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Köhler meets with Ethiopia's leaders on first leg of African visit

IMF Managing Director Horst Köhler traveled to Ethiopia on July 5 to discuss the challenges facing the drought-stricken country and to emphasize the IMF's strong commitment to support the country's long-term vision for economic growth and poverty reduction. In subsequent stops on the week-long trip, Köhler visited Kenya, Madagascar, and Mozambique, where he attended the African Union Heads of State meeting in Maputo.

Ethiopia, one of the world's poorest countries, is currently struggling to deal with the devastating effects of a severe drought. Köhler's two-day visit provided him with an opportunity to witness firsthand the economic and social challenges that Ethiopians face and to discuss the economic situation with a wide range of people in government and in civil society.

In his meetings with Prime Minister Meles Zenawi, Finance Minister Sufian Ahmed, and the country's economic team, Köhler welcomed the government's decisive actions to deal with the immediate effects of drought and its decision to adopt structural and lasting measures— *(Please turn to the following page)*

A young Ethiopian woman. Her country is struggling with the effects of a severe drought.

Uruguay takes cooperative approach to a successful debt exchange

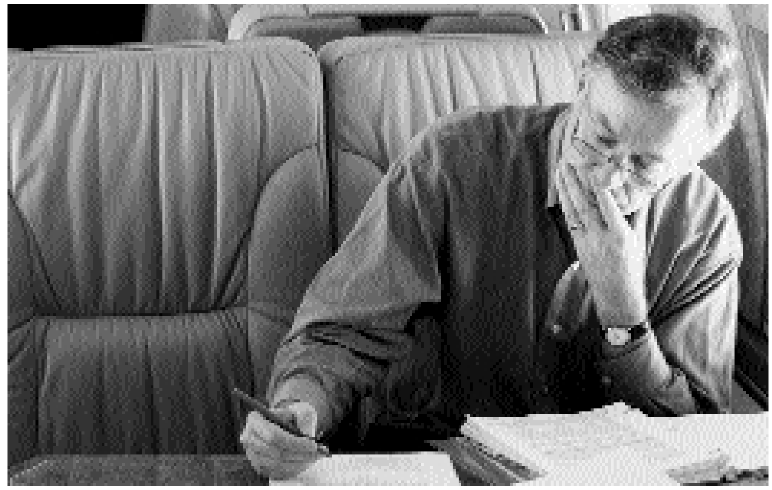
On May 29, the government of Uruguay successfully exchanged most of its market debt (about half of its total debt) for new bonds with longer maturities and roughly unchanged interest rates. The exchange, which provides crucial debt-service relief to a country that has battled external shocks, a severe financial crisis, and a deep recession, constitutes a key component of Uruguay's efforts to restore economic vitality. Gilbert Terrier (Western Hemisphere Department), Rupert Thorne, and Peter Breuer (both International Capital Markets Department) examine the exchange's design, why bondholders responded so favorably, and whether this successful effort might hold lessons for other countries contemplating a similar operation.

At the beginning of 2003, the Uruguayan economy confronted major challenges: output had declined by over 17 percent in the four preceding years, the public debt-to-GDP ratio was approaching 100 percent, the banking system had been hit by a crisis, and the country's credit rating had collapsed. The government was not able to issue new market debt of more than a few weeks maturity, and large residual financing needs were projected to persist for the foreseeable future.

To address these challenges, the authorities were implementing a comprehensive economic program, supported by an exceptionally large Stand-By Arrangement from the IMF and assistance from the World Bank and the Inter-American Development Bank. After initially *(Please turn to page 203)*

Ethiopia making progress on poverty reduction

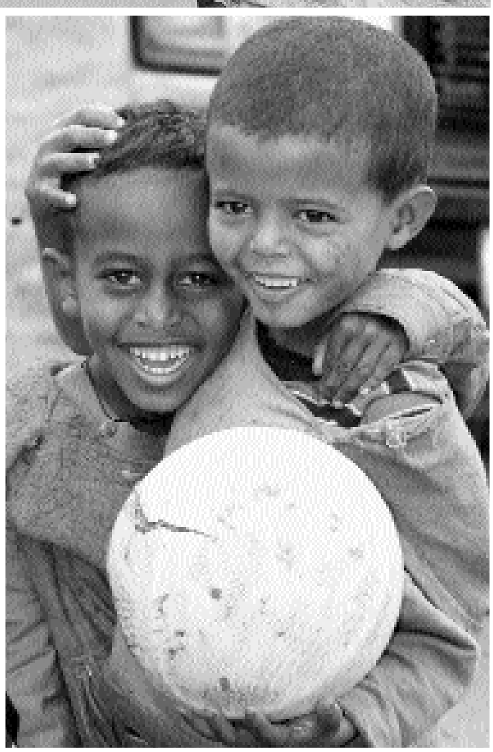
(Continued from front page) such as agricultural modernization and investment in key economic and social infrastructure—to ensure food security in the future. He also underscored the international community's critical role in helping Ethiopia contend with this difficult situation.

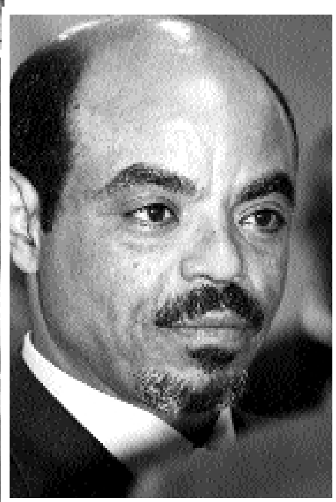


Fighting poverty

The government of Ethiopia is making considerable progress in tackling poverty, aided by an increasing share of government spending earmarked for the social sectors and poverty reduction. Efforts to reduce poverty are also being supported by the IMF through a three-year, $140 million loan under its concessional lending facility—the Poverty Reduction and Growth Facility (PRGF). Over the past three years, poverty-reducing spending has more than doubled as a percentage of GDP, rising from 8 percent in 1999/2000 to close to 18 percent in 2002/03. In his discussions with Prime Minister Meles and his economic team, Köhler proposed measures that could, with the assistance of its development partners, help Ethiopia make progress toward the UN Millennium Development Goals and in particular substantially reduce the prevailing level of poverty. They agreed on the need to ensure high sustainable agricultural growth rates and to foster the role of the private sector.

Köhler and Prime Minister Meles (below, top right) agreed on measures that would help Ethiopia make progress toward the UN Millenium Development Goals, in particular, reducing poverty.





Economic growth, debt sustainability

Ethiopia's comprehensive strategy for achieving sustainable development and reducing poverty aims at achieving a 7 percent real GDP growth rate, consistent with the target set under the New Partnership for Africa's Development initiative. This ambitious growth rate—or perhaps even a higher one—is achievable, Köhler told the press, "provided the pace of structural reforms is accelerated, financial sector reform deepened, and the climate for private, domestic, and foreign investment greatly enhanced to contribute to job and income creation."

In November 2001, Ethiopia reached the decision point under the enhanced initiative for Heavily Indebted Poor Countries (HIPC), with debt relief estimated at $1.9 billion. Köhler said that he sees "a good prospect that Ethiopia will reach the HIPC completion point in early 2004 and thereby contribute to debt sustainability." In this context, he urged donors to provide much needed assistance to Ethiopia, with new assistance given, as far as possible, on grant terms. ■

Uruguay stresses consultation, communication

(Continued from front page) focusing on stabilizing the economy through fiscal adjustment (while preserving the social safety net), an exchange rate float, and measures to address the banking crisis, the authorities next turned to designing a debt operation which would close the financing gaps in the next few years and ensure a sustainable medium-term debt profile.

