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Research Summaries

Interest Rate Rules for Developing Economies

Alessandro Rebucci

"Rules" rather than "discretion" may have conquered inflation worldwide over the past 30 years or so, but when it came to implementation, which types of monetary rules guided policymakers, or should have guided them? Following the seminal work by Taylor (1993), a large literature has documented that good monetary policies in advanced economies may be represented by simple interest rate rules. With a broad-based shift toward monetary stability in the developing world, researchers have started asking which interest rate rules may work best in those economies. This article summarizes recent IMF research in this area and highlights some issues for future analysis.

The literature on advanced and open economies—based on models with monopolistic competition and price rigidity (the standard new-Keynesian framework)—concludes that there is no role for the exchange rate in the interest rate rule unless pass-through to import prices is incomplete. Targeting consumer price index inflation already controls for exchange rate changes (Batini, Harrison, and Millard, 2003; and Corsetti and Pesenti, 2005).

Developing economies, however, seldom allow their currencies to float freely, even when the exchange rate regime is flexible. So, how should the interest rate rule respond to the exchange rate in these economies? *(continued on page 2)*

Labor Market Performance and Policy Effectiveness

Martin Schindler

A flexible and dynamic labor market is central to a country's economic growth and to most people's economic fortunes. However, the dynamics of the labor market also expose individuals to employment and earnings risk. Not surprisingly, many countries have implemented policies to limit such risks while enhancing overall labor market performance. A large body of empirical and theoretical research at the IMF is devoted to understanding the determinants of labor market outcomes and the role played by labor market policies. This article provides a selective review of recent IMF research in this area. *(continued on page 4)*

Interest Rate Rules for Developing Economies

(continued from page 1)

Parrado (2004), calibrates a small open-economy version of the new-Keynesian model to an emerging economy and finds that including the exchange rate in the interest rule is desirable only if domestic monetary shocks dominate. Laxton and Pesenti (2003) calibrate a richer version of the standard framework and, even when pass-through is incomplete, find no gains from including the exchange rate in the interest rule. The high degree of openness and the very small size here dominate pass-through considerations.

However, Morón and Winkelried (2005) analyze a small open economy with liability dollarization and find that, unlike in the standard case, there is a clear role for the exchange rate in the interest rate rule. Elekdag and Tchakarov (2004) also find that rules implementing fixed exchange rate regimes deliver higher welfare than rules implementing flexible exchange rate regimes if there are balance sheet effects. Ghironi and Rebucci (2002) analyze alternative interest rate rules in a small open economy in which currency risk is a distinct source of volatility from, but correlated with, default or credit risk. They find that the welfare gains of the rule implementing official dollarization exceed those associated with the flexibility value of rules supporting other types of fixed exchange rate or inflation targeting regimes.

The literature on advanced and open economies generally assumes that the interest rate rule is fully credible. This cannot be taken for granted in developing economies, where credibility is often the problem. Rabanal (forthcoming) shows that if agents underestimate the true parameters of the interest rate rule, the central bank needs to react more aggressively to deviations of its objectives from targets, including inflation targets. Isard, Laxton, and Eliasson (2001) study interest rate rules for inflation targeting in a small macro model with uncertainty related to the nonaccelarating inflation rate of unemployment (NAIRU) and alternative specifications of the evolution of policy credibility. They find that when inflation expectations and credibility respond endogenously to the policymaker's track record of inflation, forward-looking interest rate rules (i.e., rules based on future inflation) work better than backward-looking rules (i.e., rules based on past inflation). Interestingly, both Ghironi and Rebucci (2002) and Laxton and Pesenti (2003) find that interest rate rules for inflation targeting that place a larger coefficient on inflation perform better in quite different settings.

