including the Group of Eight, in the research community, and among potential remittance service providers. Remittances are increasingly viewed as a relatively attractive source of external finance for developing countries that can help foster development and smooth crises.

Unfortunately, much is still unknown about remittances. For instance, some remittances are channeled through the informal sector and are not captured in official balance of payments statistics. These include cash transfers based on personal relationships between businesspeople, or carried out by courier companies, friends, relatives, or by oneself. Using balance of payments data as well as household surveys, Freund and Spatafora (2005) estimate that, overall, these informal remittances may amount to about 35 to 75 percent of official remittances. El Qorchi, Maimbo, and Wilson (2003) provide a comprehensive review of the historical development of these informal fund transfer systems, the operational characteristics that favor their use, and the national and international economic and regulatory challenges they pose. Reinke and Patterson (2005) summarize other issues and problems that data users may experience with the balance of payments framework. Looking ahead, they review the methodological improvements currently under consideration for measuring remittances in the future. The Statistics Department of the IMF (see IMF, 2005) reviews the progress made recently in these areas, and outlines current plans for further work.

In spite of their limitations, existing data reveal strong empirical regularities. For instance, using cross-country data, Aggarwal and Spatafora (2005) find that policies and regulations play an important role in determining remittance inflows. In particular, multiple exchange rates, restrictions on holding foreign exchange deposits, and large black market premium all have sizable and statistically significant negative impacts on remittances. Freund and Spatafora (2005) similarly find that high transaction costs, in the form of money-transfer fees and dual exchange rates, reduce official remittances. Importantly, such transaction costs—which in spite of recent declines still amount in many countries to 10 percent or more of the sum remitted—are systematically related to concentration in the banking sector, lack of financial depth, and exchange rate volatility. The papers cited above also find that remittance inflows are countercyclical, increasing during periods of weak economic growth in the receiving countries. This suggests that remittances can play an important role in maintaining macroeconomic stability and mitigating the impact of adverse shocks. This finding is further confirmed by Bouhga-Hagbe (2004) for Morocco, Chamon (2005) for Samoa, and Gupta (forthcoming) for India. Burgess and Haksar (2005) do not find clear evidence of such a stabilizing effect of remittances in the Philippines.

The countercyclicality of remittances does make it hard to establish what effect, if any, they exert on economic growth. Chami, Fullenkamp, and Jahjah (2003) conclude that remittances have a detectable negative impact, perhaps because remittance recipients can decrease labor force participation or reduce labor effort. Using a different identification strategy, Aggarwal and Spatafora (2005) fail to find any such effect; in contrast, they find that remittances help reduce poverty. Giuliano and Ruiz-Arranz (forthcoming), noting the constraints on borrowing in many developing countries, hypothesize that remittances may substitute for lack of financial development. Consistent with this, their empirical analysis finds that remittances promote growth in countries with shallow financial systems, but have no impact in financially developed economies.

The increasing amount of remittances by workers is just one of the many channels through which rising global migration flows affect developing-country welfare. Migrants may learn skills that will prove valuable if they repatriate; further, emigration may encourage the development of commercial networks, and promote trade and investment flows. Set against this, "brain drain" and the loss of specialized human capital may hamper the development prospects of those left behind, for instance by affecting the tax base. Mishra (forthcoming) examines these issues in the context of the Caribbean, which has extremely high migration rates, especially among the highly skilled. Many Caribbean countries have lost more than 70 percent of their labor force with more than 12 years of completed schooling. In this context, Mishra's welfare calculations suggest that losses due to emigration of highly skilled workers outweigh the benefits of remittances. More research on such issues is clearly important.

References

Aggarwal, Reena, and Nikola Spatafora, 2005, "Workers' Remittances and Economic Development," in *World Economic Outlook April 2005* (Washington: International Monetary Fund).

Bouhga-Hagbe, Jacques, 2004, "A Theory of Workers' Remittances with an Application to Morocco," IMF Working Paper 04/194.

Burgess, Robert, and Vikram Haksar, 2005, "Migration and Foreign Remittances in the Philippines," IMF Working Paper 05/111.

Chami, Ralph, Connel Fullenkamp, and Samir Jahjah, 2003, "Are Immigrant Remittance Flows a Source of Capital for Development?" IMF Working Paper 03/189.

Chamon, Marcos, 2005, *Samoa: Selected Issues and Statistical Appendix,* IMF Country Report No. 05/221 (Washington: International Monetary Fund). Available via the Internet: *http://ww.imf.org/external/pubs/ft/scr/2005/cr05221.pdf.*

El Qorchi, Mohammed, Samuel Munzele Maimbo, and John Wilson, 2003, *Informal Funds Transfer Systems: An Analysis of the Informal Hawala System,* IMF Occasional Paper No. 222 (Washington: International Monetary Fund).

