



### Editor's Note

The first article in this issue provides an overview of the large body of research at the IMF on patterns of trade and the determinants of growth in Africa. The second article, on exchange rate-based stabilization, surveys IMF research on a topic that continues to attract much attention in the context of emerging market economies.

The IMF's role in Russia's transition to a market economy has been the subject of considerable critical scrutiny both within and outside the institution. This issue's country study summarizes extant and ongoing IMF research on Russia, which has contributed directly to the development of the analytical framework for the IMF's work in this country.

Government finance statistics (GFS) is the special topic feature, with details of the forthcoming revised GFS manual, which describes a new set of concepts and procedures for constructing fiscal accounts. This issue also includes summaries of the May 2001 *World Economic Outlook* and the 2001 *International Capital Markets Report*.

— Eswar Prasad

### Research Summaries

## Growth and Trade in Africa

Arvind Subramanian

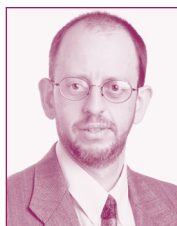


*Raising economic growth in sub-Saharan Africa and the role of trade in achieving this objective have been important areas of research at the IMF. While the focus has mainly been on the policy determinants of growth, many studies have also explored the contributions of good governance, strong institutions, and the external environment. On globalization, the role of regional integration and the extent to which Africa has integrated with the world economy are two key issues in research done at the IMF.*

(continued on page 2)

## Exchange Rate-Based Inflation Stabilization

A. Javier Hamann



*The last decade witnessed an intense debate on the benefits of using the exchange rate as a nominal anchor in disinflation. During the first half of the 1990s, several studies identified and tried to explain empirical regularities that occurred only under exchange rate-based stabilizations (ERBS). Subsequently, the notion of a distinctive ERBS cycle was challenged, mainly on the grounds that the initial findings could not be replicated in larger samples, and that the money-based stabilizations (MBS) used for comparison may not have constituted an adequate control group. New elements have also been brought into the debate, particularly the effects of the use of a particular anchor on the domestic financial system. The debate is far from over, as more sophisticated techniques continue to be used to disentangle the effects of ERBS from those generated by other types of stabilization and closer attention is paid to the issue of whether ERBS constitute inherently riskier strategies. This summary reviews IMF contributions to this debate.*

(continued on page 5)

### In This Issue

Growth and Trade in Africa	1	World Economic Outlook	10
Exchange Rate-Based Inflation Stabilization	1	International Capital Markets Report	11
Call for Papers	4	External Publications by IMF Staff	12
Visiting Scholars	7	IMF Working Papers	14
Country Study: Russia	8	Government Finance Statistics	16

## IMF Staff Papers

### Volume 48, Issue 2

#### Product Variety and Economic Growth: Empirical Evidence for the OECD Countries

Michael Funke

#### Inflation, Money Demand, and Purchasing Power Parity in South Africa

Gunnar Jonsson

#### Exchange Rate Movements and Tradable Goods Prices in East Asia: An Analysis Based on Japanese Customs Data, 1988–98

Shinji Takagi and Yushi Yoshida

#### Military Spending, the Peace Dividend, and Fiscal Adjustment

Hamid Davoodi, Benedict Clements, Jerald Schiff, and Peter Debaere

#### Inflation Targeting in Korea: An Empirical Exploration

Alexander W. Hoffmaister

#### Can Currency Demand be Stable Under a Financial Crisis: The Case of Mexico

May Khamis and Alfredo M. Leone

#### Sectoral Macroeconomic

#### Interdependence: Evidence for Latin America, East Asia, and Europe

Norman Loayza, Humberto Lopez, and Angel Ubide

#### The Complier Pays Principle: The Limits of Fiscal Approaches Towards Sustainable Forest Management

Luc Leruth, Remi Paris, and Ivan Ruzicka

*IMF Staff Papers*, the IMF's scholarly journal, edited by Robert Flood, publishes selected high-quality research produced by IMF staff and invited guests on a variety of topics of interest to a broad audience, including academics and policymakers in IMF member countries.

The papers selected for publication in the journal are subject to a rigorous review process using both internal and external referees. The journal and its contents (including an archive of articles from past issues) are available online at the Research at the IMF website at <http://www.imf.org/research>.

## Growth and Trade in Africa (continued from page 1)

Raising economic growth so that countries can attain higher standards of living and reduce poverty remains the central policy challenge for sub-Saharan Africa. And facilitating the attainment of this objective through rapid trade integration, which is one of the most important vehicles for poorer African countries to “catch up” with their richer partners, is another related challenge.

The question of why growth has been slow in Africa has been extensively studied by numerous academics on the basis of cross-country growth regressions.<sup>1</sup> The causes fall into four broad categories: (1) adverse inheritance of conditions—geographic, social, and human capital; (2) poor macroeconomic and structural reform policies; (3) external and internal shocks; and (4) weak domestic institutions and governance. Unsurprisingly, research at the IMF has focused on the importance of the policy determinants for growth, although increasingly it has extended to nonpolicy factors as well. Ghura and Hadjimichael (1996) find that per capita real GDP growth in Africa is boosted by increases in investment, particularly private investment, and human capital, as well as by policies that promote macroeconomic stability and external competitiveness on a sustained basis.<sup>2</sup> These results are confirmed with an extended dataset by Calamitsis and others (1999).<sup>3</sup> Hernández-Catá (2000) emphasizes the need to deal with three types of risk (macroeconomic instability, nonenforcement of contracts, and armed conflicts) that reduce investment and hinder the prospects for sustained growth.<sup>4</sup> Leite and Weidman (1999) identify corruption as an explanation for slow growth in resource-rich economies, but conclude that neither the degree of corruption nor the growth process is different in Africa than elsewhere.<sup>5</sup>

A substantial portion of the research on growth-related issues has been at the country level.<sup>6</sup> A study on Cameroon by Ghura (1997) confirms the conclusions of Ghura and Hadjimichael (1996) at the aggregate level. Jonsson and Subramanian (2001) use time-series and cross-sectional (across industries) methods to demonstrate the sizable gains to total factor productivity growth from trade liberalization in South Africa. Sacerdoti, Brunschwig, and Tang (1998) build a time series for human capital for eight West African countries, using data on school enrollment and on wage structure by education attainment, and show that schooling in itself is not sufficient to generate growth, and that investment in education must be supported by an environment favorable to the productive application of skills. For Ghana, Bulir (1998) reports that policies that provide an incentive for smuggling account for a substantial share of output variations in the cocoa sector.

A number of studies emphasize the impact on growth of factors other than domestic policies.<sup>7</sup> Fanizza (2001) provides evidence that aid, by financing increased domestic government spending (particularly consumption) and by not facilitating policy adjustment, failed to favorably affect growth in Malawi. Examining the Mauritian growth experience, Subramanian and Roy (2001) conclude that a combination of strong domestic institutions and idiosyncratic factors, particularly its diversity, rather than its unorthodox form of outward orientation, accounts for the country's impressive growth record.

The AIDS epidemic sweeping Africa has prompted research on its impact on growth.<sup>8</sup> MacFarlan and Sgherri (2001) use simulation techniques to show that

AIDS is likely to reduce trend GDP growth by about 3–4 percentage points per year in Botswana. Haacker (2001), based on a neoclassical growth model, estimates that the levels of GDP per capita in Southern Africa will decline considerably—from 5 percent for Mozambique to 13 percent for Botswana—over a 20-year period, owing mainly to a decline in the supply of human capital. For South Africa, real GDP could be as much as 8–17 percent below the level attained under a no-HIV/AIDS scenario.

Reflecting the importance of trade integration as a vehicle for accelerating growth, African countries undertook significant trade liberalization during the 1990s both at the national and regional levels.<sup>9</sup> In fact, the proliferation of regional integration initiatives in Africa has led to a greater focus on making regional integration consistent with and supportive of broad-based liberalization. Subramanian and others (2000) analyze trade developments in eastern and southern Africa, highlighting their macroeconomic aspects and the particular challenges posed by the multiplicity of regional integration efforts. Hernández-Catá and others (1998) describe trade policy developments for the countries that have come together to form the Western Africa Economic and Monetary Union (WAEMU). Masson and Pattillo (2001) evaluate the plans for monetary union within the Economic Community of Western African States (ECOWAS) and stress the importance of achieving convergence to low inflation (as already achieved in WAEMU) in moving toward the goal of monetary union.