Model uncertainty is more pervasive in developing economies because of continued structural change. The problem is that interest rate rules that have desirable theoretical properties might induce undesirable outcomes when implemented in slightly different economic environments. Batini and others (forthcoming) show that designing policy rules robust to indeterminacy has negligible welfare costs when the central bank is not excessively forward-looking in response to inflation. Demertzis and Tieman (2004) investigate the conditions under which robust rules are preferable to optimal rules when there is model uncertainty. They find that the higher the expected loss from applying robust rules to an incorrectly specified model, and the more risk adverse the policymaker, the more the robust rules are preferable to optimal rules.

Monetary policy implemented by means of interest rate rules might be inconsistent with the IMF's traditional monetary conditionality. Blejer and others (2001) discuss the extent to which traditional IMF conditionality—a ceiling on net domestic assets of the central bank or base money and a floor on net international reserves—can be reconciled with the requirements of an inflation-targeting framework with the money market interest rate as the instrument. They conclude that the traditional monetary performance criteria are not well suited to monitor monetary policy implementation, and they suggest that simple interest rate rules (such as a Taylor rule) could be used to evaluate the policy stance and trigger consultations with the authorities on the appropriate level of the short-term interest rate. There are cases, however, in which it remains desirable to also monitor monetary aggregates, such as when the zero-bound in the nominal interest rate is binding or when asset price inflation or deflation are sources of concern for the policymaker.

Several issues remain open for future research, but a few stand out for their operational relevance. A high degree of interest rate smoothing is often a feature of optimal monetary policies for advanced economies "under discretion," as it enables replication of "commitment" outcomes by inducing history-dependence in policy behavior. It would be interesting to see how these results would be altered by a high level of external volatility, including sudden stops of capital flows, which, all else being equal, might require relatively less interest rate persistence (see Espinosa-Vega and Rebucci, 2003). More generally, implementing monetary policy by interest rate rules assumes high substitutability between alternative forms of households and firm financing. So it would be useful to understand the extent to which standard interest rate rules would fare in the presence of financially-constrained households and firms, such as when the only source of financing is the domestic banking system.

References

Batini, Nicoletta, Richard Harrison, and Stephen P. Millard, 2003, "Monetary Policy Rules for an Open Economy," *Journal of Economic Dynamics and Control*, Vol. 27 (September), pp. 2059–94.

Batini, Nicoletta, Alejandro Justiniano, Paul Levine, and Joseph Pearlman, "Robust Inflation-Forecast-Based Rules to Shield Against Indeterminacy," IMF Working Paper, forthcoming.

Blejer, Mario I., Alfredo M. Leone, Pau Rabanal, and Gerd Schwartz, 2001, "Inflation Targeting in the Context of IMF-Supported Adjustment Programs," IMF Working Paper 01/31; also published in *IMF Staff Papers,* 2002, Vol. 49, No. 3, pp. 313–38.

Corsetti, Giancarlo, and Paulo Pesenti, 2005, "The Simple Geometry of Transmission and Stabilization in Closed and Open Economies," Federal Reserve Bank of New York Staff Report No. 209, May (New York: Federal Reserve Bank of New York).

Demertzis, Maria, and Alexander F. Tieman, 2004, "Robust versus Optimal Rules in Monetary Policy: A Note," IMF Working Paper 04/96.

Elekdag, Selim, and Ivan Tchakarov, 2004, "Balance Sheets, Exchange Rate Policy, and Welfare," IMF Working Paper 04/63.

Espinosa-Vega Marco, and Alessandro Rebucci, 2003, "Retail Bank Interest Rate Pass-Through: Is Chile Atypical?" *Analysis and Economic Policies Series*, Vol. 7, October (Santiago: Central Bank of Chile), pp. 147–82; also issued as IMF Working Paper 03/112.

Ghironi, Fabio, and Alessandro Rebucci, 2002, "Monetary Rules for Emerging Market Economies," IMF Working Paper 02/34.

Isard, Peter, Douglas Laxton, and Ann-Charlotte Eliasson, 2001, "Inflation Targeting with NAIRU Uncertainty and Endogenous Policy Credibility," IMF Working Paper 01/07; also published in *Journal of Economic Dynamics and Control,* 2001, Vol. 25, pp. 115–148.