Designing the exchange

With these goals in mind, the Uruguayan authorities, in close coordination with their legal and financial advisors, moved to develop a comprehensive debt exchange that would elicit a high participation rate, while lengthening maturities and reducing the net present value (NPV) of their debt. To achieve this, they aimed for a voluntary exchange that would treat bondholders equally and employed a strong communications strategy that would convince investors of the benefits of participation.

They structured the exchange to cover international and domestic bonds, with principal totaling $5.4 billion eligible for exchange (equivalent to 45 percent of the country's GDP). They divided the operation into three simultaneous offers for the old bonds: 46 domestically issued securities, totaling $1.6 billion; 18 international bonds, totaling $3.5 billion; and one Japanese bond of about $250 million. The first two offers were structured as exchanges for new bonds, while the Japanese bond was to have its terms amended at a bondholders' meeting. Eligible bonds were primarily denominated in U.S. dollars, and their remaining maturity ranged from a few days after the offer closed to the year 2027.

"Selling" the debt exchange required, above all, communicating clearly to bondholders what its aims and expected outcomes were. From early on, the authorities took a market-friendly approach by holding informal consultations with bondholders. After announcing, on March 11, their intention to conduct a debt exchange, they developed its details during a "roadshow" in the United States, Europe, and Uruguay. In group presentations and one-on-one meetings, they explained the country's financial constraints and listened to bondholder suggestions for the appropriate design of the exchange. The official launch of the exchange took place on April 10, followed by a second roadshow to explain the final

"Selling" the debt exchange required, above all, communicating clearly to bondholders what its aims and expected outcomes were.

Raghuram Rajan nominated as IMF Economic Counsellor

On July 2, IMF Managing Director Horst Köhler announced his intention to nominate Raghuram Rajan, currently Professor of Finance at the University of Chicago Graduate School of Business, as the IMF's next Economic Counsellor and Director of the Research Department. Rajan would succeed Kenneth Rogoff, who had earlier announced his decision to return to academia in the fall of 2003.

In making this announcement, Köhler noted that Rajan has been at the forefront of work on banking and financial sector issues. He cited Rajan's exceptional rise within the economics profession and his extensive experience, adding that Rajan "will bring a strong and proven record of intellectual leadership to the IMF. This will be an asset to develop further the IMF's research program to the leading edge of economic theory and policy. His particular experience in financial sector issues will help strengthen the IMF's role as a center of excellence in macroeconomic and financial sector stability." Köhler also expressed confidence that as Economic Counsellor, Rajan "will help the IMF meet its responsibilities in supporting its members in an increasingly complex and challenging global environment."

Rajan, 40, and an Indian national, has published extensively on economic and financial matters. Prior to his present appointment at the University of Chicago, Rajan held professorships at the Massachusetts Institute of Technology, Northwestern University, and the Stockholm School of Economics. In January 2003, he received the American Finance Association's inaugural Fisher Black Prize—an award given to the person under 40 who has contributed the most to the theory and practice of finance.

A director of the American Finance Association, an associate editor of the *American Economic Review*, and a program director for corporate finance at the National Bureau of Economic Research, Rajan has also been a consultant to the U.S. Federal Reserve Board, the World Bank, the IMF, and various financial institutions.

The full text of the IMF Press Release 03/100, announcing Raghuram Rajan's nomination, is available on the IMF's website (www.imf.org).

details and to convince bondholders of the benefits of participation.

The final design offered most bondholders a choice between two options, both involving approximately a par-for-par exchange:

- The "Maturity extension" option typically offered a new bond five years longer than the old one but with otherwise similar terms. Its simplicity was designed to appeal to retail bondholders.
- The "Benchmark bond" option, which targeted primarily institutional investors, provided the opportunity to swap into a larger, more liquid bond, typically of even longer maturity than under the maturity-extension option.

The IMF strongly supported the debt exchange as an essential element of the authorities' program (see box below).

Encouraging participation

With coupons being maintained at well below Uruguay's secondary market yields, the main incentive for investors to participate was the improvement the exchange would make in the country's ability to meet its debt-service needs. The government warned that, without a successful exchange, it might not be able to make all its debt payments, even in 2003. Nevertheless, Uruguay continued to service its debt in full throughout the offer period, thus helping to retain investor goodwill.

Investors were particularly interested in how Uruguay planned to treat future debt-service obligations on bonds that investors did not exchange. The authorities made it clear that the country remained committed to servicing all of its debt in full, if possible, but that it would direct its funds to pay the new bonds in preference to the old ones if its resources were not sufficient to meet all debt-service needs. For many bondholders, this explanation provided a key incentive to participate in the exchange.

A high participation rate was necessary to achieve the required debt-service relief. To signal the importance of a high participation rate and to discourage free riders, the authorities said they would not complete the exchange unless it reached at least 80 percent investor participation. (The authorities committed themselves to completing the exchange if participation reached 90 percent in total—including 90 percent for bonds maturing through 2008—but retained discretion to complete the exchange if participation fell between 80 and 90 percent.)

To further boost bondholder participation, the authorities made it obvious that there would be risks attached to nonparticipation, while making participation more attractive, through a number of features:

- By allowing investors to swap their existing bonds for new benchmark bonds of larger issue size, Uruguay aimed to increase its weighting in closely followed international bond indices, thus increasing liquidity and stimulating demand from index-tracking investors.
- Those who were exchanging international bonds were asked to approve exit consents that, if approved by the majority of former holders, would reduce the old bonds' liquidity and their holders' ability to enforce debt-service payments. New bonds included a trustee structure, which would receive debt-service payments on behalf of bondholders and distribute the payments to them, thus reducing the risk that the payments could be attached by holders of the old bonds.
- Domestic financial institutions were advised that the old bonds would be treated less favorably by bank and pension fund regulators because of their future illiquidity.

The new international bonds included Collective Action Clauses (CACs), with an innovative feature—an aggregation clause that lowers the 75 percent majority needed for changing payment terms on each individual bond issue to two thirds if at least 85 percent of the aggregate holders of all the affected issues approve. Uruguay was the first sovereign to use such a clause.

The Japanese bond already contained a CAC. This was used to extend the bond's maturity at a bondholders' meeting in Tokyo. This was the first time that

IMF's role

In supporting Uruguay's debt exchange, as part of the overall economic program backed by the Stand-By Arrangement, the IMF endorsed specifically the objectives of closing the near-term financing gaps and restoring medium-term debt sustainability, while leaving the design of the operation to the authorities and their advisors. Throughout the operation, IMF staff stayed in close contact with the authorities and their advisors, focusing on assurances that financing gaps and debt sustainability were being addressed.

On the April 10 launch date, Horst Köhler, the IMF's Managing Director, in an open letter to the financial community endorsed the authorities' economic program, noting that high participation in the exchange would be needed to achieve the financing objectives that were required for continued disbursements by the IMF. Later in April, the authorities published the staff report for the IMF's second review of the Stand-By Arrangement, which provided detailed information about the country's performance under the program as well as a debt sustainability analysis based on successful completion of the debt exchange.

the payment terms of a sovereign bond were amended using a CAC in Japan.

Exceeding expectations

Uruguay's exchange successfully drew high participation rates across all types of investors and garnered a favorable response from the market. Overall participation was exceptionally high—92.5 percent of eligible bonds. Contrary to expectations, the participation rate for bonds maturing through 2008 was higher than the average, at 93.5 percent. Participation reached 89.2 percent of internationally issued bonds and 98.8 percent of domestically issued bonds. At the Japanese bondholders' meeting, holders of 80 percent of the bonds were represented, and over 99 percent of votes cast approved the change in payment terms.