Whether trade liberalization has led to Africa's integration with the world economy is the subject of two papers, both based on a gravity model of trade.<sup>10</sup> Coe and Hoffmaister (1999) analyze trade between developing countries and their richer industrial-country partners and conclude that the magnitude of Africa's trade is not different from that of the average developing country after controlling for the standard determinants of trade (income, transport cost, and size). Subramanian and Tamirisa (2001), using data on trade flows between and within developing and industrial countries, find that Africa does appear to be disengaging from the world economy, a finding that is especially strong for some francophone countries in the region and this was particularly evident during the latter half of the 1990s. Bayoumi, Coe, and Helpman (1999) obtain simulation results indicating that Africa has not benefited from R&D spillovers to the extent that developing countries in other regions have.<sup>11</sup>

<sup>9</sup>See, for example, J. Sachs and A. Warner, "Sources of Slow Growth in African Economies," *Journal of African Economies*, Vol. 6, pp. 335–76, 1997; P. Collier and W. Gunning, "Africa's Economic Performance," *Journal of Economic Literature*, Vol. 37, pp. 64–111, 1999; and W. Easterly and R. Levine, "Africa's Growth Tragedy: Policies and Ethnic Divisions," *Quarterly Journal of Economics*, Vol. 112, pp. 1203–50, 1997.

<sup>2</sup>D. Ghura, and M. Hadjimichael, "Growth in Sub-Saharan Africa," *IMF Staff Papers*, Vol. 43, No. 3, 1996.

<sup>3</sup>E. Calamitsis, A. Basu, and D. Ghura, "Growth in Sub-Saharan Africa: An Empirical Analysis and Policy Implications," IMF Working Paper 99/51, 1999.

<sup>4</sup>E. Hernández-Catá, "Raising Growth and Investment in Sub-Saharan Africa: What Can Be Done?" *International Economic Policy Review*, Vol. 2, pp. 3–15, 2000.

<sup>5</sup>C. A. Leite and J. Weidman, "Does Mother Nature Corrupt?: Natural Resources, Corruption and Economic Growth," IMF Working Paper 99/85, 1999.

<sup>6</sup>D. Ghura, "Private Investment and Endogenous Growth: Evidence from Cameroon," IMF Working Paper 97/165, 1997; G. Jonsson, and A. Subramanian, "Dynamic Gains from Trade: Evidence from South Africa," *IMF Staff Papers*, Vol. 48, No. 1, 2001; E. Sacerdoti, S. Brunschwig, and J. Tang, "The Impact of Human Capital on Growth: Evidence from West

## Books from the IMF

### A Decade of Transition: Achievements and Challenges

*Oleh Havrylyshyn and Saleh Nsouli, Editors*

This volume contains the proceedings of a conference, organized by the IMF, to review the key lessons learned from a decade of experiences with economic transition. In February 1999, the IMF brought together senior government officials from transition countries and experts from academia and international institutions to explore the key elements of the transition process: macroeconomic stabilization, growth recovery, privatization, banking reform, income inequality, and the changing role of government.

Four main lessons are drawn. First, while macroeconomic stabilization has largely been attained, progress on structural and institutional reform lags behind—to a considerable extent in some countries. Second, privatization has, in some cases, led to inequity and undesirable anticompetitive consequences, but, on balance, economic performance is better than what occurs under state ownership. Third, sustained "success" and economic growth requires going beyond stabilization to managing the structural-institutional elements. Fourth, in dealing with these elements, more emphasis needs to be placed on accelerating institutional development; instilling a "rule-of-law" climate; addressing egregious income inequalities; and dealing firmly with corruption and commercial, vested interests.

Full-text versions (or, in some cases, detailed summaries) of books published by the IMF are available online at the **Research at the IMF** website at <http://www.imf.org/research>. Follow the link to IMF Publications.

## Books from the IMF

### Legal Aspects of Regulatory Treatment of Banks in Distress

*Tobias M. C. Asser*

This new book discusses banks in distress—defined as banks that are not in compliance with prudential banking law—and, specifically, legal aspects of their regulatory treatment. The work is based on a comparative study of laws in selected countries with banking legislation that may serve as a standard for treating banks in distress. Because the book focuses on the legal aspects, it addresses only those banking and economic policy issues required for a proper understanding of banking law or the legal strategies, procedures, and practices that have evolved in the treatment of banking problems.

The starting-off point of the study is where prudential enforcement gives way to corrective action. It is organized with progression from noncompliance with prudential requirements and early signs of financial distress to insolvency; from relatively simple corrective measures to receivership, culminating in revocation of the bank's operating license and closure of the bank. Although the book focuses on banks, many of the conclusions and recommendations are also relevant for nonbank financial institutions.

Full-text versions (or, in some cases, detailed summaries) of books published by the IMF are available online at the **Research at the IMF** website at <http://www.imf.org/research>. Follow the link to IMF Publications.

Africa." IMF Working Paper 98/162, 1998; Z. Brixiová, A. Bulíř, and J. Comenetz, "The Gender Gap in Education in Eritrea in 1991–98: A Missed Opportunity?" forthcoming IMF Working Paper, 2001; and A. Bulíř, "The Price Incentive to Smuggle and Cocoa Supply in Ghana, 1950–96." IMF Working Paper 98/88, 1998.

<sup>7</sup>D. Fanizza, "Foreign Aid, Macroeconomic Stabilization and Growth in Malawi," forthcoming IMF Working Paper, 2001; and A. Subramanian and D. Roy, "Who Can Explain the Mauritian Miracle: Meade, Romer, Sachs, or Rodrik?" forthcoming IMF Working Paper, 2001 (also forthcoming in *Analytical Development Narratives*, ed. by D. Rodrik, Princeton: Princeton University Press).

<sup>8</sup>M. MacFarlan, and S. Sgherri, "The Macroeconomic Impact of HIV/AIDS in Botswana," IMF Working Paper 01/80, 2001; and M. Haacker, "The Economic Consequences of HIV/AIDS in Southern Africa," forthcoming IMF Working Paper, 2001.

<sup>9</sup>A. Subramanian, E. Gelbard, R. Harmsen, K. Elborgh-Woytek, and P. Nagy, "Trade and Trade Policies in Eastern and Southern Africa," *IMF Occasional Paper No. 196*, 2000; E. Hernández-Catá, C. Francois, P. Masson, P. Bouvier, P. Deroz, D. Desruelle, and A. Vamvakidis, "The West African Economic and Monetary Union: Recent Developments and Policy Issues," *IMF Occasional Paper No. 168*, 1998; and P. Masson, and C. Pattillo, "Monetary Union in West Africa (ECOWAS): Is It Desirable and How Could It Be Achieved?" *IMF Occasional Paper No. 204*, 2001.

<sup>10</sup>D. Coe and A. Hoffmaister, "North-South Trade: Is Africa Unusual?" *Journal of African Economies*, Vol. 8, No. 2, pp. 228–56, 1999; and A. Subramanian and N. Tamirisa, "Africa's Trade Revisited," IMF Working Paper 01/33, 2001.

<sup>11</sup>T. Bayoumi, D. Coe, and E. Helpman, "R&D Spillovers and Global Growth," *Journal of International Economics*, Vol. 47, pp. 399–428, 1999.

### Call for Papers

## IMF Conference on Macroeconomic Policies and Poverty Reduction

The International Monetary Fund is organizing a conference on *Macroeconomic Policies and Poverty Reduction* in Washington DC on March 14–15, 2002. Research papers of operational relevance for the IMF are being sought on topics at the intersection of macroeconomics and poverty. Suggested topics include:

- 1. Macroeconomic Shocks and Poverty**—the nature of shocks likely to hurt the poor, their mechanisms of transmission, and the role of country risk management in mitigating their incidence and persistent effects.
- 2. Fiscal Policy and Poverty**—the stance, composition, and rules relevant for poverty reduction.
- 3. Growth, Macroeconomic Stability, and Poverty**—the growth policies that are beneficial to the poor, and the channels through which inflation, output, and employment trends and cycles may have an impact on inequality and poverty.
- 4. Foreign Aid, Debt Reduction, Official Flows, and Private Flows**—the role of foreign aid and debt reduction in poverty reduction, including the cyclical behavior of aid and the observed relationships between private and official flows.
- 5. Political Sustainability of Reform**—the implications of a country's income distribution pattern for sustainable reform.