Laxton, Douglas, and Paulo Pesenti, 2003, "Monetary Rules for Small, Open, Emerging Economies," *Journal of Monetary Economics,* Vol. 50, No. 5, pp. 1109–46.

Morón, Eduardo, and Diego Winkelried, 2005, "Monetary Policy Rules for Financially Vulnerable Economies," *Journal of Development Economics,* 2005, Vol. 76, pp. 23–51; also published as IMF Working Paper 03/39.

Parrado, Eric, 2004, "Inflation Targeting and Exchange Rate Rules in an Open Economy," IMF Working Paper 04/21.

Rabanal, Pau, "Monetary Policy Uncertainty," IMF Working Paper, forthcoming.

Taylor, John B., 1993, "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy,* Vol. 39 (December), pp. 195–214.

IMF Study

Adopting the Euro in Central Europe: Challenges of the Next Step in European Integration

Susan Schadler, Paulo Drummond, Louis Kuijs, Zuzana Murgasova, and Rachel van Elkan

The first wave of transition countries to join the European Union (EU) are turning their attention to the next step in European integration—replacing national currencies with the euro. This Occasional Paper examines the economic developments and policy challenges in this process. The focus is on five central European nations that joined the EU in May 2004—the Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia—and for which the change will entail a move from a flexible to a fixed exchange rate regime.

Accession to the EU implies a commitment to adopt the euro, although countries can choose when to request to do so. This study examines arguments for and against early euro adoption, the macroeconomic and structural preconditions for a successful experience in the euro area, and more narrowly, the policy frameworks needed to achieve the Maastricht criteria. The authors conclude that participating in the euro area will yield benefits through higher exports and faster economic growth, provided structural characteristics are broadly in line with the other EU economies. Countries will, however, face potential vulnerabilities inherent in relinquishing monetary autonomy, such as the risks of fixing the exchange rate at an inappropriate level and having to cope with large and volatile capital flows and possible credit and demand booms.

Among the conclusions of the study are that policies should largely be in place to meet the Maastricht criteria before entering the rather exacting framework of ERM2 (an exchange rate band arrangement designed to test exchange rate stability). The five countries score relatively well in terms of labor market flexibility, but substantial progress is needed with fiscal adjustment, and maintaining a high standard of financial sector supervision will be critical. With careful preparation in these areas, the flexibility and resilience of the economies should provide ample means for adjusting to country-specific shocks in the absence of monetary policy.

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Labor Market Performance and Policy Effectiveness

(continued from page 1)

Concern about unemployment ranks high on the agenda of most policymakers. As unemployment is the result of both inflows and outflows, one way to try to reduce it is to restrict inflows by making it more difficult for firms to lay off workers. However, the net effect of such a policy is ambiguous: dismissal restrictions may decrease the flow from employment into unemployment, but the reduced flexibility of firms to adjust to changing economic conditions may also diminish their incentive to create new jobs, and thus reduce the flows out of unemployment. This conceptual ambiguity is reflected in the literature. On the one hand, a study by Garibaldi and Mauro (2002) of 21 developed countries finds that a laissez-faire policy of low dismissal costs and low taxation is associated with higher net employment growth. On the other, using a calibration approach, Takizawa (2003) finds that dismissal restrictions may have increased employment in Portugal. Still, he calculates substantial welfare losses associated with dismissal restrictions because the inability of companies to lay off workers in response to adverse shocks has resulted in less productive jobs, on average.

The potentially negative effects of restricting dismissals may be mitigated if complemented by measures to increase the flow into employment. In a search model, Heijdra and Ligthart (2002) show that a combination of a subsidy for hiring and a tax on firing increases employment and, under some conditions, welfare. Similarly, in a sample of 15 industrial countries, Estevão (2003) finds that subsidies to job creation have supported employment growth. However, he notes that a partial focus on employment outcomes is ill-suited for policy evaluation because it omits the financing side. Indeed, Zhou (2005) finds that higher income tax rates may have substantially reduced employment in Belgium.