It was also evident that the authorities' emphasis on communication and a market-friendly approach had appealed to all types of bondholders. Institutional investors and retail bondholders, residents as well as nonresidents, participated strongly in the exchange. Domestic institutions did so universally. Vigorous broker and custodian programs to contact all their clients bolstered domestic retail participation.

The time profile for participation shows that investors took something of a wait-and-see approach. Although many investors expressed general support for the deal early on, the majority did not provide formal acceptances until the final days of the five-week offer period (see chart, this page), a trend similar to that observed in other bond exchanges. For a few bonds, participation rates were lower than hoped for. Participation in the euro-denominated bonds was below 80 percent, partly because European retail holders could only be contacted at a late stage because of administrative delays. Similarly, participation of Brady bondholders was relatively low, at less than 60 percent on average, as some longstanding holders preferred the structure of the old bonds.

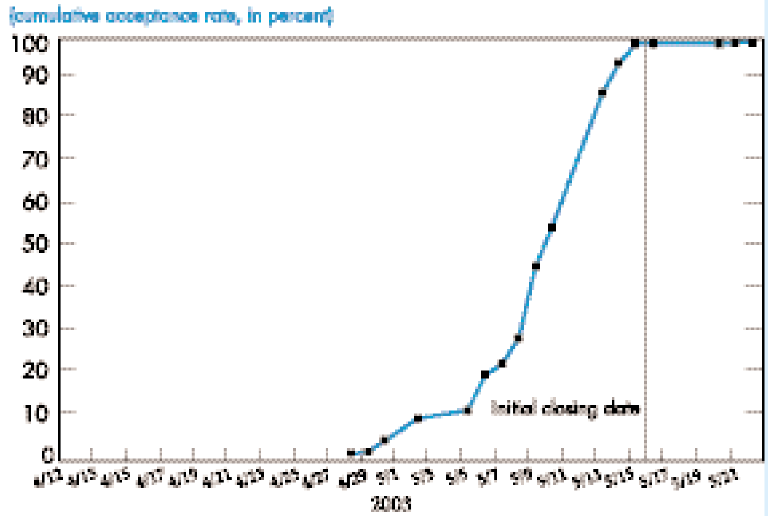
Markets kept a watchful eye on the proceedings and reacted positively to both the announcement and the completion of the exchange. Over the exchange period, the post-exchange yield curve implied by market prices of the old bonds (the "exit yield") remained fairly flat and declined from 18 percent in early April to 16 percent in early May. Once completion was announced in mid-May, and there was no longer a risk that the exchange could fail, yields on the new benchmark bonds dropped to around 13 percent, and have since fallen further to just above 11 percent. Two major credit rating agencies also upgraded Uruguay's sovereign debt ceiling in response to the completion of the exchange.

Impact and lessons

Did the operation meet Uruguay's targets for debt-service relief? In short, yes. The exchange reduced principal on medium and long-term bonds due in the remainder of 2003 from $469 million to $23 million. For the period 2003–07, payments on principal declined from $2.1 billion to $300 million (see chart, page 206). Over the same period, overall debt-service obligations on the bonds fell from $3.5 billion to $1.8 billion. The operation reduced the NPV of participating bonds by an average of around 20 percent, measured on the basis of market conditions at the time of the offer. This was achieved by lengthening maturities while maintaining the existing coupon of

Domestic acceptances did not arrive until the last few days

(cumulative acceptance rate, in percent)



Data: Central Bank of Uruguay

around 7 percent, although yields in the market were much higher. The cash flow benefits, in turn, have improved the medium-term debt profile, with the debt-to-GDP ratio expected to fall gradually to below 60 percent.

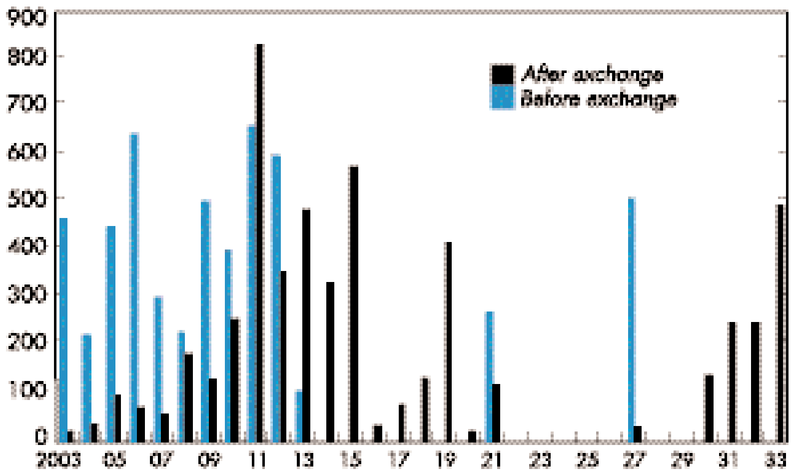
What persuaded investors to participate in such large numbers? Most investors seemed to conclude that the risks of *not* participating were high. Uruguay's difficulty in servicing the old debt profile, coupled with the legal features of the exchange, convinced them that participation was the more appealing option. Concerns that hold-out creditors might not receive future payments, and the expected greater liquidity of the new bonds, also helped spur participation.

More generally, the authorities' intensive consultations with investors beforehand helped explain Uruguay's financial constraints, tailor the exchange to the preferences of bondholders, and create a positive sentiment. The domestic exchange may have benefited from a sense of patriotism among retail investors.

Moreover, the offer period coincided with a rally in emerging market securities; this increased optimism about the exchange, and the higher prices of Uruguayan bonds raised the potential costs to holdout creditors if the old bonds were not serviced after the exchange.

Most principal repayments were extended by at least 5 years

(million U.S. dollars)



Data: IMF

Uruguay also found itself in the fortunate position of being able to achieve debt relief by extending maturities without lowering face value or coupon rates. Existing coupons were low because Uruguay's bonds had been rated investment grade as recently as one year before the exchange. Maintaining coupon rates and asking for a modest "NPV haircut"—the reduction in NPV under the exchange—probably made a cooperative approach easier to achieve. In turn, investors' widespread understanding of Uruguay's financial difficulties (seen, in large part, as caused by an external shock) and appreciation of its efforts to find a cooperative solution also made investors receptive to the proposal.

Is it replicable?

Certain aspects of Uruguay's successful debt exchange may provide useful guidance to other governments in similar situations, although caution should be exercised in drawing generalized lessons. In particular, it may well be more difficult to handle cases that might require larger NPV reductions or where domestic banks hold large amounts of government debt.

Clearly, however, extensive informal consultation helped build consensus and demonstrated that a cooperative exchange can achieve high participation across a wide range of investors. Near-universal participation by domestic retail indicates that brokers, banks, and other intermediaries can mobilize a widely dispersed retail base. The exchange also illustrated the importance of providing a compelling explanation of why debt-service relief is needed and of having a credible economic program, and showed the benefits of strong support from the official sector.