The intention is to publish the selected papers in a special issue of a scholarly journal. Paper proposals (of about 1000–2000 words) should be submitted to [macro&poverty@imf.org](mailto:macro&poverty@imf.org) by **September 15, 2001**.

### Exchange Rate–Based Inflation Stabilization *(continued from page 1)*

In the early 1990s, Kiguel and Liviatan identified several empirical regularities that arise when inflation is brought down from chronically high levels using the exchange rate as the nominal anchor.<sup>1</sup> The main features of this so-called ERBS “syndrome” include a boom-bust cycle in output, as opposed to the recessionary effects of MBS; a surge in consumption and investment; a pronounced real exchange rate appreciation; and worsening external accounts. Subsequently, a substantial amount of research—much of it carried out at the IMF—was devoted to further identifying the distinctive features of this syndrome and, later, to explaining it.<sup>2</sup> Some attempts at identifying whether the syndrome was also observed in low-inflation countries yielded mostly negative results.<sup>3</sup> On the other hand, empirical evidence from transition economies supported the existence of the ERBS syndrome.<sup>4</sup>

More recently, the notion of an ERBS syndrome has been challenged. Santaella and Vela (1996) observe that the studies identifying the ERBS syndrome are based mostly on casual observation across episodes and that their robustness has not been assessed properly.<sup>5</sup> They argue that the Mexican experience in 1987–94 is not fully consistent with the ERBS syndrome. In work done at the World Bank, Easterly (1996) finds that disinflations from chronically high levels are accompanied by an acceleration in output growth, irrespective of whether the exchange rate is the anchor.<sup>6</sup> Importantly, his sample—selected on the basis of the actual behavior of inflation—includes several African stabilizations, unlike the studies that first identified the syndrome, which relied on a small set of well-documented stabilizations in Latin America and Israel. Following a methodology similar to Easterly’s for identifying stabilizations, Hamann (1999) re-examines the ERBS syndrome and finds little support for it.<sup>7</sup> Like Easterly, he finds no difference in the behavior of output during disinflation between ERBS and other stabilizations, although he does find evidence of a consumption boom during ERBS. In contrast, Fischer, Sahay, and Végh (2000) do find evidence that ERBS are characterized by higher output growth and a distinctive consumption/investment cycle.<sup>8</sup> Although they, too, use a sample selected on the basis of the behavior of actual inflation, they focus on cases where prestabilization inflation was at least 100 percent a year, compared with 40 percent in the studies by Easterly and Hamann.

Case studies conducted recently at the IMF highlight two issues that help reconcile the conflicting findings described above: (1) the role of the anchor during disinflation is not as clear-cut as portrayed in theoretical comparisons of ERBS with MBS; and (2) for output dynamics, what matters is the de facto exchange rate regime rather than the announced regime (although, admittedly, the announcement of a path for the exchange rate—especially if not fully credible—may be a key ingredient in the theoretical explanation of the other elements of the ERBS syndrome). As explained by Fischer (1986), under MBS, the increase in money demand associated with lower inflationary expectations is associated with a recession needed to generate a decline in (sticky) domestic prices and, thus, an equilibrating increase in the real stock of money.<sup>9</sup> Under an ERBS, the increased money demand is met by a larger nominal stock of money,

### Economic Issues

#### Economic Issues No. 24

Full Dollarization: The Pros and Cons  
*Andrew Berg and Eduardo Borensztein*

#### Economic Issues No. 25

Controlling Pollution: Using Taxes and Tradable Permits  
*John Norregaard and Valerie Reppel-Hill*

#### Economic Issues No. 26

Rural Poverty in Developing Countries: Implications for Public Policy  
*Mahmood Hasan Khan*

#### Economic Issues No. 27

Tax Policy for Developing Countries  
*Vito Tanzi and Howell Zee*

### Policy Discussion Paper

#### Policy Discussion Paper PDP/01/1

Economic Integration and the Exchange Rate Regime: Some Lessons from Canada  
*Vivek B. Arora and Olivier Jeanne*

achieved through a surplus in the balance of payments. No recession is needed, and the preannouncement of the peg is immaterial.

Ross (1998); Wang (1999); and Horváth, Thacker, and Ha (1998) study the disinflation experiences of Slovenia, Georgia, and Armenia, respectively, in the 1990s.<sup>10</sup> While these experiences differ in many respects, none relied on the preannouncement of an exchange rate path, and all entailed a rapid decline in inflation accompanied by a marked improvement in growth. Nonetheless, in all cases there was systematic intervention in the foreign exchange market and a gradual move to de facto pegs (to the deutsche mark in Slovenia and to the U.S. dollar in Georgia and Armenia). Given the fragmentation of the foreign exchange market and the prevalence of current account restrictions, it is unlikely that a preannounced exchange rate would have been an effective nominal anchor initially in these countries. Yet, the favorable evolution of output during disinflation in these cases may be related to the fact that systematic intervention in the foreign exchange market facilitated a quick remonetization.<sup>11</sup> In a forthcoming article, Hamann, Arias, and Zhang (2001) look at the extent to which monetary dynamics in non-ERBS have been affected by intervention. Preliminary findings suggest that, in several instances, the behavior of domestic credit and foreign exchange reserves in non-ERBS cannot be distinguished from that of ERBS, raising the question of whether the early literature may have mislabeled some of the non-ERBS as MBS.<sup>12</sup>

The relationship between the financial sector and the use of an exchange rate anchor during disinflation—particularly when the ERBS takes the form of a hard peg—is the subject of two recent studies at the IMF. Gulde (1999) explains Bulgaria's disinflation in 1997 with the adoption of a currency board whose rules had to be adapted to that country's prestabilization banking problems.<sup>13</sup> Sobolev (2000) develops a theoretical model where banks do not internalize the effects of their lending operations on the quality of information faced by other banks.<sup>14</sup> As a result, the rapid remonetization through capital inflows that characterizes ERBS leads to excessive lending and systemic financial fragilities, which make the economy vulnerable to banking and balance of payments crises.

Research at the IMF in recent years has, in many ways, tested the robustness of the ERBS syndrome identified in

the early studies, with varying results. Moreover, theoretical work linking the use of an exchange rate anchor with the behavior of the domestic financial sector has opened up a promising direction for future research, that could shed some light on the key issue of whether ERBS constitute an inherently riskier strategy in countries integrated with international capital markets.

<sup>10</sup>Miguel Kiguel and Nissan Liviatan, "The Business Cycle Associated with Exchange Rate-Based Stabilization," *The World Bank Economic Review* (May 1992).

<sup>11</sup>On the identification of the ERBS syndrome, see, for example, Carlos Végh, "Stopping High Inflation," *IMF Staff Papers* (September 1992); Guillermo Calvo and Carlos Végh, "Inflation Stabilization and Nominal Anchors," *Contemporary Economic Policy* (April 1994); and, Carmen Reinhart and Carlos Végh, "Inflation Stabilization in Chronic Inflation Countries: The Empirical Evidence" (unpublished; Washington: IMF, July 1994). Alexander Hoffmaister and Carlos Végh, "Disinflation and the Recession-Now-Versus-Recession-Later Hypothesis: Evidence from Uruguay," *IMF Staff Papers* (June 1996), provides econometric evidence of the distinctive behavior of output in ERBS. IMF research aimed at explaining the syndrome includes Jorge Roldós, "Supply-Side Effects of Disinflation Programs," *IMF Staff Papers* (March 1995); Carmen Reinhart and Carlos Végh, "Nominal Interest Rates, Consumption Booms and Lack of Credibility: A Quantitative Examination," *Journal of Development Economics* (April 1995); Sergio Rebelo and Carlos Végh, "Real Effects of Exchange-Rate-Based Stabilization: An Analysis of Competing Theories," in NBER *Macroeconomics Annual 1995* (Cambridge, Massachusetts: MIT Press); and May Khamis, "Credit and Exchange Rate Based Stabilization," IMF Working Paper 96/51, 1996. A paper by R. Armando Morales, "Exchange Rate Uncertainty in Money-Based Stabilization Programs," IMF Working Paper 98/3, 1998, shows that

## IMF Research Bulletin

Coming in the December 2001 issue

- Capital Controls
- Currency Unions
- Country Study: United States
- Special Topic: Environmental Research



uncertainty about the behavior of the nominal exchange rate in MBS introduces a bias towards real appreciation in these programs.