While most labor market policies attempt to influence market outcomes by changing the incentives and constraints of firms and workers, some governments try to increase employment more directly through large-scale public sector hiring. However, as noted by Demekas and Kontolemis (1999), government wage, benefit, and employment decisions, because they are not taken on a profit-maximizing basis, may have a substantial negative impact on aggregate labor market performance and unemployment. This makes government employment undesirable as a policy instrument. Focusing on countries of the Gulf Cooperation Council, Fasano and Goyal (2004) conclude that generous and easily available public sector jobs inhibit human capital accumulation and constrain competitiveness in the nonoil sector. More generally, Schiff and others (2001) note that shedding public sector labor and creating private sector jobs are key challenges facing transition economies. Brixiova and Yousef (2000) examine the appropriate pace for reducing such public sector employment in a matching model with on-the-job search.

In addition to employment issues, policymakers are also concerned about the wage structure. Some studies focus on wage inequality, which appears to have increased over time in many countries, including Poland (Keane and Prasad, 2002) and the United Kingdom (Prasad, 2002), and both within and between skill groups, pointing toward increased skill premia. An exception to this trend is Germany, where Prasad (2004) finds little change in inequality over time. Rigid relative wages, he argues, have resulted in reduced employment rates among the unskilled, rather than increased wage inequality, in the face of relative demand shifts in favor of skilled workers. Decressin and Decressin (2002) support the view that German wages are more rigid than those in the United States or the United Kingdom. The possibility of a trade-off between wage inequality and unemployment is consistent with Porter (2004), who investigates the effects of a wage compression policy in Mauritius through a calibration exercise. He finds that even relatively minor interventions have increased labor turnover and unemployment, and made the economy more susceptible to adverse productivity shocks.

"The potentially negative effects of restricting dismissals may be mitigated if complemented by measures to increase the flow into employment."

Other studies focus on wage risk. In a theoretical model, Chami and Fischer (2000) examine the impact of private transfers, such as cross-border remittances, on domestic labor markets. They find that private transfers act as partial insurance and induce firms to shift risk to risk-averse workers, thereby reducing aggregate welfare. Rogerson and Schindler (2002) feed empirical estimates of income risk in the United States into a dynamic general equilibrium model and focus on optimal policy when insurance markets are incomplete. They find that government-sponsored severance payments dominate standard unemployment insurance systems and can deliver the first-best outcome.

Kandil and Aghdas Mirzaie (2003) explore some of the international dimensions of labor market outcomes. According to their study, appreciation of the dollar, while negatively affecting aggregate labor market outcomes, may improve employment conditions in some sectors, particularly those with a high import share. Amiti and Pissarides (2004) consider the nexus between trade liberalization and interregional labor and firm allocation and demonstrate that trade liberalization, through reduced trade costs, may lead to increased industrial agglomeration, more interregional trade, and more efficient labor matching. Trade liberalization often is associated with fear of job losses. However, Amiti and Wei (2004) examine the issue of service outsourcing and find that although it has increased over time, many industrial countries, including the United States, are still net service importers. Using data from the United Kingdom, they also fail to find a negative relationship between service outsourcing and domestic job growth.

Finally, several studies focus on theoretical issues. Underlying many applied studies is the use of the search and matching framework with wage bargaining. One feature of this framework is that labor flows are important determinants of the wage level, which Broersma, den Butter, and Kock (2004) confirm empirically using Dutch data. Using the search framework with wage posting, Gaumont, Schindler, and Wright (2005) construct models that overturn the law of one price and generate robust equilibria with endogenous wage dispersion. Using data from the United Kingdom to study determinants of on-the-job search, Fuentes (2002) finds that on-the-job search increases with job availability and wage dispersion.