Freund, Caroline, and Nikola Spatafora, 2005, "Remittances: Transaction Costs, Determinants, and Informal Flows," World Bank Working Paper No. 3704 (Washington: World Bank).

Giuliano, Paola, and Marta Ruiz-Arranz, forthcoming, "Remittances, Financial Development and Growth," IMF Working Paper.

Gupta, Poonam, forthcoming, "Macroeconomic Determinants of Remittances: Evidence from India," IMF Working Paper.

International Monetary Fund, 2005, "Remittances: Progress on Methodology and Compilation Guidance," paper presented at the Eighteenth Meeting of the Committee on Balance of Payments Statistics, Washington, 27 June–1 July, 2005. Available via the Internet: *http://www.imf.org/external/pubs/ft/bop/2005/05–08.pdf.*

Mishra, Prachi, forthcoming, "Emigration and Brain Drain: Evidence from the Caribbean," IMF Working Paper.

Reinke, Jens, and Neil Patterson, 2005, "Remittances in the Balance of Payments Framework," paper presented at the International Technical Meeting on Measuring Remittances, World Bank, 24–25 January 2005. Available via the Internet: *http://imf.org/external/np/sta/bop/pdf/rem.pdf.*

Visiting Scholars, July–September 2005

Joshua Aizenman; University of California, Santa Cruz; 8/15/05–8/19/05, 9/12/05–9/16/05

Olumide Steven Ayodele; University of Calabar, Nigeria; 8/15/05–9/23/05

Ralph Bryant; Brookings Institution; 6/20/05–7/1/05

Irina Bunda; University of Orleans, France; 8/8/05–9/2/05

Jeffrey Chwieroth; Syracuse University; 5/16/05–7/15/05

Matteo Ciccarelli; European Central Bank; 7/18/05–7/22/05

Stephen Haber; Stanford University; 6/27/05–7/1/05

Kenneth Kuttner; Oberlin College; 6/13/05–7/29/05

Philip Lane; Trinity College Dublin; 7/25/05–7/29/05

Paul Levine; United Kingdom; 9/12/05–9/23/05

Chia-Hui Lu; Academia Sinica, Taiwan Province of China; 4/15/05–7/15/05

Douglas Russell Nelson; Tulane University; 9/28/05–12/16/05

Enrico Perotti; Universiteit van Amsterdam, the Netherlands; 7/18/05–7/29/05

Assaf Razin; Tel Aviv University, Israel; 8/30/05–8/31/05

James Robinson; University of California, Berkeley; 5/23/05–7/14/05

Andrew Rose; University of California; 7/25/05–8/19/05

Federico Sturzenegger; Universidad Torcuato Di Tella, Argentina; 8/25/05–9/2/05

Allan Timmermann; University of California, San Diego; 7/5/05–8/26/05

Vadym Volosovych; University of Houston; 8/15/05–9/2/05

Country Study

Turkey

Donal McGettigan

Almost five years after the 2000–2001 economic crisis, the Turkish economy has been transformed. The economy has grown rapidly for four successive years, inflation is in single digits, interest rates have dropped sharply, and the government debt ratio has fallen significantly. Maintaining and advancing these gains will be the key policy challenge in the coming years. Against this backdrop, recent IMF research has focused on policy performance in the key areas of growth, inflation, debt, fiscal and financial sector reform, and labor markets. The analysis aims both to assess the effectiveness of reforms pursued since the crisis and to provide guideposts for the future direction of economic policy.

Improving Turkey's growth performance through both macroeconomic stabilization and structural economic reform has been a key objective of recent IMF-supported programs. Mody and Schindler (2005) examine Turkey's growth record and the factors that explain it. Their analysis shows that performance has been slightly better than the world average, especially since 1980, mainly because of increased openness to trade, financial market liberalization, and broader economic reform efforts. But they also show that Turkey's growth during this period became highly volatile and that it began to tail off in the late 1990s. The paper shows that one key factor holding back the country's growth has been the lack of discipline in fiscal, monetary, and financial policies. Looking ahead, their analysis suggests that Turkey has the potential to grow at a rate similar to that of East Asia, provided recent macroeconomic policy discipline is maintained and structural reforms accelerated.