It remains to be seen, however, whether other emerging market economies can fully repeat the success of Uruguay, a small and socially cohesive country. Also, the lower participation rates for Euro-denominated and Brady bonds suggest that challenges remain, notably in achieving very high participation rates for international retail holders and some other long-term holders. ■

Available on the web (www.imf.org)

Press Releases

03/99: IMF Completes Third Review of Madagascar's PRGF-Supported Program, Approves $15.9 Million Disbursement, June 30

03/100: IMF Managing Director Köhler Proposes Raghuram Rajan as Economic Counsellor and Director of the IMF's Research Department, July 2 (see page 202)

03/101: IMF Managing Director to Visit Four African Countries and Address the African Union Heads of State Meeting in Maputo, July 2

03/102: IMF Completes in Principle Second Review and Approves $6 Million Loan Under PRGF for Albania, July 2

03/103: IMF's Krueger Welcomes Iraq's New Banknotes, July 7

03/104: IMF Completes First Review of Bolivia's Stand-By Arrangement, Approves $15 Million Disbursement, July 7

03/105: Press Statement by IMF Managing Director in Addis Ababa, July 8

Public Information Notices

03/79: IMF Concludes 2003 Article IV Consultation with Burkina Faso, June 30

03/80: IMF Concludes 2003 Article IV Consultation with Samoa, June 30

03/81: IMF Concludes 2003 Article IV Consultation with the Republic of Congo, June 30

03/82: IMF Concludes 2003 Article IV Consultation with Eritrea, July 1

03/83: IMF Concludes 2003 Article IV Consultation with Kiribati, July 7

Speeches

"Implementing the Monterrey Consensus," Horst Köhler, IMF Managing Director, at the High-Level Segment of the ECOSOC, Geneva, June 30

Recent publications

IMF Working Papers ($15.00)

03/122: "Rating the Rating Agencies: Anticipating Currency Crises or Debt Crises," Amadou N. Sy

03/123: "An Empirical Reassessment of the Relationship Between Finance and Growth," Giovanni Favara

03/124: "Trade Liberalization and Real Exchange Rate Movement," Xiangming Li

03/125: "Modeling Stochastic Volatility with Application to Stock Returns," Noureddine Krichene

03/126: "Determinants of Inflation in a Transition Economy: The Case of Ukraine," Bogdan Lissovolik

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03/129: "Does Inflation Targeting Matter?" Laurence Ball and Niamh Sheridan

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(A country name indicates the report is the country's Article IV consultation)

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03/164: Albania: Poverty Reduction Strategy Paper Progress Report

03/165: Eritrea

03/166: Eritrea: Selected Issues and Statistical Appendix

03/167: Senegal

03/168: Senegal: Statistical Appendix

03/169: Lesotho: Fourth Review Under the Poverty Reduction and Growth Facility Arrangement and Request for Waiver of Performance Criteria

03/170: Lesotho: Joint Staff Assessment of the Poverty Reduction Strategy Paper Progress Report

03/171: Lesotho: Poverty Reduction Strategy Paper Progress Report

03/172: Ukraine: 2003 Article IV Consultation

03/173: Ukraine: Selected Issues

03/174: Ukraine: Statistical Appendix

03/175: Democratic Republic of the Congo: Selected Issues and Statistical Appendix

03/176: Papua New Guinea: Selected Issues and Statistical Appendix

03/177: Bangladesh: Interim Poverty Reduction Strategy Paper

03/178: Papua New Guinea

03/179: Bolivia: Request for Stand-By Arrangement

03/180: Pakistan: Fifth Review Under the Three-Year Poverty Reduction and Growth Facility and Request for Waiver and Modification of Performance Criteria

03/181: Colombia: First Review Under the Stand-By Arrangement

03/182: Sierra Leone: Poverty Reduction Strategy Paper Preparation Status Report

03/183: Sierra Leone: Joint Staff Assessment of the Poverty Reduction Strategy Paper Preparation Status Report

03/184: Republic of Congo: Statistical Appendix

03/185: Bangladesh: Report on the Observance of Standards and Codes—Fiscal Transparency Module

03/186: Bangladesh: Joint Staff Assessment of the Interim Poverty Reduction Strategy Paper

03/187: Republic of Poland

03/188: Republic of Poland: Selected Issues

03/189: Republic of Poland: Report on the Observance of Standards and Codes—Fiscal Transparency Module—Update

03/190: Cape Verde: Poverty Reduction Strategy Paper Preparation Status Report

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03/192: Rwanda: First Review Under the Three-Year Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria

03/193: Republic of Congo

03/195: Samoa

03/196: Samoa: Selected Issues and Statistical Appendix

03/197: Burkina Faso

03/198: Burkina Faso: Statistical Annex

03/199: Kenya

03/200: Kenya: Selected Issues and Statistical Appendix

03/201: Republic of Mozambique: Joint Staff Assessment of the Poverty Reduction Strategy Paper

03/202: Albania: Report on the Observance of Standards and Codes—Fiscal Transparency Module

03/203: Madagascar: Third Review Under the Poverty Reduction and Growth Facility

Other

Deflation: Determinants, Risks, and Policy Options, Manmohan S. Kumar (IMF Occasional Paper No. 221, $25.00; academic rate $22.00)

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Reforms in financial sector generate own momentum, IMF study finds

Governments around the world have been busy liberalizing their financial sectors during the past quarter century. What prompted them to do this, and how does the process work? A new IMF statistical analysis of the causes and timing of financial reform finds that liberalization occurred as a combination of responses to changes in the economic and political environment ("shocks") and momentum gained from previous reforms ("learning").

While financial sector reform has been high on the agenda of policymakers for several decades, the experience of different countries with liberalization has varied considerably. The pace of reform has ranged from sluggish to swift and the magnitude of changes has run the gamut from minor tweaking to complete overhaul.

Many studies have looked at the consequences of financial sector liberalization, but the causes have received less attention. In a new study, "Financial Reform: What Shakes It? What Shapes It?" Abdul Abiad and Ashoka Mody of the IMF's Research Department draw on a newly constructed cross-country database of financial liberalization to examine the experiences of 35 countries over the period 1973–96 to analyze the underlying causes of reform.

What they find is that liberalization is a combination of discrete changes in response to economic and political "shocks," reinforced by a self-sustaining dynamic—a process the authors refer to as "learning." Reforms in neighboring countries also seem to have an influential effect. Of the economic shocks, crises trigger action, but these include reversals as well as reforms. "There was apparently a need to do something, anything, when things got bad," the authors observe.

The liberalization process is one of reforms begetting further reforms.

Role of learning and shocks

What produces change? Abiad and Mody draw five specific conclusions from their extensive cross-country data.

• First, countries whose financial sectors are fully repressed (meaning unliberalized) are the ones with the strongest tendency to maintain their policy stance and hence remain closed and highly regulated. However, where initial reforms occur, and the financial sector becomes even only partially repressed, the likelihood of further reforms increases substantially.

The self-sustaining nature of reforms can be explained in several ways, the study says. Initial reforms can reduce uncertainty regarding the benefits that can be gained from reform. They will also tend to strengthen those who benefit from (and lobby for) reforms relative to those who oppose them.Finally, initial reforms cause changes that make further reforms necessary.

An interesting example is the Japanese financial liberalization experience, which received its initial impetus from the emergence of large fiscal deficits in the 1970s and the need to finance them. The resultant development of the government bond market created demand for reduced restrictions on the corporate bond market. In turn, the development of the corporate bond market resulted in a substantial revenue decline for commercial banks that led the government to liberalize the scope of banks' activities.

How the study was done

One constraint in analyzing the various forces that produce transitions to financial liberalization has been the lack of a cross-country data set. The Abiad-Mody study uses a new financial liberalization index, compiled by the IMF Research Department's Financial Studies Division, and covering 35 countries. The index allows a more precise determination of the timing and significance of various events cumulating in a financial liberalization process. The index recognizes the multifaceted nature of financial reform and is an annual aggregation of financial reform along six dimensions.

The six facets that characterize the financial sector policy are directed credit/reserve requirements; interest rate controls; entry barriers and/or lack of pro-competition policies; restrictive operational regulations and/or lack of prudential regulations; the degree of privatization in the financial sector; and the degree of controls on international financial transactions.