<sup>3</sup>IMF research in this area includes Enrica Detragiache and A. Javier Hamann, "Exchange Rate-Based Disinflation in Western Europe: Greece, Ireland, Italy and Portugal," IMF Working Paper 97/75, 1997; later published in *Contemporary Economic Policy* (July 1999).

<sup>4</sup>Stanley Fischer, Ratna Sahay, and Carlos Végh, "Stabilization and Growth in Transition Economies: The Early Experience," IMF Working Paper 96/31, 1996; later published in *Journal of Economic Perspectives* (Spring 1996).

<sup>5</sup>Julio Santaella and Abraham Vela, "The 1987 Mexican Disinflation Program: An Exchange Rate-Based Stabilization?" IMF Working Paper 96/24, 1996.

<sup>6</sup>William Easterly, "When is Stabilization Expansionary? Evidence from High Inflation," *Economic Policy* (April 1996).

<sup>7</sup>A. Javier Hamann, "Exchange Rate-Based Stabilization: A Critical Look at the Stylized Facts," IMF Working Paper 99/132, 1999; forthcoming in *IMF Staff Papers*.

<sup>8</sup>Stanley Fischer, Ratna Sahay, and Carlos Végh, "Modern Hyper- and High Inflations" (unpublished; Washington: IMF, January 2000).

<sup>9</sup>Stanley Fischer, "Exchange Rate Versus Money Targets in Disinflation," in *Indexing, Inflation, and Economic Policy*, ed. by Stanley Fischer (Cambridge, Massachusetts: MIT Press, 1986).

<sup>10</sup>Kevin Ross, "Post Stabilization Dynamics in Slovenia," IMF Working Paper 98/27, 1998; Jian-Ye Wang, "The Georgian Hyperinflation and Stabilization," IMF Working Paper 99/65, 1999; Balasz Horváth, Nita Thacker, and Jiming Ha, "Achieving Stabilization in Armenia," IMF Working Paper 98/38, 1998.

<sup>11</sup>Of course, output dynamics in the former Soviet Republics must also take account of the collapse in output that took place in the aftermath of the disruption of their trade regime and the terms of trade shock associated with the liberalization of energy prices.

<sup>12</sup>A. Javier Hamann, Felipe Arias, and Lei Zhang, "Monetary and Exchange Rate Dynamics During Disinflation: An Empirical Analysis," forthcoming IMF Working Paper, 2001.

<sup>13</sup>Anne-Marie Gulde, "The Role of the Currency Board in Bulgaria's Stabilization," IMF Policy Discussion Paper 99/3, 1999; a shorter version was published in *Finance and Development*, Vol. 36 (September 1999).

<sup>14</sup>Yuri Sobolev, "Exchange Rate-Based Stabilization: A Model of Financial Fragility," IMF Working Paper 00/122, 2000.

### Visiting Scholars at the IMF, April–June 2001

**Olumuyiwa Alaba;** University of Ibadan, Nigeria

**Lakshman Alles;** Curtin University of Technology, Australia

**Mike Artis;** European University Institute, Italy

**Philippe Bacchetta;** Study Center Gerzensee, Switzerland

**Sujit Chakravorti;** Federal Reserve Bank of Chicago

**Lawrence Christiano;** Northwestern University

**Daniel Cohen;** Université de Paris, France

**Philip Corbae;** University of Pittsburgh

**Nick Crafts;** London School of Economics, U.K.

**Allan Drazen;** University of Maryland

**Mardi Dungey;** Australian National University, Australia

**Morris Goldstein;** Institute for International Economics

**Barry W. Ickes;** University of California, Berkeley

**Douglas Irwin;** Dartmouth College

**Talan Iscan;** Dalhousie University, Canada

**Michael Klein;** Tufts University

**Renu Kohli;** Indian Council for Research on International Economic Relations, India

**Randall Kroszner;** University of Chicago

**Ross Levine;** University of Minnesota

**Ronald MacDonald;** University of Strathclyde, U.K.

**Nancy Marion;** Dartmouth College

**Sugata Marjit;** Centre for Studies in Social Sciences, Calcutta, India

**George Mbangah;** University of Yaounde II, Cameroon

**John McDermott;** Reserve Bank of New Zealand

**John Mutenyo;** Makerere University Institute of Economics, Uganda

**Emmanuel Ogunkola;** National University of Lesotho, Lesotho

**Lee Redding;** University of Glasgow, U.K.

**Francisco Ruge-Murcia;** University of Montreal, Canada

**Luigi Ruggeroni;** Banca Commerciale Italiana, Italy

**Fondoh Sikod;** University of Yaounde II, Cameroon

**Neil Wallace;** Pennsylvania State University

**Yunjong Wang;** Korea Institute for International Economic Policy, Korea

**Thomas Willett;** Claremont Graduate University

## Country Study

## Russia

Nikola Spatafora



*The Russian economy has undergone dramatic, sharp swings in the past decade. Output collapsed at the start of transition in 1991 and, while signs of recovery emerged in 1997, they were quashed by the August 1998 default and the ensuing financial crisis. During 1999 and 2000, a sharply depreciated real exchange rate and booming world prices for fuels (a key export) led to extremely high growth rates and unprecedented current account surpluses. Future growth prospects, however, will be closely tied to progress in key structural policy areas. Against this background, recent IMF research on Russia has focused on the policies needed to sustain rapid growth. This article summarizes this research, including some especially relevant cross-country studies dealing with the Baltics, Russia, and other countries of the former Soviet Union (BRO).*

IMF involvement in Russia has centered on supporting the transition to a market economy through the adoption of appropriate macroeconomic and structural policies, and the creation of necessary institutions. While the IMF has concentrated on those areas critical to macroeconomic stability, sustained growth will remain elusive in the absence of continued, broadbased reforms. As a result, IMF staff research has dealt with a wide range of topics including: sources of output growth, strengthening public finances, developing financial markets and monetary-policy instruments, and key external-sector issues such as contagion and capital flight.

Focusing on output, several IMF studies, using a growth-accounting framework, found that the 40 percent contraction during 1992–97 reflected both falling investment and employment, and sharp declines in productivity, with productivity levels closely related to the pace of enterprise restructuring.<sup>1</sup> Survey data from the 1998 crisis suggest the adverse impact on income and consumption was mitigated through mechanisms such as intrafamily transfers and subsistence farming.<sup>2</sup>

For much of the 1990s, weak growth was accompanied by increasing nonmonetary transactions, including barter and offsets. Such transactions reflected firm-level liquidity problems, including arrears in particular, but also the government's use of tax and utility offsets to channel implicit subsidies to enterprises. The government's inability to change the culture of nonpayment (including its own expenditure policies) aggravated arrears in the utilities sector and inhibited

enterprise restructuring.<sup>3</sup> A key to solving this problem lay in the improvement of the government's own finances, including the cessation of federal government nonmonetary operations such as arrears and offsets.<sup>4</sup>

Other research on growth includes a discussion in Buckberg (1997) of the importance of broad structural reforms to medium-term growth, focusing on the tax system, judicial system, capital-market infrastructure, and red tape.<sup>5</sup> Roaf (2000) documented the extent of corruption, its implications for growth, and necessary reforms, while Alexander and others (2000) discussed the banking crisis, the results of banking-sector restructuring efforts to date, and the remaining reform agenda.<sup>6</sup> Meanwhile, survey data suggests that whether individuals will indeed support continued reforms depends on personal circumstances, such as their economic well-being, education, and age, but also regional circumstances including the prevailing wage-arrears and crime levels.<sup>7</sup>