Reducing high and persistent inflation has been another focus of the reform program. Inflation first took off in the 1970s, peaking at more than 100 percent with the second oil shock, and then rising again in the mid-1990s. With such high inflation over such a long period, there was a concern that price-setting had become more backward-looking, which would have complicated the task of reducing inflation. Instead, Celasun and McGettigan (2005) find that much of Turkey's persistent inflation was self-fulfilling: the inflation process was driven more by expectations of future high inflation than by formal backward indexation. Their analysis also finds that fiscal policy has been a key determinant of these expectations, so the reform program's focus on generating sustained, high primary surpluses has been central to the success of disinflation. Complementing this analysis, Rossi and Rebucci (2004) present an empirical measure of disinflation credibility and find that it has improved markedly in Turkey over the postcrisis period, boding well for the future of disinflation in the country.

Looking back, it is clear that balance sheet weaknesses in the financial and corporate sectors have contributed to Turkey's propensity to fall into crisis. Keller and Lane (2005) document these preexisting weaknesses and show how they were magnified by the depreciation of the Turkish lira in 2001 and the increase in interest rates during the crisis. Their analysis also shows how private sector balance sheets have since been restored, in part because of the economic recovery and success in macroeconomic stabilization, but also because some of the vulnerabilities have been transferred to the government, which has taken on greater foreign currency and interest rate risk. For example, the government has issued bonds that improve banks' balance sheet exposures and used official external financing to provide foreign currency liquidity to the market in the wake of the crisis. Finally, the analysis also shows that, despite the many balance sheet improvements in recent years, Turkey remains vulnerable, due in part to the level and composition of public debt and remaining extensive dollarization.

Helping rectify these balance sheet weaknesses, Turkey's large fiscal adjustment has been one of the most impressive features of recent IMF-supported programs. Debrun (2005) estimates the factors that determine primary surpluses across countries, and finds that Turkey's fiscal adjustment since 2000 has been particularly impressive in size and longevity, marking a clear break with past performance. However, the risk is that this break cannot be sustained, and that Turkey's primary surplus will revert to the lower levels predicted by Debrun's cross-country analysis. Ramirez Rigo (2005) finds that Turkey's fiscal adjustment has not borne the typical hallmarks of sustainability: he finds that the adjustment since 2000 has relied mainly on tax increases, with current expenditures increasing, and investment spending being cut, until recently. The emergence of a stronger and more disciplined government has helped, backed by efforts to curtail off-budget spending. Looking ahead, however, a redirection of the adjustment toward current spending cuts and less reliance on temporary tax increases would help sustain the current fiscal adjustment.

Complementing these fiscal reform efforts, recent IMF-supported programs have stressed efforts to improve the sustainability of public debt and its structure. Klingen (2005) surveys the literature on the appropriate level of public debt for emerging market economies such as Turkey, and concludes that achieving debt sustainability is not enough. Turkey's high level of public debt continues to raise concerns about fiscal dominance, which could undermine the effectiveness of monetary policy in reducing inflation. These considerations suggest the importance of targeting a further substantial reduction in government debt over the medium term. Effective management of the public debt is essential to ensure that it is safely rolled over and that its structure is made more resilient to shocks. Lim (2005) reviews the authorities' debt management strategy and gauges their success in issuing securities that more closely match investor needs, widening the investor base, deepening the liquidity of benchmark bonds, and improving the treasury's debt management. The challenge is to continue to lengthen maturities and reduce reliance on foreign exchange indexed borrowing.

Reform of the financial sector has also been at the heart of the program, so that a recurrence of the 2000–2001 crisis can be prevented. Josefsson and Marston (2005) first describe the outbreak of the banking crisis and the measures taken by the authorities to contain it. They then explain the reforms that have been introduced, including the restructuring of state banks and the recapitalization of private banks. This strategy has largely succeeded in strengthening the banking system and enhancing the confidence of depositors.

Finally, despite Turkey's impressive growth record in recent years, unemployment remains high. Verghis (2005) analyzes recent developments in Turkey's labor market, particularly its low employment and labor force participation rates, especially for women. He notes that one obstacle to employment growth is the cost of complying with recent legislation on statutory employment protection, the amount of which is more than twice the average of the members of the Organization for Economic Cooperation and Development.

References

Celasun, Oya, and Donal McGettigan, 2005, "Turkey's Inflation Process," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Debrun, Xavier, 2005, "Lessons from an Empirical Model of Fiscal Policy in Emerging Markets," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Josefsson, Mats and David Marston, 2005, "Bank Restructuring and Financial Sector Reform," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Keller, Christian, and Chris Lane, 2005, "Balance Sheet Developments Since the Crisis," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Klingen, Christoph, 2005, "How Much Debt Is Too Much?" in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Lim, Cheng Hoon, 2005, "Progress and Challenges in Public Debt Management," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Mody, Ashoka, and Martin Schindler, 2005, "Economic Growth in Turkey, 1960–2000," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Ramirez Rigo, Ernesto, 2005, "Sustainability of the Fiscal Adjustment," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Rossi, Marco, and Alessandro Rebucci, 2004, "Measuring Disinflation Credibility in Emerging Markets: A Bayesian Approach with an Application to Turkey," IMF Working Paper 04/208.