On each dimension, the index classifies a country as being *fully repressed, partially repressed, largely liberalized,* or *fully liberalized*. The possibility of domestic "learning," which implies a dynamic relationship between the current level of financial sector liberalization and subsequent policy changes undertaken, is taken into account in the econometric specification.

Thus, the liberalization process is one of reforms begetting further reforms.

• Second, regional diffusion effects appear to be important. The further a country's stage of liberalization is from that of the regional leader, the greater is the pressure to liberalize. Countries within the same region tend to have similar characteristics and, because of this, are likely to be motivated by similar objectives, including competition for the same pool of international capital. This competitive effect becomes stronger as the levels of liberalization increase.

• Third, shocks to the economic environment play an important role in weakening the status quo and making reforms possible. The status quo is likely to be altered—through both reforms and reversals—in the first year of a new government. Among external influences, reforms are promoted by a decline in U.S. interest rates, while IMF program conditionality appears to have a strong influence under conditions of relatively high repression and a declining effect as liberalization advances.

• Fourth, crises do trigger action, but not always in the direction of reform. Balance of payments crises raise the likelihood of reform. However, banking crises have the opposite effect. Reversals following banking crises arise, in part, because of the takeover of problem banks by the government. "Since banking crises are merely manifestations of extreme banking sector fragility," the study notes, "it is not surprising that reforms were not pushed further during such periods since, in the short run, they risked further weakening franchise values of incumbent banks. Instead, governments attempting to resolve banking crises through takeovers of weak banks by stronger ones were apt to offer incentives, such as temporary monopoly power."

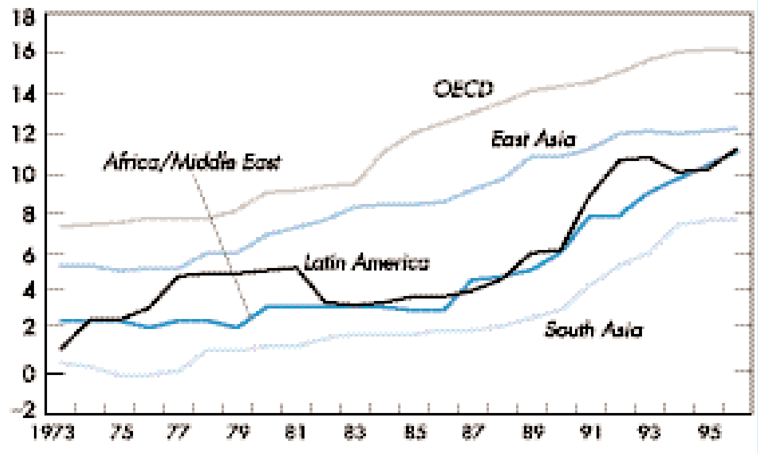
• Finally, among variables representing ideology and structure, only trade openness appears related to the pace of reform. There is no evidence that right-wing governments are more reform-oriented than left-wing governments. If anything, the propensity of left-wing governments to reform is slightly higher than that of right-wing governments, although the difference is not statistically significant. Presidential and parliamentary regimes are equally inclined to reform, and the legal system proves not to be influential as well. Greater trade openness, however, appears to increase the pace of reform, especially when the level of liberalization is low.

Implications

"For policymakers," say the authors, "our results suggest that even small reforms are potentially a large victory, since the reform process tends to build its own momentum. Reforms need not be all-or-nothing, and if political conditions are such that large reforms are not feasible, it may be worth implementing the feasible reforms."

Despite some setbacks, financial liberalization advanced steadily over the past 25 years

(Index: 0 = fully repressed; 18 = fully liberalized)



Data: IMF

Abiad and Mody find that policy reform becomes more likely under certain conditions. Governments use balance of payments crises, in particular, to push through reforms. The "honeymoon period"—an incumbent's first year in office—may also be a period when policy reform is possible. However, in such fluid situations—especially during banking crises—policymakers also need to guard against backsliding, the authors counsel. ■

Further details may be found in IMF Working Paper No. 03/70, "Financial Reform: What Shakes It? What Shapes It?" by Abdul Abiad and Ashoka Mody. Copies of the paper are available for $15.00 each from IMF Publication Services. Please see page 207 for ordering details. The full text is also available on the IMF's website (www.imf.org).

Selected IMF rates

Week beginning	SDR interest rate	Rate of remuneration	Rate of charge
June 30	1.52	1.52	2.01
July 7	1.51	1.51	1.99

The SDR interest rate and the rate of remuneration are equal to a weighted average of interest rates on specified short-term domestic obligations in the money markets of the five countries whose currencies constitute the SDR valuation basket. The rate of remuneration is the rate of return on members' remunerated reserve tranche positions. The rate of charge, a proportion of the SDR interest rate, is the cost of using the IMF's financial resources. All three rates are computed each Friday for the following week. The basic rates of remuneration and charge are further adjusted to reflect burden-sharing arrangements. For the latest rates, call (202) 623-7171 or check the IMF website (www.imf.org/cgi-shl/bur.pl?2003).

General information on IMF finances, including rates, may be accessed at www.imf.org/external/fin.htm.

Data: IMF Finance Department

Inflation targeting

The ideal framework for monetary policy?

Many economists strongly advocate inflation targeting as a framework for conducting monetary policy. Under this approach, first adopted by New Zealand in 1989, countries make an explicit commitment to meet a specified inflation rate target or target range within a certain time frame. Proponents of inflation targeting cite its many potential benefits—it can lower average inflation, stabilize output, and lock in expectations of low inflation, which can reduce the inflationary impact of macroeconomic shocks. But is there hard evidence yet that inflation targeting really has helped improve inflation, output, and interest rate performance? A study by Laurence Ball (Professor of Economics, Johns Hopkins University) and Niamh Sheridan (Economist, IMF Institute) argues that the early evidence is inconclusive. They suggest greater experience may be needed before a definitive answer can be reached.

What does experience have to say about the relative merits of inflation targeting? Ball and Sheridan examine 20 industrial, moderate-inflation economies—7 that adopted inflation targeting during the 1990s (Australia, Canada, Finland, New Zealand, Spain, Sweden, and the United Kingdom) and 13 that did not (Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Japan, the Netherlands, Norway, Portugal, Switzerland, and the United States). Because two of the latter group adopted inflation targeting fairly recently—Switzerland in 1999 and Norway in 2000—they are included as nontargeters until those dates and then dropped from the sample.

For each country, the beginning of targeting is defined as the first full quarter in which a specific inflation target or target range was in effect, with the target having been announced publicly at some earlier time. The public announcement is important, because many of the intended effects of targeting, such as those working through expectations, depend on agents knowing that they are currently in a targeting regime. The starting dates range from the third quarter of 1990 (New Zealand) to the second quarter of 1995 (Spain). The targeting period lasts through 2001, except for Finland and Spain, where it lasts through 1998 because of the advent of the euro.

Ball and Sheridan compare each country's performance during its targeting period to its performance during two pretargeting periods—a longer one that began in 1960 and a shorter one that began in 1985. They also compare the 13 targeters to the 7 nontargeters. For the nontargeters, they define the beginning of the "targeting" period as the average start date for the targeters—that is, the third quarter of 1993. The targeting period ends in 1998 for euro countries and in 2001 for noneuro countries, excluding Norway and Switzerland.

Ball and Sheridan also examine periods in which countries are constant inflation targeters, meaning that they have an unchanging target or target range because some benefits of targeting might not arise if the target changes.