References

Amiti, Mary, and Christopher A. Pissarides, 2004, "Trade and Industrial Location with Heterogeneous Labor," IMF Working Paper 04/103; also forthcoming in *Journal of International Economics*.

Amiti, Mary, and Shang-Jin Wei, 2004, "Fear of Service Outsourcing: Is It Justified?" IMF Working Paper 04/186.

Brixiova, Zuzana, and Tarik Yousef, 2000, "Labor Market Adjustment in Transition Economies with On-the-Job Search," *Economics Letters*, Vol. 67, No. 2, pp. 223–29.

Broersma, Lourens, Frank A.G. den Butter, and Udo Kock, 2004, "A Cointegration Model for Search Equilibrium Wage Formation," IMF Working Paper 04/92; also forthcoming in *Journal of Applied Economics*.

Chami, Ralph, and Jeffrey H. Fischer, 2000, "Do Private Income Transfers Increase Labor Market Risk?" *Economics Letters*, Vol. 69, No. 2, pp. 143–51.

Decressin, Anja, and Jörg W. Decressin, 2002, "On Sand and the Role of Grease in Labor Markets: How Does Germany Compare?" IMF Working Paper 02/164.

Demekas, Dimitri G., and Zenon G. Kontolemis, 1999, "Government Employment and Wages and Labor Market Performance," IMF Working Paper 99/55; also published in *Oxford Bulletin of Economics & Statistics*, 2000, Vol. 62, No. 3, pp. 391–415.

Estevão, Marcello, 2003, "Do Active Labor Market Policies Increase Employment?" IMF Working Paper 03/234.

Fasano, Ugo, and Rishi Goyal, 2004, "Emerging Strains in GCC Labor Markets," IMF Working Paper 04/71.

Fuentes, Andres, 2002, "The Determinants of On-the-Job Search: An Empirical Exploration," IMF Working Paper 02/156.

Garibaldi, Pietro, and Paolo Mauro, 2002, "Anatomy of Employment Growth," *Economic Policy*, Vol. 17, No. 34, pp. 67–113.

Gaumont, Damien, Martin Schindler, and Randall Wright, 2005, "Alternative Models of Wage Dispersion," IMF Working Paper 05/64.

Heijdra, Ben J., and Jenny E. Ligthart, 2002, "The Hiring Subsidy cum Firing Tax in a Search Model of Unemployment," *Economics Letters*, Vol. 75, pp. 97–108.

Kandil, Magda, and Ida Aghdas Mirzaie, 2003, "The Effects of Dollar Appreciation on Sectoral Labor Market Adjustments: Theory and Evidence," *The Quarterly Review of Economics and Finance*, Vol. 43, No. 1, pp. 89–117.

Keane, Michael P., and Eswar S. Prasad, 2002, "Changes in the Structure of Earnings During the Polish Transition," IMF Working Paper 02/135; also forthcoming in *Journal of Development Economics*.

Porter, Nathan, 2004, "Wage Compression, Employment Restrictions and Unemployment: The Case of Mauritius," IMF Working Paper 04/205.

Prasad, Eswar S., 2002, "Wage Inequality in the United Kingdom, 1975–99," *IMF Staff Papers*, Vol. 49, No. 3, pp. 339–63.

———, 2004, "The Unbearable Stability of the German Wage Structure: Evidence and Interpretation," *IMF Staff Papers*, Vol. 51, No. 2, pp. 354–85.

Rogerson, Richard, and Martin Schindler, 2002, "The Welfare Costs of Worker Displacement," *Journal of Monetary Economics*, Vol. 49, No. 6, pp. 1213–34.

Schiff, Jerald, Susan George, Erik Lündback, Luc Moers, Alexandra Merlino, and Hélène Poirson, 2001, "Labor Markets in Hard-Peg Accession Countries: The Baltics and Bulgaria," IMF Country Report 01/100.

Takizawa, Hajime, 2003, "Job-Specific Investment and the Cost of Dismissal Restrictions—The Case of Portugal," IMF Working Paper 03/75.