Verghis, Matthew, 2005, "Labor Market Developments," in *Turkey at the Crossroads: From Crisis Resolution to EU Accession,* IMF Occasional Paper No. 242 (Washington: International Monetary Fund).

Safeguarding Financial Stability: Theory and Practice

SAFEGUARDING
FINANCIAL STABILITY
Theory and Practice
Garry J. Schinasi
INTERNATIONAL MONETARY FUND

By Garry Schinasi

How is *finance* related to economic processes, and why should *it* be viewed as a public good requiring policy action? This book provides an answer and also: i) develops a practical framework for safeguarding financial stability, which encompasses both prevention and resolution of problems, and ii) examines on-going and future challenges to financial stability posed by "globalization," a growing reliance on OTC derivatives and their markets, the capital-market activities of insurers and reinsurers, and others.

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Jacques Polak Annual Research Conference: Reform

The Sixth Jacques Polak Annual Research Conference, held on November 3–4, 2005 at the headquarters of the International Monetary Fund in Washington, marked a departure from the forum's usual focus on macroeconomic issues. Yet, as IMF Deputy Managing Director Agustín Carstens said in his opening remarks, "understanding reforms, what makes them happen, and their consequences is no less central to the daily work of the IMF than understanding the macroeconomics of stabilization."

Among the questions posed by the conference was, if reforms are good for society, why is it so difficult to make them happen? According to Ernesto Dal Bó of the University of California at Berkeley and Pedro Dal Bó of Brown University, a possible explanation is that the standard view of the economy does not take into account social conflict and its interaction with reforms. These authors take the traditional 2 x 2 small model of international trade and add a third sector—social conflict—that destroys resources rather than uses them to produce new output. If conflict is a relatively labor-intensive activity, reforms enhancing the productivity of the capital-intensive sector, which in general would make a country better off, may hurt the country, because they result in more conflict. This may explain why politicians are reluctant to undertake apparently beneficial reforms.

That the IMF can play a role in spurring reform efforts is well recognized. The Fund's Anna Ivanova discussed how this can happen using outcome-based conditionality in IMF-supported programs. With outcome-based conditionality, IMF financing is conditional on the member country meeting particular targets or objectives rather than implementing specific actions. This type of conditionality may be more practical for inducing countries to undertake complex reforms without jeopardizing ownership. While the literature on the effectiveness of conditionality has generally found only marginal effects, Bennet Zelner (University of California at Berkeley) presented evidence that countries with IMF loans are more likely to undertake market-oriented reforms. Zelner's paper was coauthored by Mauro Guillén and Witold Henisz of the University of Pennsylvania.

How Reforms Can Run Aground

Sanjay Jain (University of Virginia) and Sharun Mukand (Tufts University) proposed a model in which some groups benefit and others lose from reforms, but losers can vote to have some of the gains redistributed to them. As reforms progress, however, the ranks of the losers shrink, and at some point, they may lose the political power to force redistribution in their favor. Anticipating this outcome, and unable to know for sure if they will be among the winners in the next stage of reform, losers may choose to block further reforms so that they can enjoy the fruits of the initial reform through redistribution.

Reform may also run aground because the public fears that elites will appropriate all of the gains. In this case, politicians can use the constitution as a commitment mechanism to boost support for economic reform, as illustrated in a paper by Anders Olofsgård and Raj Desai of Georgetown University. To support their view, they showed opinion poll data indicating greater support for reforms in countries with greater political accountability and judicial independence.

Globalization and Reform

Andrei Levchenko of the IMF and Quy-Toan Do of the World Bank studied the effect of trade opening on institutional quality. In their theoretical model, bad institutions translate into high operating costs for firms and trade liberalization benefits mostly large firms, while small firms are forced to exit. Politically influential large firms may prefer higher fixed costs to prevent new entry and reduce competition. Thus, trade liberalization may worsen the quality of economic institutions.

In a careful empirical analysis of firm-level data from Colombia, John Haltiwanger (University of Maryland) and his coauthors also confirmed that trade liberalization leads to more forced exits by firms. However, this process leads to efficiency gains, as the companies that go out of business tend to be low-productivity firms. The joint paper was prepared with Marcella Eslava (Universidad de los Andes), Adriane Kugler (University of Houston and Universitat Pompeu Fabra), and Maurice Kugler (University of Southampton).