A second focus of IMF research has been the reorientation of public finances. Studies have analyzed the post-transition changes in revenues, as well as the current structure of and key issues in tax policy and tax administration.<sup>8</sup> For instance, revenues from the energy sector were found to be half the level predicted using international comparisons, reflecting an inappropriate tax structure, weak tax administration, infrastructure constraints on oil exports, and low statutory tax rates on gas.<sup>9</sup> As regards expenditure, studies have addressed: the appropriateness of the expenditure level and composition; weaknesses in the social-welfare system, including pensions; and the adequacy of fiscal management, including how to improve the budget process and eliminate noncash government transactions.<sup>10</sup> On this latter topic, the IMF devoted significant technical assistance to setting up treasury systems within the finance ministry to manage government financial resources, and, in particular, to provide payment processing, accounting, reporting, and financial management services for central government; Potter & Diamond (2000) describe the experience.<sup>11</sup> There has also been work on fiscal decentralization.<sup>12</sup>

A third important area of IMF work has involved setting up payments systems and developing monetary-policy instruments. Knight and others (1999) summarize the technical assistance provided to BRO central banks.<sup>13</sup> During 1992–95, Russian monetary policy was conducted entirely through direct credit flows from the Central Bank of Russia (CBR) to the budget, enterprises, and other ruble-area republics. Over time, in a major achievement, indirect monetary instruments started playing a key role.<sup>14</sup> Lybek (1999) found that in the BRO, greater central bank autonomy, if accompanied by accountability, was associated with lower inflation, higher growth, and greater reform of central bank



operations.<sup>15</sup> However, the CBR still enjoyed relatively little autonomy. De Broeck and others (1997) analyzed changes in money velocity in the BRO and assessed likely future developments, including the pace of remonetization.<sup>16</sup>

Research on the external sector has focused on issues of sustainability, contagion, and capital flight. McGettigan (2000) discussed the evolution of BRO current accounts and the usefulness of key indicators of external sustainability.<sup>17</sup> Two precrisis studies warned that the rapidly growing external debt of many BRO, while useful in financing transition, could also help maintain wasteful expenditures or postpone needed reforms.<sup>18</sup> This was especially dangerous because rising debt stocks increased vulnerability to changes in perceived creditworthiness. Countries should therefore press ahead with structural reforms.

After the 1998 crisis, two studies examined its links with other emerging-market crises. The idea of “contagion” was broadly supported. However, it is unclear whether this reflected foreign investors generally panicking, or international institutional investors (including common bank lenders) engaging in a compensatory liquidation of assets.<sup>19</sup> On capital flight, cross-country evidence suggests that it can only be curbed through a medium-term reform strategy aimed at improving governance, enhancing macroeconomic performance, and strengthening the banking system.<sup>20</sup> In contrast, capital controls produce costly distortions and should be phased out.

Looking ahead, ongoing IMF research on Russia continues to focus on the macroeconomic and structural policies required to underpin stable and sustained growth.

<sup>1</sup>Mark de Broeck and Vincent Koen, “The Great Contractions in Russia, the Baltics, and the Other Countries of the Former Soviet Union,” IMF Working Paper 00/32, 2000; Jonathan Anderson and others, “Russian Federation—Selected Issues,” IMF Staff Country Report 00/150, Annex I, 2000; and Irina Dolinskaya, “Explaining Russia’s Output Collapse: Aggregate Sources and Regional Evidence,” IMF Working Paper 01/16, 2001.

<sup>2</sup>Stephanie Eble and Petya Koeva, “The Distributional Effects of Macroeconomic Crises: Microeconomic Evidence from Russia,” forthcoming IMF Working Paper, 2001.

<sup>3</sup>Hrant Bagratian and Emine Gürgen, “Payment Arrears in the Gas and Electric Power Sectors of the Russian Federation and Ukraine,” IMF Working Paper 97/162, 1997; and Simon Commander, Irina Dolinskaya, and Christian Mumssen, “Determinants of Barter in Russia: An Empirical Analysis,” IMF Working Paper 00/155, 2000.

<sup>4</sup>Gérard Bélanger and others, “Russian Federation—Recent Economic Developments,” IMF Staff Country Report 99/100, Annex II, 1999.

<sup>5</sup>Elaine Buckberg, “Legal and Institutional Obstacles to Growth and Business in Russia,” IMF Paper on Policy Analysis and Assessment 97/8, 1997.

<sup>6</sup>James Roaf, 2000, “Corruption in Russia”; and William Alexander, David Hoelscher, and Michael Fuchs, 2000, “Banking System Restructuring in Russia,” available via the Internet at [www.imf.org/external/pubs/ft/seminar/2000/invest](http://www.imf.org/external/pubs/ft/seminar/2000/invest).

<sup>7</sup>Stephanie Eble and Petya Koeva, “What Determines Individual Preferences Over Market Reform? Microeconomic Evidence from Russia,” forthcoming IMF Working Paper, 2001.

<sup>8</sup>Augusto Lopez-Claros and Sergei Alexashenko, *Fiscal Policy Issues During the Transition in Russia*, IMF Occasional Paper No. 155, 1998; Liam Ebrill and Oleh Havrylyshyn, *Tax Reform in the BRO*, IMF Occasional Paper No. 182, 1999; Anderson and others, “Fiscal Adjustment after the Crisis,” IMF Staff Country Report 00/150 Annex II, 2001; Victoria Summers, “Tax Policy for Russia,” 2000; and Richard Highfield and Katherine Baer, “Tax Administration for Russia,” 2000. The last two references are available via the Internet at [www.imf.org/external/pubs/ft/seminar/2000/invest](http://www.imf.org/external/pubs/ft/seminar/2000/invest).

<sup>9</sup>Dale Gray, “Evaluation of Taxes and Revenues from the Energy Sector in the BRO,” IMF Working Paper 98/34, 1998.

<sup>10</sup>Lopez-Claros and Alexashenko, 1998; Marta Castello-Branco, “Pension Reform in the BRO,” IMF Working Paper 98/11, 1998; and Jack Diamond, “Public Expenditure Management,” 2000, available via the Internet at [www.imf.org/external/pubs/ft/seminar/2000/invest](http://www.imf.org/external/pubs/ft/seminar/2000/invest).

<sup>11</sup>Barry Potter and Jack Diamond, “Setting Up Treasuries in the BRO: An Assessment of IMF Technical Assistance,” IMF Occasional Paper No. 198, 2000.

<sup>12</sup>Era Dabla-Norris, Jorge Martinez-Vasquez, and John Norregaard, “Fiscal Decentralization in Russia: Economic Performance and Reform Issues,” 2000, available via the Internet at [www.imf.org/external/pubs/ft/seminar/2000/invest](http://www.imf.org/external/pubs/ft/seminar/2000/invest).

<sup>13</sup>Malcolm Knight, Arne Petersen, and Robert Price, eds., *Transforming Financial Systems in the BRO* (Washington: International Monetary Fund, 1999).

<sup>14</sup>Tomaás Baliño, “Evolution of Monetary Policy Instruments in Russia,” IMF Working Paper 97/180, 1997.

<sup>15</sup>Tonny Lybek, “Central Bank Autonomy, and Inflation and Output Performance in the BRO, 1995–97,” IMF Working Paper 99/4, 1999.

<sup>16</sup>Mark de Broeck, Kornélia Krajnyák, and Henri Lorie, “Explaining and Forecasting the Velocity of Money in Transition Economies: With Special Reference to the BRO,” IMF Working Paper 97/108, 1997.

<sup>17</sup>Donal McGettigan, *Current Account and External Sustainability in the BRO*, IMF Occasional Paper No. 189, 2000.

<sup>18</sup>Ishan Kapur and Emmanuel van der Mensbrugge, “External Borrowing by the BRO: Developments and Policy Issues,” IMF Working Paper 97/72, 1997; and John Odling-Smee and Basil Zavoico, “External Borrowing in the BRO: The Transition to a Market Economy,” IMF Paper on Policy Analysis and Assessment 98/5, 1998.

<sup>19</sup>Caroline van Rijckeghem and Beatrice Weder, “Sources of Contagion: Finance or Trade?” IMF Working Paper 99/146, 1999; and Taimur Baig and Ilan Goldfajn, “The Russian Default and the Contagion to Brazil,” IMF Working Paper 00/160, 2000.