Zhou, Jianping, 2005, "Employment Effects of Reductions in Labor Taxes in a Wage Bargaining Model," *Belgium: Selected Issues*, IMF Country Report 05/76, pp. 21–36.

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Country Study

Indonesia

Ashok Bhundia

The 1997–98 economic crisis marked a turning point for Indonesia after three decades of impressive growth. IMF research has examined the depth of the economic crisis, the channels through which it was propagated, and the quality of the IMF's policy advice to Indonesian authorities. It has also focused on the design of structural reforms and progress in implementing them, including reforms in the banking sector, and on the challenges posed by pressures for greater regional autonomy.

Indonesia's growth performance over the three decades preceding the Asian economic crisis was impressive. GDP per capita increased more than fourfold, and poverty fell substantially. In contrast with some previous studies, Sarel (1997) finds that over 1978–96, growth was driven primarily by relatively strong improvements in total factor productivity rather than by the accumulation of factor inputs.

Indonesia was among the countries hardest hit by the economic crisis, with a decline in output of 13 percent in 1998. A statistical analysis by Cerra and Saxena (2003) finds that all the crisis-affected Asian countries, including Indonesia, suffered a permanent decline in the level of output. The decline was partly explained by a fall in investment caused by the reversal in private capital flows that began in 1997 (Greene, 2002). Financial contagion may also have played a role. Baig and Goldfajn (1999) find evidence of an increase in the co-movement of financial markets across the crisis-affected countries, including Indonesia.

Weaknesses in the banking system help explain the severity and depth of the crisis, which began with the devaluation of the rupiah in July 1997. Many banks had weak capital positions, partly because of connected lending, poor supervision, and lack of enforcement of prudential regulations. Using data up to 1994, Montgomery (1997) had already identified several priority areas for prudential reforms before the onset of the crisis. Pangestu and Habir (2002) trace the origins of the deterioration in the overall health of the banking system to poor sequencing of policy reforms. In particular, they find that financial liberalization in Indonesia was not preceded by strengthening supervisory institutions and prudential regulations, and was carried out in an environment of weak governance. The costs of resolving the banking crisis were extremely high, in part because of protracted delays in policy reforms designed to address weaknesses (Enoch and others, 2001). These delays, in turn, reflected the volatility of Indonesia's political environment, which was more turbulent than in the other crisis countries.

Much progress has since been made in restructuring the banking system, but as noted by Pangestu and Habir (2002), a number of issues remain. These include pressing ahead with further consolidation of the sector, divestment of state ownership, strengthening of prudential regulation, and completion of a bank-wide financial safety net.

The role of the IMF, including its programs and policy advice, has been criticized by various observers. One criticism has regarded the handling of the bank closure program at the outset of the systemic banking crisis. Enoch (2000) draws on four episodes of bank closures between November 1997 and March 1999 to offer some "do's and don'ts" about closing banks in the midst of a systemic crisis. The IMF was also criticized for advising the authorities to raise interest rates sharply to support the external value of the currency. However, Tanner (2000) and Basurto and Ghosh (2001), using different approaches to control for endogeneity, both find that tighter monetary policy during the crisis did not exacerbate but rather eased the pressure on the exchange rate, as was intended. In a preliminary assessment of the IMF-supported program in Indonesia (and other countries), Lane and others (1999) report that monetary programs were initially too loose (and fiscal targets were too tight). But they note that since nobody predicted the severity of the crisis, including private sector analysts, adjustments to programs were made as circumstances evolved and the true extent of the crisis became apparent.