Proponents of inflation targeting cite its many potential benefits—it can lower average inflation, stabilize output, and lock in expectations of low inflation, which can reduce the inflationary impact of macroeconomic shocks.

No discernable benefits

This contrast of performance with and without inflation targets finds no evidence, on average, that inflation targeting improves inflation, output, or interest rate behavior. Looking solely at inflation targeters, it finds that performance improved between the period before targeting and the targeting period. Inflation fell and became more stable, and output growth also stabilized. However, countries that did not adopt inflation targeting also experienced improvements around the same time, suggesting that better performance resulted from something other than targeting.

In some areas, both inflation targeters and nontargeters improve over time, but the improvements are larger for targeters. For example, average inflation fell for both groups between the pretargeting and targeting periods, but the average for targeters went from above that of nontargeters to roughly the same. Similar findings have led other researchers to argue that inflation targeting promotes "convergence"—that is, it helps poorly performing countries catch up with countries that are already doing well.

The results of the Ball and Sheridan study, however, do not support even this modest claim of benefits from targeting. A problem arises because of "regression to the mean." They point out that a switch to targeting was most attractive to countries with poor performance under their previous policies. That is, poor performers in the pretargeting period tend to improve more than good performers, and if inflation targeters are poor initial performers, they will improve more than nontargeters, even if targeting does not affect performance. Throughout their study, Ball and Sheridan control for such biases.

Inflation. There is also little cross-country evidence that targeting has reduced the average level, variability, or persistence of inflation. In almost every country, average inflation is lower in the targeting periods than in the pretargeting periods, and, on average, targeters converged to the lower inflation levels of nontargeters.

The cross-country variation is smaller in the targeting periods, and cross-country averages indicate that the inflation-targeting group had higher inflation than the nontargeting group before targeting was introduced. Here, as elsewhere, the comparison between the constant and nonconstant inflation-targeting groups is similar. For the shorter pretargeting sample (starting in 1985), average inflation fell by 2.2 points more in targeters than in nontargeters. However, most of this apparent effect is illusory: it reflects the fact that targeters had higher initial inflation, and there is regression to the mean. For a given initial level, the decrease in inflation looks similar for targeters and nontargeters.

There is no evidence that targeting influences inflation variability, which fell for all groups of countries during the targeting period and, at all times, was lower for nontargeters than for targeters.

Inflation persistence decreased over time—inflation became more "anchored." But this holds for both targeting and nontargeting countries and indicates, once again, that there is no evidence that targeting affects inflation behavior.

Output growth and variability. There is no obvious theoretical reason why inflation targeting should affect average output growth. It might, if it affects inflation behavior, because inflation affects economic growth. But the study already points to negative findings in this area. The results show that average growth increased in inflation-targeting countries after targeting began, and decreased slightly in nontargeting countries. But these estimates are imprecise because growth rates vary greatly across individual countries, say the authors. Also, inflation targeting would also have to be observed over longer periods to determine whether it really affects average growth.

Some economists argue that "flexible" inflation targeting stabilizes output as well as inflation. Others suggest that targeting makes output more variable. Once again, Ball and Sheridan find that targeting simply does not matter. During the short pretargeting and the targeting period, output is more stable in nontargeting countries than in targeting countries. But, for both groups, output becomes more stable during the targeting period.

Interest rates. The study next examines the level of long-term interest rates, which should reflect inflation expectations, and the variability of short-term rates, which might indicate the activism of monetary policy. It finds that inflation targeters and nontargeters have experienced similar reductions in inflation since the early 1990s. Targeting proponents argue, however, that targeting locks in low inflation permanently, while adverse events might reignite inflation under other regimes. If the public believes this argument, then targeting should reduce both expected inflation and inflation uncertainty, which should, in turn, reduce long-term interest rates.

Ball and Sheridan look for this effect in OECD data on 10-year government bond rates, but their results are highly reminiscent of those for inflation and output. If better performance is defined by lower interest rates, then nontargeters always do better than targeters. In fact, both groups improved during the targeting period. The improvement is somewhat larger for targeters, but the effect of targeting disappears when the results are controlled for regression to the mean.

Do inflation-targeting central banks use their policy instruments (such as interest rates) differently from nontargeters? If they respond more strongly to inflation movements, then short-term rates should become more volatile (unless targeting stabilizes inflation, an effect that the study fails to find). Once again, the results follow the same pattern: interest-rate volatility is lower for nontargeters than for targeters and falls over time for both groups. The decrease appears larger for targeters only if the regression to the mean is ignored.

No harm done

How should these results be interpreted? One possibility, say Ball and Sheridan, is that targeters and nontargeters pursue similar interest-rate policies. Indeed, some observers have suggested that the United States is a "covert inflation targeter." This view is supported by the study's finding of similar interest-rate volatility for targeters and nontargeters.

If targeting does not change the behavior of policy instruments, it is not shocking that economic outcomes do not change either. This result suggests, however, that the formal and institutional aspects of targeting—such as public announcements of targets, inflation reports, and enhanced independence of central banks—are not important. Nothing in the data suggests that covert targeters would benefit from adopting explicit targets.

To be clear, Ball and Sheridan do not present a case against inflation targeting: they find no evidence that it does any harm and suggest it may provide benefits that do not lend themselves to measurement. For example, aspects of inflation targeting, such as more open policymaking, may be desirable for political rather than economic reasons. In addition, inflation targeting might improve economic performance in the future. The economic environment has been fairly tranquil during the inflation-targeting era, so many central banks have not been tested severely.

Trauma rather than tranquility may determine whether inflation targeters handle these challenges better than other policymakers.

Perhaps future policymakers will face 1970s-size supply shocks or strong political pressures for inflationary policies. Trauma rather than tranquility may determine whether inflation targeters handle these challenges better than other policymakers. ■

Copies of IMF Working Paper No. 03/129, "Does Inflation Targeting Matter?" by Laurence Ball and Niamh Sheridan, are available for $15.00 each from IMF Publication Services. Please see page 207 for ordering details. The full text is also available on the IMF's website (www.imf.org).

Fiscal policy and underground economies: there may be no easy answers

There is a widespread belief that underground economies arise from high statutory tax rates and excessive, but poorly enforced, government regulation. Whatever their causes, underground economies can impede macroeconomic performance and undermine economic growth. A recent IMF Working Paper, "An Analysis of the Underground Economy and Its Macroeconomic Consequences," by Era Dabla-Norris and Andrew Feltenstein, explores the interaction between fiscal policy, underground economies, and economic performance.

Underground economies—that part of the economy operating outside the reach of official registration and taxation—can have a substantial and costly impact on the performance of many developing and transition countries. Sizable underground economies, for example, can siphon off considerable revenue, adversely affect public finances, and significantly diminish the quality of public administration. Lost government tax revenues can also translate into larger budget deficits that, in turn, can lead to higher public borrowing requirements and crowd out private investment.

In addition, the illegal nature of underground activity often deters private investment and constrains growth. The efforts that firms make to avoid detection can generate distortions and result in misallocated resources. Moreover, firms operating underground are typically unable to use market-supporting institutions, such as the judicial system, and may, as a result, underinvest. Clearly, one important cost imposed by the inability to enforce legal contracts is limited access to formal credit markets.

Sizable underground economies can siphon off considerable revenue, adversely affect public finances, and significantly diminish the quality of public administration.

Causes and costs

What are the consequences of the underground economy for public finances and aggregate economic performance? In particular, what encourages businesses to enter the underground economy, and what role can appropriate tax rates and interest rates play in encouraging firms to exit the underground economy and join the formal economy?