Another aspect of globalization is increased international financial flows. According to Pierre-Olivier Gourinchas (University of California at Berkeley) and Olivier Jeanne (Princeton University and IMF), the effects of financial globalization on reforms depend on investor confidence. If investors believe that the government will reform, they will keep their capital in the country, increasing wealth and making reforms more likely. But if investors do not believe that the government will implement reforms, they will take their capital abroad, impoverishing the country and making it optimal for the government not to implement any changes. This is a new model of self-fulfilling capital flight. The optimal policy in this case is to liberalize inflows but not outflows.

If financial globalization is a catalyst for reform, nowhere is this clearer than in the financial sector, where globalization spurs ongoing liberalization. Three IMF economists—Abdul Abiad, Nienke Oomes, and Kenichi Ueda—investigated the effect of financial liberalization on the allocation of capital across firms. They show that, in theory, financial liberalization should reduce the cross-sectional variation in the expected marginal return on capital, because it eliminates preferential credit allocation and credit rationing. To support their theoretical prediction, they show that financial liberalization reduces the dispersion in Tobin's *q*, a measure of the efficiency of the allocation of capital, across firms in five emerging market economies.

Public Sector Reform

Using World Bank Institute survey data, Francesca Recanatini (World Bank), Alessandro Prati (IMF), and Guido Tabellini (Università Bocconi) found that public agencies maintaining open and transparent procedures tend to be less corrupt. James Alt (Harvard University), David Dreyer Lassen (University of Copenhagen), and Shanna Rose (State University of New York at Stony Brook) exploited variations across U.S. states to examine what causes budgetary transparency. They found that political competition, such as a government divided between executive and legislature tends to improve transparency, while political polarization worsens it.

Political Economy of Macroeconomic Adjustment

Impending disaster can spur even the most reluctant politician to action. So can crises force reform, particularly fiscal and monetary reforms that lower fiscal deficits and inflation. This is one of the key findings presented by Alberto Alesina, who delivered the Sixth Mundell-Fleming Lecture entitled "Who Adjusts? The Political Economy of Reforms."

As a theoretical framework, Alesina described the war-of-attrition model. Different social groups fight over reforms by delaying a decision. Delay is costly, but caving in to the demands of the other group is even worse. While delays in reforms cost the society, it is rational for each group to wait, since the uncertainty about the cost of waiting for different groups is revealed as time passes. The winner of the game is the group with the lowest waiting cost. In this model, the passage of time alone increases the probability of reforms. A crisis can also generate reforms, especially if it makes one group worse off. By inducing reforms, then, a crisis can improve welfare. Political systems that allow more vetoes are less likely to generate early reforms, while external commitments accelerate the resolution of wars of attrition by increasing the cost of waiting.

In the empirical part of the lecture, Alesina showed that stronger governments—presidential systems and clear-majority parliamentary systems—stabilize more in time of crisis. On the other hand, he found little evidence that IMF conditionality generates a strong response, although this result is still tentative.

While the conference explored many aspects of the political economy of reforms, much remains to be studied, a point that came out during the proceedings. One important question preeminent for future consideration by policymakers was raised by IMF First Deputy Managing Director Anne Krueger: "While crises can spur reforms, what are the conditions that make countries reform so crises can be avoided?"

Central America: Global Integration and Regional Cooperation

By Markus Rodlauer and Alfred Schipke

The Central American-Dominican Republic Free Trade Agreement (CAFTA-DR) with the United States will provide a new impetus for economic integration and bolster efforts by participating countries to compete successfully in the global economy. With a focus on the policy implications of increased integration, this Occasional Paper examines how policymakers can make the best of Central America's considerable potential and set the isthmus on a path of rapid and sustainable growth.

The Central American nations already have made major strides over the past two decades in implementing social and economic reforms and consolidating democracy and macroeconomic stability. But poverty levels remain high, institutional weaknesses continue to undermine growth, and weak fiscal positions and financial sectors have left economies vulnerable to shocks.

The paper looks at these challenges and how Central America is attempting to meet them. The authors examine the macroeconomic implications of CAFTA-DR, fiscal sustainability, exchange rate regimes, financial sector issues, macroeconomic statistics, and the political economy of reforms. A core theme is the need to intensify regional collaboration in a number of areas to maximize the benefits of globalization. The study provides a framework for deepening cooperation in banking supervision and regulation, tax policy and administration, and economic statistics. It also notes that integration must be anchored in strong domestic economic policies, especially fiscal reforms to ensure sustainable public debt levels and structural reforms to raise productivity and competitiveness.

This study was issued as IMF Occasional Paper No. 243.

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