Along with political changes in the wake of the crisis, there has been strong momentum for increased regional autonomy, including passage of decentralization laws in 2001. The implications for fiscal policy, including the allocation of oil revenues, have been profound. Ahmad and Mottu (2003) posit that political economy arguments may provide a rationale for the oil revenue sharing between the central government and oil producing regions that was provided for in the decentralization laws. However, they also note that such revenue sharing arrangements are fraught with risks, including the fact that oil revenues can be volatile and that subnational governments, with narrower tax bases, are less able to adjust to such shocks. More generally, Ahmad and Leruth (2000) study how decentralization in Indonesia could constrain the effectiveness of central government policy. They provide evidence that compensation mechanisms for the poor (such as rice subsidies) are open to "capture" by local governments that have very different incentives than does the central government. Hence, they argue that policies need to be crafted carefully so that they are incentive compatible, especially since monitoring mechanisms are weak.

References

Ahmad, Ehtisham, and Eric Mottu, 2003, "Oil Revenue Assignments: Country Experiences and Issues," IMF Working Paper 02/03.

Ahmad, Ehtisham, and Luc Leruth, 2000, "Indonesia: Implementing National Policies in a Decentralized Context: Special Purpose Programs to Protect the Poor," IMF Working Paper 00/102.

Baig, Taimur, and Ilan Goldfajn, 1999, "Financial Market Contagion in the Asian Crisis," *IMF Staff Papers,* Vol. 46, No. 2, pp. 167–95.

Basurto, Gabriela, and Atish Ghosh, 2001 "The Interest Rate-Exchange Rate Nexus in Currency Crises," *IMF Staff Papers,* Vol. 47, Special Issue, pp. 99–120.

Cerra, Valerie, and Sweta C. Saxena, 2003, "Did Output Recover from the Asian Crisis," IMF Working Paper 03/48.

Enoch, Charles, 2000, "Interventions in Banks During Banking Crises: The Experience of Indonesia," IMF Policy Discussion Paper No. 00/2.

———, Barbara Baldwin, Olivier Frecaut, and Arto Kovanen, 2001, "Indonesia: Anatomy of a Banking Crisis —Two Years Living Dangerously, 1997–99," IMF Working Paper 01/52.

Greene, Joshua, 2002, "The Output Decline in Asian Crisis Countries: Investment Aspects," IMF Working Paper 02/25.

Lane, Timothy, Atish Ghosh, Javier Hamann, Steven Phillips, Marianne Schultze-Ghattas, and Tsidi Tsikata, 1999, *IMF-Supported Programs in Indonesia, Korea, and Thailand,* IMF Occasional Paper No. 178.

Montgomery, John, 1997, "The Indonesian Financial System — Its Contribution to Economic Performance, and Key Policy Issues," IMF Working Paper 97/45.

Pangestu, Marie, and Manggi Habir, 2002, "The Boom, Bust, and Restructuring of the Indonesian Banks," IMF Working Paper 02/66.

Sarel, Michael, 1997, "Growth and Productivity in ASEAN Countries," IMF Working Paper 97/97.

Tanner, Evan, 2000, "Exchange Market Pressure and Monetary Policy: Asia and Latin America in the 1990s," *IMF Staff Papers,* Vol. 47, No. 3, pp. 311–33.

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Books from the IMF

Postconflict Economics in Sub-Saharan Africa: Lessons from the Democratic Republic of the Congo

Edited by Jean A.P. Clément

War and civil war have profoundly affected Africa's development and caused immense suffering to its population—nowhere more than in the Democratic Republic of the Congo (DRC), which was the main battlefield for a series of conflicts that involved seven neighboring countries and directly or indirectly affected an estimated 100 million people. Yet since 2001, the DRC has made significant political and economic progress that, while still fragile, provides lessons for other postconflict countries and the international community.

Postconflict Economics in Sub-Saharan Africa summarizes recent research on conflict and analyzes its causes and economic consequences in Africa, particularly the Great Lakes region. The book focuses on efforts by the Democratic Republic of the Congo, the third-largest country on the continent, to cope with the many challenges along its path from conflict to stabilization and reconstruction. The contributors examine sources of growth in the DRC, issues of financial intermediation and the vicious cycle of hyperinflation and a falling currency, and such challenges as rebuilding institutions, coping with debt overhang, addressing structural bottlenecks, and demobilizing combatants and reintegrating them into society. The book also looks at the impact of the conflict on neighboring countries such as the Central African Republic.