<sup>20</sup>Prakash Loungani and Paolo Mauro, “Capital Flight from Russia,” IMF Policy Discussion Paper 00/6, 2000.

## World Economic Outlook, May 2001

Summary by Maitland MacFarlan

In its global overview, the May 2001 *World Economic Outlook* (WEO) discusses the significant weakening in prospects for world growth, led by a marked slowdown in the United States, the stalling recovery in Japan, and moderating growth in Europe and in a number of emerging market countries. The WEO noted that some slowing in the recently rapid rates of global growth is desirable, especially in countries most advanced in the cycle, but that the current deceleration is steeper than expected. The overview also emphasizes the considerable uncertainty in the outlook: while some pickup in activity is expected later in 2001, supported by lower interest rates and, in some countries, an easing of fiscal policy, a deeper and more prolonged downturn is also possible. Contributing to the latter concerns are the substantial imbalances that arose in the United States during the expansion—including the large current account deficit, the apparent overvaluation of the U.S. dollar, the negative household savings rate, and highly valued equity markets—developments that could unwind in a disorderly manner.

The latest WEO looks at different aspects of **globalization** in three essays. The first essay examines the impact of the global stock market correction on consumption and investment. It presents new evidence suggesting that the impact of changes in technology stocks on real activity may be more comparable across countries than the impact of changes in nontechnology stocks, possibly reflecting the more widespread holdings of the former types of shares. Recent exchange rate movements among the major currencies are assessed in the second essay. Noting the significant increase over recent years in portfolio equity flows to the United States, particularly from Europe, this essay provides empirical evidence suggesting that the strength of the dollar may be due, in part, to market expectations of a relatively strong U.S. growth outlook compared to other regions. The third essay looks at the growth in regional trade initiatives, focusing on sub-Saharan Africa. The essay assesses the success of these initiatives and suggests policy approaches for increasing the momentum of African trade, including through further lowering of trade barriers in advanced economies.

Two background chapters are included in the publication—one assesses recent improvements in fiscal positions

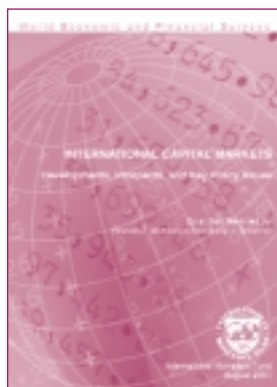
in advanced economies, and the other analyzes the decline in inflation in emerging markets. Looking at fiscal developments, two factors should support the durability of recent consolidation: the important role played by expenditure restraint and the strengthening of fiscal frameworks over the past decade. Nevertheless, the WEO notes that significant fiscal challenges lie ahead, particularly in funding rising public pension and health care costs as populations age. Meeting these pressures will require both pension system reforms, including prefunding of future liabilities, and broader structural reforms to support future output growth. The chapter also draws attention to the global dimensions of aging. With dependency ratios expected to decline in many developing countries, increased saving by countries with aging populations could support growth in emerging markets and future consumption in advanced economies.

An analysis of declining inflation in emerging economies suggests that an important role has been played by improved monetary stability in advanced economies, progress in institutional reform, including more independent central banks, and improved knowledge about how monetary policy operates. The WEO analysis does emphasize, however, that a stable monetary policy cannot be consistently pursued in the face of persistent fiscal weakness. Hence, prudent fiscal policies, directed toward stabilizing public debt ratios at low levels, are of key importance in achieving lower inflation. With many emerging market countries shifting toward more flexible exchange rates, the use of inflation targeting has increased markedly. The chapter notes that, so far, the experience with inflation targeting has been generally encouraging, although—with most emerging markets adopting inflation targeting only recently—it remains to be seen how this monetary arrangement fares in preserving price stability over sustained periods, including episodes of financial stress and exchange rate instability.

The May WEO can be found in full-text format at <http://www.imf.org/research>. The next issue of the WEO will be available on this website in late September 2001; the published version will be available in October.

## International Capital Markets Report, August 2001

Summary by Charles Kramer and Garry J. Schinasi



An integral component of the IMF's surveillance of international financial markets is its annual report on *International Capital Markets: Developments, Prospects, and Key Policy Issues* (ICM). The report provides a comprehensive assessment of recent developments in both mature and emerging financial markets and analyzes key systemic and structural issues. During the

year ending May 2001, the global economic slowdown and the greater synchronization between economic and financial cycles gave rise to reappraisals of financial risk, portfolio rebalancing, and asset repricing in a wide range of financial markets. As discussed in previous ICM reports, past financial market adjustments, such as the one that occurred in 1998, often seemed to have originated in concerns that excessive leverage, market illiquidity, and other potential financial fragilities could engender real economic consequences, for example, a "credit crunch." By contrast, the *recent* adjustment reflected perceptions, and then the reality, of deteriorating economic conditions and prospects. Concerns later arose that the attendant financial repercussions, including downward pressure on corporate earnings growth and rising default rates, would adversely affect prospects for real economic growth. Against this background, the new report also provides the IMF staff's views of the key risks and vulnerabilities in the period ahead.

The ICM report covers two key structural issues in international capital markets—changes in government securities markets and financial sector consolidation in emerging markets. The first discussion looks closely at the **structural changes in government securities markets** in Europe, Japan, and the United States, examines their financial implications, and identifies associated public policy questions. For instance, U.S. treasury securities have played key roles in the national and international dollar markets as benchmarks, hedging vehicles, and safe-haven assets during periods of stress. In recent years, as the supply of U.S. treasury securities has shrunk, market participants have begun to substitute other instruments such as swaps in some of these roles. The

private, U.S. dollar, fixed-income markets are well developed, and useable private substitutes exist for many of the roles. It is unclear, however, how using alternative instruments as safe-haven assets may affect market dynamics during bouts of turbulence. There are additional questions about how the shrinking supply of U.S. treasury securities may affect the dollar's role as a currency of denomination for international financial transactions. Also considered are structural changes under way in Europe associated with the introduction of the euro and other aspects of European financial integration, as well as structural changes in Japan to address perceived weaknesses in the JGB market infrastructure. Implications of these structural changes for private finance in Europe, Japan, and the international markets are assessed.

A second issue addressed in the ICM is **financial-sector consolidation in emerging markets**. Consolidation in emerging markets is predominantly cross-border, and authorities have played a larger role in guiding its earlier stages compared with the mature markets. Ownership structures, particularly family ownership, are seen as the main obstacles to faster market-driven consolidation. Attempts to exploit economies of scale and scope drive the consolidation of financial institutions; and technological advances (including the Internet) and deregulation are making it easier to reap such economies. Technological advances are also transforming securities trading. In response to the associated competitive pressures, stock and derivatives exchanges are consolidating, liberalizing access, and deregulating brokerage commissions. However, barriers to entry of foreign brokerages and antiquated trading and governance structures have delayed the adaptation of some securities markets, with the result that liquidity and trading has migrated to offshore markets. Consolidation in emerging markets raises many policy issues including: the relevance of market discipline, adequate exit policies for institutions in distress, consolidated supervision and the architecture of supervisory agencies, the effects of concentration on systemic risk, and consumer protection and antitrust issues.

The International Capital Markets Report is available in full-text format at the **Research at the IMF** website at <http://www.imf.org/research>.