Using a simple general equilibrium model, this study explores the link between tax rates, access to credit, and the size of the underground economy. It assumes that firms will enter and exit the underground economy when it is most advantageous to do so and models the benefits derived from operating in the underground economy in terms of a firm's desire to evade corporate taxes. In many developing countries, taxes on formal firms constitute a major source of government revenues, and narrow tax bases for formal firms often result in very high marginal tax rates. Recent empirical work on developing and transition economies has found that a high corporate tax burden, combined with an ineffective and discretionary application of the tax system and other regulations, influences the size of the underground economy.

The study's model also assumes that tax evasion exacts a cost. The greater the extent of the tax evasion, the lower the implied value of firm assets, and the more credit is rationed by the banking system. Loan applications require official documentation, especially if collateral is needed. Economic activity hidden from the tax authorities is unlikely to be disclosed on loan applications. And if banks do not know a firm's true assets and do not have legal access to them in the event of a default, they are very likely to extend credit solely on the basis of the firm's taxable assets.

For the purposes of this study, the model also assumes that firms operate partially in the formal economy and partially underground. In deciding to what extent it will operate in the underground economy, a firm faces a trade-off between its ability to evade taxes and its desire to use bank financing. The part of its operation that takes place in the legal economy pays taxes and can, therefore, borrow from the banking system. The part that remains underground

Photo credits: Denio Zara, Padraic Hughes, and Michael Spilotro for the IMF, pages 201–03 and 213–16; and Andres Stapff for Reuters, page 204.

neither pays taxes nor borrows. Since the size of the underground economy depends upon both inherent and external variables, such as tax rates and interest rates, the model also is able to gauge the impact of policy changes.

Policy implications and options

To simulate policy options and how firms might respond, the study uses stylized data for Pakistan, a country that has faced severe problems from tax evasion and has had parallel markets for both goods and financial assets. In these circumstances—especially given the country's difficulties with its budget deficit—economic reform is likely to rely on efforts to reduce the various forms of tax evasion.

A policy simulation that incorporates actual tax rates shows that entry into the underground economy can have a cyclical nature and be sensitive to the rate of return on investment changes. A rise in the corporate tax rate, as a possible anti-budget deficit policy, produces a counterproductive result. A large amount of production flees to the underground economy, thereby lowering the tax base and actually increasing the deficit. Aggregate investment in the economy and, hence, growth, is lowered due to greater credit rationing by the banking system. These findings suggest that even moderate tax increases can lead to entry into the underground economy and to credit rationing, which would have a significant recessionary impact on the economy.

A second policy experiment considers a reduction in the corporate tax rate. This policy does, indeed, eliminate underground activity and lowers credit rationing, but the rate of capital formation does not exhibit a significant increase. This is due to the fact that the budget deficit increases substantially, leading to a crowding out of private investment by public borrowing. The corresponding rapid rise in the interest rate tends to outweigh the beneficial impact on investment of lower taxes. At the same time, the economy exhibits high rates of inflation and a loss of foreign reserves. What this means, the study concludes, is that the low tax regime is not sustainable over the long run, due to increases in the budget and trade deficits, even though it eliminates the underground economy and reduces credit rationing.

Where does that leave policymakers? In the absence of any flexibility to adjust expenditures, it is possible that an economy may have to accept some underground activity—that is, a degree of tax evasion—as part of an otherwise acceptable tax program. ■

Era Dabla-Norris
IMF Institute

Copies of IMF Working Paper No. 03/23, "An Analysis of the Underground Economy and Its Macroeconomic Consequences," by Era Dabla-Norris and Andrew Feltenstein, are available for $15.00 each from IMF Publication Services. See page 207 for ordering details. The full text of the Working Paper is also available on the IMF's website (www.imf.org).

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Interview with Arnold Harberger

Sound policies can free up natural forces of growth

The Wall Street Journal *once called Arnold Harberger the "godfather of free market economics in Latin America." How did a boy from Irvington, New Jersey, assume this role? According to Harberger, it started with high-school Latin. When the time came to pick a foreign language, he chose Spanish, thinking it would save him the most work. "My later interest in Latin America arose partly from my knowledge of Spanish. Everything else followed." What followed was a lifelong involvement in providing policy advice to Latin America, directly and through his numerous students. Currently a professor at UCLA, Harberger spent nearly 40 years at the University of Chicago making path-breaking research contributions in the fields of public finance, cost-benefit analysis, and international economics. Prakash Loungani speaks with Harberger about that long and illustrious career.*

LOUNGANI: Are you worried about the future of free market economics in Latin America?

HARBERGER: No. Some people interpret recent events as anti-neoliberal or anti-Washington Consensus, but these are hiccups in the broad move from import substitution toward more liberal, market-oriented policies. Of course, countries have done so at different times, to differing degrees, and not always in a smooth manner.

Take Brazil. The Brazilian miracle of the 1970s was a story of liberalization. The seeds were sown in 1964 when Roberto Campos was the key minister. He was followed by Antonio Delfim Neto, another liberalizing minister. If you look at everything that was happening—the opening of the internal capital market, the wide-

Harberger: "One big micro lesson for governments is to eliminate lying prices."

spread use of monetary instruments, and so on—it was very much a story of freeing up the economy. Trade barriers were lowered too, though progress was uneven. After a few years of transition, Brazil had clear sailing for a decade with liberal policies and good growth.

LOUNGANI: How do you assess Brazil's prospects now?
HARBERGER: From what I understand and have read, Mr. Lula has handled his presidency very well so far. He has certainly belied the worst fears that were being expressed before he took office. He could be on a track for which we have precedents from the region. After all, [Chilean President] Ricardo Lagos is a socialist and yet one of the most liberalizing presidents we've had in Latin America in the past couple of decades.

LOUNGANI: You've had a long association with Chile.
HARBERGER: Yes, I first went there in 1955. At the time, I sent a letter to my colleagues noting my shock at the distortions they had in place—tariffs as high as 200 or 300 percent; price controls; a system of all kinds of approvals by government agencies for almost any action by the private sector. It was a pretty distorted, old-fashioned, and authoritarian economy. The course of policies was up and down for the next 10–15 years.

Then there was the big blow from Allende. Distortions went beyond all bounds. Just one example says it all: at one point there were 13 different official exchange rates, ranging from 25 escudos to the dollar to 1,325 escudos to the dollar. It boggles the mind. There is nothing more homogeneous than a dollar. Each dollar, for every single purpose, is just as good as each other dollar. Why should there have been so many different prices?

LOUNGANI: Could we talk about Mexico's experience?
HARBERGER: Mexico went through a very interesting era from 1955 to 1970 or so. Rodrigo Gomez and Antonio Ortiz Mena formed a wonderful economic team that had IMF discipline written all over it, without the IMF being there. That they had successful growth shows a country can do pretty well getting macro policies in shape even when micro policies are messed up.

LOUNGANI: But then the macro policies also broke down, and they went through the debt crisis.
HARBERGER: Right, but starting in about 1989—the tequila crisis notwithstanding—they got the macro back in shape. The struggle to get the micro in shape is ongoing. Take, for example, land reforms. There's been progress, but even now Mexico doesn't really have an open market in agricultural land by any means. On the micro side, there are still major agendas to be dealt with.

LOUNGANI: Your views on the Argentine tragedy?
HARBERGER: The overriding issue in Argentina was the experience of three near-hyperinflations in less than 20 years. That left people completely distrustful of Argentine money. A fixed exchange rate was the only plausible way of giving people some degree of confidence where there had been none. They needed a special law because they had tried fixed exchange rates a number of times already in the past and had always violated them.