A key lesson from the analysis is that a lasting peace process must include an economic pillar that takes into account the particular characteristics of a country or region exiting from war. Also critical is an early, proactive, and coordinated approach by country authorities, civil society, and the international community to forge consensus on a well-sequenced road map to address the economic situation, secure the timely support required, strengthen the country's administrative capacity, and hold free and transparent elections.

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IMF Conference on Trade and Developing Countries

Zhiwei Zhang

Developing countries find themselves confronted with new challenges and opportunities as a result of the stop-and-go nature of the World Trade Organization's Doha Round. This and other critical issues were the focus of a conference on trade and developing countries held at IMF headquarters in Washington on April 28, 2005. Hosted by the IMF Research Department's Trade and Investment Division, the conference was attended by economists from the IMF, World Bank, U.S. International Trade Commission, and academia.

Peter Neary of University College Dublin opened the conference by discussing how to use index numbers to measure the restrictiveness of trade regimes. Based on a series of papers that Neary coauthored with James Anderson, the presentation clarified the kinds of questions that index numbers are designed to answer, proposed the methods underpinned by theoretical models to construct the indexes, and examined the pros and cons of different approaches to implementing these methods. Neary's discussant, James Cassing of the University of Pittsburgh, questioned some of Neary's results and pointed out that the same restrictive trade regime could produce different values of the Anderson-Neary index depending on the nature of domestic distortions.

Neary's presentation was followed by two papers on the effect of trade reforms: "Trade Liberalization, Intermediate Inputs and Productivity" by Mary Amiti of the IMF and Jozef Konings of Catholic University of Leuven; and "Trade and Growth in the Presence of Distortions" by James Cassing of the University of Pittsburgh and Stephen Tokarick of the IMF. The first paper used Indonesia as a case study to analyze the effects of reducing tariffs (both on inputs and final goods) on firm productivity. It found that the benefits from lower tariffs on intermediate inputs are significantly higher than those from reducing output tariffs, with firms that import inputs enjoying the largest gains due to improved access to foreign intermediate goods. The discussant, Andrei Levchenko of the IMF, suggested that an interesting extension of the paper would be to analyze why some firms choose to import their inputs while others do not.

In the second paper, Cassing and Tokarick argued that, regardless of the ambiguous effect of higher tariffs on economic growth, small countries cannot improve their welfare by enhancing trade protection. This in turn implies that focusing exclusively on a country's growth rate could be misleading. The discussant, Will Martin of the World Bank, suggested that the framework of the paper be used to evaluate the impact of differential rates of growth on sectoral total factor productivity.

The next paper—"When Do Externally Mandated Reforms Work? The Case of Trade Conditions in IMF Programs," by Shang-Jin Wei and Zhiwei Zhang of the IMF—examined the conditions under which trade reforms in IMF-supported programs are more likely to function effectively. The authors found that taking into account a country's willingness to reform ("ownership") is indeed important, and that trade conditionality has no effect on openness in the absence of such ownership. The discussant, Simon Johnson, suggested that it would be useful to disentangle the effect of countries' capacity to reform (institutions) from their willingness to reform (ownership).

In the final paper, "Rags in the High Rent District: Rhetoric and Reality in the Elimination of Textile and Clothing Quotas," Joseph Francois and Julia Woerz of the Tinbergen Institute examined the effects of the end on January 1, 2005, of the 10-year phase-out period of textile and clothing quotas. They found that the phase-out was so backloaded that very few adjustments had taken place, with one consequence being delays in the integration of China and India into the global textile sector. This means that the potential still exists for substantial additional increases in exports from China and India after 2005. Clinton Shiells of the IMF, the discussant, pointed out that the analysis might overestimate the impact of quota elimination, because the residual-based method used is subject to an omitted variable bias.