## External Publications by IMF Staff January–June 2001

### Journal Articles

- Alberola, Enrique; Crevero, Susano; Lopez, Humberto; Ubide, Angel**  
Quo Vadis, Euro?  
*European Journal of Finance*
- Altig, David; Auberbach, Alan J.; Kotlikoff, Laurence J.; Smetters, Kent A.; Walliser, Jan**  
Simulating Fundamental Tax Reform in the United States  
*American Economic Review*
- Bakker, Bas**  
On Employment Performance in the Netherlands and Belgium  
*Economische Statistische Berichten*
- Bartolini, Leonardo; Bertola, Giuseppe; Prati, Alessandro**  
Banks' Reserve Management, Transaction Costs, and the Timing of Federal Reserve Intervention  
*Journal of Banking and Finance*
- Berthélemy, Jean-Claude; Söderling, Ludvig**  
The Role of Capital Accumulation, Adjustment, and Structural Change for Economic Take-Off: Empirical Evidence from African Growth Episodes  
*World Development*
- Boughton, James M.**  
The Case Against Harry Dexter White: Still Not Proven  
*History of Political Economy*
- Buliř Ales**  
The Impact of Macroeconomic Policies on the Distribution of Income  
*Annals of Public and Cooperative Economics*
- Christoffersen, Peter; Sløk, Torsten; Wescott, Robert**  
Is Inflation Targeting Feasible in Poland?  
*Economics in Transition*
- Christou, Costas**  
Differential Borrowing Constraints and Investment in Human Capital  
*Journal of Macroeconomics*
- Fernández, Carmen; Ley, Eduardo; Steel, Mark**  
Benchmark Priors for Bayesian Model Averaging  
*Journal of Econometrics*
- Gelos, Gaston R.; Sahay, Ratna**  
Financial Market Spillovers in Transition Economies  
*Economics of Transition*
- Gershenson, Dimitry; Grossman, Herschel I.**  
Cooption and Repression in the Soviet Union  
*Economics and Politics*
- Hakura, Dalia**  
Why Does HOV Fail? The Role of Technological Differences Within the EC  
*Journal of International Economics*
- Hilbers, Paul**  
The IMF/World Bank Financial Sector Assessment Program  
*Economic Perspectives*
- Hussain, Mumtaz; Brookins, Oscar**  
On the Determinants of National Saving: An Extreme-Bounds Analysis  
*Weltwirtschaftliches Archiv / Review of World Economics*
- Isard, Peter; Laxton, Douglas; Eliasson, Ann-Charlotte**  
Inflation Targeting with NAIRU Uncertainty and Endogenous Policy Credibility  
*Journal of Economic Dynamics and Control*
- Jadresic, Esteban; Masson, Paul; Mauro, Paolo**  
Exchange Rate Regimes of Developing Countries: Global Context and Individual Choices  
*Journal of the Japanese and International Economies*
- Kandil, Magda Elsayed**  
Asymmetry in the Effects of U.S. Government Spending Shocks: Evidence and Implications  
*The Quarterly Review of Economic Finance*
- Kandil, Madga Elsayed**  
On Differences Between East and West Germany in 1970–90  
*International Journal of Social Economics*
- Kandil, Magda Elsayed**  
Variations in the Effects of Aggregate Demand Shocks: Evidence and Implications Across Industrial Countries  
*Southern Economic Journal*
- Kim, Jung Yeon; Mody, Ashoka; Taylor, Mark**  
Modeling Economic Fundamentals for Forecasting Capital Flows to Emerging Markets  
*International Journal of Finance and Economics*
- Kinoshita, Yuko; Mody, Ashoka**  
Private Information for Foreign Investment in Emerging Economies  
*Canadian Journal of Economics*

**Masson, Paul R.**

Exchange Rate Regime Transitions  
*Journal of Development Economics*

**Redding, Lee; Faruquee, Hamid**

Asset Markets and Endogenous Liquidity  
*Scottish Journal of Political Economy*

**Spilimbergo, Antonio**

Testing the Hypothesis of Collusive Behavior among OPEC members  
*Energy Economics*

**Unterobderdoerster, Olaf**

Trade and Transboundary Pollution: Spatial Separation Reconsidered  
*Journal of Environmental Economics and Management*

## Contributions to Books and Conference Volumes

**Alier, Max; Vittas, Dimitri**

Personal Pension Plans and Stock Market Volatility  
*New Ideas About Old Age Security, ed. by Robert Holzmann and Joseph Stiglitz*

**Borensztein, Eduardo; Zettelmeyer, Jeronimo**

Monetary Independence in Emerging Markets: Does the Exchange Rate Regime Make a Difference?  
*Currency Unions, ed. by Alberto Alesina and Robert Barro*

**Chalk, Nigel; Hemming, Richard**

Assessing Fiscal Sustainability in Theory and Practice  
*Fiscal Sustainability, Public Finance Workshop Volume Banca D'Italia Research Department*

**Claessens, Stijn; Djankov, Simeon; Mody, Ashoka**

Resolution of Financial Distress: An International Perspective on the Design of Bankruptcy Laws  
*World Bank Institute, Washington D.C.*

**Clements, Benedict; Gupta, Sanjeev; Schiff, Jerald**

What Happened to the Peace Dividend?  
*The Economics of Defence, ed. by Keith Hartley and Todd Sandler*

**Corbo, Vittorio; Hernández, Leonardo**

Private Capital Inflows and the Role of Economic Fundamentals  
*Capital Flows, Capital Controls, and Currency Crisis: Latin America in the 1990s, ed. by Felipe Larraín*

**Davoodi, Hamid; Gupta, Sanjeev; Tiongson, Erwin**

Corruption and the Provision of Health Care and Education Services  
*Political Economy of Corruption, ed. by Arvind K. Jain*

**Davoodi, Hamid; Tanzi, Vito**

Corruption, Growth, and Public Finances  
*Political Economy of Corruption, ed. by Arvind K. Jain*

**Eichengreen, Barry; Hale, Galina; Mody, Ashoka**

Flight to Quality: Investor Risk Tolerance and the Spread of Emerging Market Crises  
*International Financial Contagion, ed. by Stijn Claessens and Kristin J. Forbes*

**Gallego, Franciso; Hernández, Leonardo; Schmidt-Hebbel, Klaus**

Capital Controls in Chile: Were They Effective?  
*Banking, Financial Integration, and International Crises, ed. by Leonardo Hernández and Klaus Schmidt-Hebbel*

**Henstridge, Mark I.; Kasekende, Louis A.**

Exchange Reforms, Stabilization, and Fiscal Management  
*Uganda's Recovery: The Role of Farms, Firms, and Government, ed. by Ritva Reinikka, and Paul Collier*

**Kotlikoff, Laurence J.; Smetters, Kent A.; Walliser, Jan**

Distributional Effects in a General Equilibrium Analysis of Social Security  
*The Distributional Effects of Social Security Reform, ed. by Martin Feldstein and Jeffrey Liebman*

**Masson, Paul**

Multiple Equilibria, Contagion, and the Emerging Market Crises  
*Financial Crises in Emerging Markets, ed. by Reuven Glick, Ramon Moreno, and Mark Spiegel*

**Prasad, Eswar**

The Dynamics of Reservation Wages: Preliminary Evidence from the GSOEP  
*DIW Vierteljahrsheft zur Wirtschaftsforschung (Quarterly Journal of Economic Research)*

**Walliser, Jan**

Regulation of Withdrawals in Individual Account Systems  
*New Ideas About Old Age Security, ed. by Robert Holzmann and Joseph Stiglitz*

A full and updated listing of external publications of IMF staff (from 1997 onward), including forthcoming publications, can be found in a searchable database at the Research at the IMF website at <http://www.imf.org/research>.

## IMF Working Papers

### April–June 2001

*Working Paper No. 01/27*

#### **Sustaining Fixed Exchange Rates: A Model with Debt and Institutions**

Pitt, Alexander

*Working Paper No. 01/28*

#### **Euro-Area Banking at the Crossroads**

Belaïsch, Agnes; Kodres, Laura; Levy, Joaquim V.; Ubide, Angel

*Working Paper No. 01/29*

#### **What Drives Contagion: Trade, Neighborhood, or Financial Links?**

Hernandez, Leonardo F.; Valdes, Rodrigo O.

*Working Paper No. 01/30*

#### **In Search of Coincident and Leading Indicators of Economic Activity in Argentina**

Simone, Alejandro

*Working Paper No. 01/31*

#### **Inflation Targeting in the Context of IMF-Supported Adjustment Programs**

Blejer, Mario I.; Leone, Alfredo M.; Rabanal, Pau; Schwartz, Gerd

*Working Paper No. 01/32*

#### **Human Capital Convergence: International Evidence**

Sab, Randa; Smith, Stephen C.