The convertibility law was thus the legacy of these prior episodes. The conditions in which the law came into effect were such that the real exchange rate was not a matter of choice—if they had made the exchange rate two pesos to a U.S. dollar, the price level would have been twice as high; if they had made it four to one, the price level would have been four times as high. So it was an inherited real exchange rate. This is unlike, say, Mexico, which at the time of their so-called pact started out with a big devaluation first to allow for a future drift toward appreciation in the real exchange rate. The Argentines had their hands tied.

LOUNGANI: But initially they did well.
HARBERGER: They were lucky in the early 1990s that the flow of capital into Argentina was sufficient to validate the real exchange rate they were saddled with. But even before the tequila crisis of

1994, that real exchange rate was looking not too good.

Evidence? Unemployment rates were already 13 percent before the Mexican crisis. That was always a sign that the real exchange rate was out of whack. Too many economists saw one problem—the fiscal deficit. But solving the fiscal problem would have made the unemployment problem worse. That is the demonstration that the real exchange rate problem was not being diagnosed; too many people zeroed in exclusively on the fiscal problem.

LOUNGANI: If the real exchange rate problem had been diagnosed, what could have been done about it?

HARBERGER: With the convertibility law in place, doing something about the real exchange rate problem was always difficult. I don't want to claim that I had an answer in advance. I did call attention to the real exchange rate disequilibrium all through this period, but I did not try to put into the mouths of the government people that they should devalue or anything like that.

In hindsight, when things were looking pretty good in 1997–98, Argentina could have opened up a band in which in the initial weeks and months the Argentine currency would have appreciated. That's the way to do it. If you are going to go flexible, you can get over the biggest hump if you can flex in that direction. In retrospect, that would have been the easiest way to have elided from the convertibility law into something more flexible.

LOUNGANI: Let's talk in more general terms now about the link between growth and economic policies. A natural place to start is your 1998 Presidential lecture to the American Economic Association.

HARBERGER: For the lecture I used the modern breakdown of the sources of growth—the increment in labor and improvements in its quality, the rate of investment in new capital and the productivity of capital, and real cost reductions.

Real cost reductions are the single element that most sharply distinguishes the big success stories from the big failures. Cost reductions occur in a thousand different ways: finding a more efficient way to run a taxi fleet is quite separate from a better way to bake a cake, and that's different from a cheaper way to make steel. Real cost reductions are not easily predictable. The industries or activities that experience reductions in one decade tend not to be the ones that experience it in the next decade, and so on.

LOUNGANI: How do we bring in the role of economic policies?

HARBERGER: When you say a policy helps growth, ideally you should be able to say what the link is between that policy and these different sources of growth. Certainly bad policies can screw up growth—we have plenty of evidence of that. Bad policies can stop investment from happening or make the return on investment low. But can you predictably make the rate of return on an investment jump to 20 percent by doing two or three things on the policy front? No. When you get right down to business, there aren't too many policies that we can say with certainty deeply and positively affect growth.

LOUNGANI: Given this unpredictability, what should the IMF's policy advice be?

HARBERGER: What policies can do is to free up the natural forces of growth and allow them to have their full effect. As we talked about in the case of Mexico and other countries, this means keeping macro policies in shape—fiscal and monetary restraint.

At the micro level, you want decision makers—that is, businesses and households—to perceive as closely as possible the true real cost of what they are producing and the true real price of selling it in the market. If you have an undistorted price structure, including wages and other factor prices, that will tend to be the case.

The more distortions you have, the more you have what my friend Ernesto Fontaine calls "prices that lie." Prices that are the products of 200 percent tariffs and 13 different official exchange rates are perfect examples of prices that lie. That's inimical to entrepreneurs being able to find proper ways to reduce costs. One big micro lesson for governments is to eliminate lying prices.

LOUNGANI: Do those of us who are in the business of giving policy advice—the IMF included—promise too much when we say "do these three things and your growth will be better"?

HARBERGER: It's more a case of the IMF sometimes becoming captive of the political game in the country. You'll see opposition parties saying: "In these recent parlous times, we're having only 4 percent growth. If we were in power, we'd have 7 percent." Opposition parties are forever blaming the government's policies for reductions in growth that stem from totally different causes.

Of course, if the government gets lucky and gets high growth, it, too, claims credit for its policies, even though they may have had little actual impact on the growth rate. That kind of debate pervades the politi-

Opposition parties are forever blaming the government's policies for reductions in growth that stem from totally different causes.

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cal arena in just about every country. It's hard for the IMF to keep a distance from that debate when it's deeply involved in a give-and-take with the government to get agreement on a program.

I like to sell good policies another way. Good policies are like the person who takes good care of himself, eats a good diet, and exercises regularly. When the flu comes around, who is most likely to survive or get better faster? Good policies help you avert disasters that might otherwise happen or surmount unavoidable disasters at lower total cost. That is a message that I think can be sold all the time and almost everywhere, even if we cannot promise that particular growth rates will follow from a given set of policies.

Harberger: "Good policies help you avert disasters that might otherwise happen or surmount unavoidable disasters at lower total cost."

LOUNGANI: The effects of some economic policies are better understood thanks to your academic contributions. You did path-breaking work on whether capital or labor bears the burden of the corporate income tax.

HARBERGER: There are interesting developments to report on that front. In the closed-economy case that I analyzed in the 1960s, the natural result is that capital bears the burden of the tax and can easily bear more than the full burden. But my students and I have now analyzed the open-economy case, which is more applicable to today's global economy. The result in this case is that labor bears the burden and can easily bear more than the full burden.

LOUNGANI: That's quite a flip. Why does it happen?

HARBERGER: Think of the so-called "tradable goods" sector of an open economy, the sector that produces goods that are traded on a world market. The prices of these goods are determined in the world market. And, with an open economy, the rate of return to capital is largely determined in the world market, because capital can flow from country to country in search of the highest return. Now the government gets in there and tries to impose a corporation tax on capital. Well, who bears the burden? Capital can move across national boundaries to try to escape the tax. So it's labor, the factor of production that can't easily escape national boundaries, that ends up bearing the burden of the tax.

LOUNGANI: Given this result, what advice can we offer developing countries on how to tax corporations?

HARBERGER: They should equalize their rates with those of the rich nations—somewhere near 30 percent. Keep in mind that many developing countries have multinationals living in them. If they don't tax the multinationals, the home country will. So they need the corporation tax to avoid giving revenue away. But to keep their own labor from bearing the burden of the tax, countries can integrate the corporation tax and the individual income tax. Essentially, you rig it so that for the local taxpayer, the tax paid at the corporate level is really just the withholding on his personal tax on that income. That's what countries like Chile have tried to do.

LOUNGANI: You revolutionized measurement of deadweight losses from distortions—they're now called "Harberger's triangles." But despite better quantification of the loss from trade distortions, policies don't seem to change. Think of the deadweight loss from tariffs and subsidies that rich nations have on agricultural products.

HARBERGER: At the University of Chicago in the 1950s, Theodore W. Schultz, who revolutionized the study of agricultural economics, was forever railing against U.S. policies of subsidizing our own agriculture, encouraging overproduction, and then dumping the surplus on the world market.

And it's not just the United States. The Danes, for example, heavily protect their agriculture. The result? I've been buying Danish blue cheese for years in Los Angeles at the very affordable price of $3.50 a pound! D. Gale Johnson, and later Anne Krueger, showed that cost of U.S. sugar policies was a billion dollars a year even at that time.

The main beneficiaries are a small number of rich sugar farmers in the United States. But the cost of such policies to developing countries is enormous, because a large fraction of their population is in the agricultural sector. ■