*Working Paper No. 01/33*

#### **Africa's Trade Revisited**

Subramanian, Arvind; Tamirisa, Natalia

*Working Paper No. 01/34*

#### **Monetary Union in West Africa: An Agency of Restraint for Fiscal Policies?**

Masson, Paul R.; Pattillo, Catherine

*Working Paper No. 01/35*

#### **Social Sector Reform in Transition Countries**

Heller, Peter S.; Keller, Christian

*Working Paper No. 01/36*

#### **Mortgage Market Development, Savings, and Growth**

Li, Xiaowei

*Working Paper No. 01/37*

#### **Obstacles to Faster Growth in Transition Economies: The Mongolian Case**

Black, Stanley W.

*Working Paper No. 01/38*

#### **PPP and the Balassa-Samuelson Effect: The Role of the Distribution Sector**

MacDonald, Ronald; Ricci, Luca Antonio

*Working Paper No. 01/39*

#### **The Equilibrium Distributions of Value for Risky Stocks and Bonds**

Johannes, Ronald L.

*Working Paper No. 01/40*

#### **Population Aging in Japan: Demographic Shock and Fiscal Sustainability**

Faruqee, Hamid; Muhleisen, Martin

*Working Paper No. 01/41*

#### **International Trade in Manufactured Products: A Ricardo-Heckscher-Ohlin Explanation with Monopolistic Competition**

Choudhri, Ehsan; Hakura, Dalia

*Working Paper No. 01/42*

#### **How Does Privatization Work? Ownership Concentration and Enterprise Performance in Ukraine**

Pivovarsky, Alexander

*Working Paper No. 01/43*

#### **Measures to Limit the Offshore Use of Currencies: Pros and Cons**

Ishii, Shogo; Otker-Robe, Inci; Cui, Li

*Working Paper No. 01/44*

#### **Inflation and Financial Depth**

Khan, Mohsin S.; Senhadji, Abdelhak S.; Smith, Bruce

*Working Paper No. 01/45*

#### **Comparing Projections and Outcomes of IMF-Supported Programs**

Musso, Alberto; Phillips, Steven

*Working Paper No. 01/46*

#### **How Do Countries Choose Their Exchange Rate Regime?**

Poirson, Helene

*Working Paper No. 01/47*

#### **Financial Sustainability and Reform Options for the Albanian Pension Fund**

Treichel, Volker

*Working Paper No. 01/48*

#### **The Fall and Recovery of the Cuban Economy in the 1990s: Mirage or Reality?**

Hernandez-Cata, Ernesto

*Working Paper No. 01/49*

#### **Currency Crises and the Real Economy: The Role of Banks**

Disyatat, Piti

*Working Paper No. 01/50*

#### **High Inflation and Real Wages**

Braumann, Benedikt

*Working Paper No. 01/51*

#### **Securities Transaction Taxes and Financial Markets**

Habermeier, Karl; Kirilenko, Andrei

*Working Paper No. 01/52*

#### **Indonesia: Anatomy of a Banking Crisis, Two Years of Living Dangerously, 1997–99**

Enoch, Charles; Baldwin, Barbara; Frecaut, Olivier; Kovanen, Arto

*Working Paper No. 01/53*

**Financial Reforms in Sudan: Streamlining Bank Intermediation**  
Kireyev, Alexei

*Working Paper No. 01/54*

**International Trade and Poverty Alleviation**  
Bannister, Geoffrey; Thugge, Kamau

*Working Paper No. 01/55*

**Transition Economies: How Appropriate Is the Size and Scope of Government?**

Gupta, Sanjeev; Leruth, Luc; de Mello, Luiz; Chakravarti, Shamit

*Working Paper No. 01/56*

**Interpreting Real Exchange Rate Movements in Transition Countries**  
De Broeck, Mark; Sløk, Torsten

*Working Paper No. 01/57*

**Intrahousehold Allocation of Resources: The Bolivian Family**  
Inchauste, Gabriela

*Working Paper No. 01/58*

**Monetary Implications of Cross-Border Derivatives for Emerging Economies**  
Morales, Armando

*Working Paper No. 01/59*

**Whose Inflation? A Characterization of the CPI Plutocratic Bias**  
Ley, Eduardo

*Working Paper No. 01/60*

**Price Volatility and Financial Instability**  
Worrell, DeLisle; Leon, Hyginus

*Working Paper No. 01/61*

**Financial Implications of the Shrinking Supply of U.S. Treasury Securities**

Schinasi, Garry J.; Kramer, Charles; Smith, R. Todd

*Working Paper No. 01/62*

**Financial System Standards and Financial Stability: The Case of Basel Core Principles**

Sundararajan, V.; Marston, David; Basu, Ritu

*Working Paper No. 01/63*

**Domestic Bank Regulation and Financial Crises: Theory and Empirical Evidence from East Asia**  
Dekle, Robert; Kletzer, Kenneth M.

*Working Paper No. 01/64*

**Determinants of Private Capital Flows in the 1970s and 1990s: Is There Evidence of Contagion?**

Hernandez, Leonardo F.; Mellado, Pamela; Valdes, Rodrigo O.

*Working Paper No. 01/65*

**Intergovernmental Relations and Fiscal Discipline: Between Commons and Soft Budget Constraints**

Pisauro, Giuseppe

*Working Paper No. 01/66*

**Sanctions and Civil Conflict**  
Gershenson, Dimitry

*Working Paper No. 01/67*

**Bank Debit Taxes in Latin America: An Analysis of Recent Trends**  
Coelho, Isaias; Ebrill, Liam P.; Summers, Victoria P.

*Working Paper No. 01/68*

**The Long-Run Behavior of Commodity Prices: Small Trends and Big Variability**

Cashin, Paul; McDermott, C. John

*Working Paper No. 01/69*

**An Exploration of the Private Sector Response to Changes in Government Saving Across OECD Countries**

Thomas, Alun H.

*Working Paper No. 01/70*

**What is Different About Family Businesses?**  
Chami, Ralph

*Working Paper No. 01/71*

**Fiscal Decentralization and Governance: A Cross-Country Analysis**  
de Mello, Luiz; Barenstein, Matias

*Working Paper No. 01/72*

**Treatment of Mobile Phone Licenses in the National Accounts**

Dippelsman, Robert; Maehle, Nils

*Working Paper No. 01/73*

**Competition Among Regulators**  
Dell'Araccia, Giovanni; Marquez, Robert

*Working Paper No. 01/74*

**Fiscal Deficits and Inflation: A New Look at the Emerging Market Evidence**

Catao, Luis; Terrones, Marco

*Working Paper No. 01/75*

**Domestic Petroleum Price Smoothing in Developing and Transition Countries**

Federico, Giulio; Daniel, James; Bingham, Benedict

*Working Paper No. 01/76*

**The International Lender of Last Resort: How Large Is Large Enough?**

Jeanne, Olivier; Wyplosz, Charles

*Working Paper No. 01/77*

**Wealth Effects and the New Economy**  
Edison, Hali; Sløk, Torsten

*Working Paper No. 01/78*

**New Economy Stock Valuations and Investment in the 1990s**

Edison, Hali; Sløk, Torsten

*Working Paper No. 01/79*

**Benefits of Compliance with Securities Listing Standards: Evidence from the Depository Receipt Market**  
Sarr, Abdourahmane

---

IMF Working Papers and other IMF publications can be downloaded in full-text format from the Research at the IMF website at <http://www.imf.org/research>.



## IMF Research Bulletin

Eswar Prasad  
Editor

Helen Chin  
Assistant Editor

Kellett Hannah  
Systems Consultant

Choon Lee  
Typesetting

Phil Torsani  
Graphic Designer

Dawn Heaney  
Editorial Assistant

The IMF Research Bulletin (ISSN: 1020-8313) is a quarterly publication in English and is available free of cost. Material from the bulletin may be reprinted with proper attribution. Editorial correspondence may be addressed to The Editor, IMF Research Bulletin, IMF, Room 10-548, Washington, DC 20431 U.S.A. or e-mailed to [resbulletin@imf.org](mailto:resbulletin@imf.org). Subscription requests should be addressed to Publication Services, Box X2001, IMF, Washington, DC 20431 U.S.A.; e-mail: [publications@imf.org](mailto:publications@imf.org).

### Special Topic

## Government Finance Statistics

John Pitzer

*The IMF has updated the international standards for the compilation and presentation of fiscal data in its forthcoming publication, the second edition of the Government Finance Statistics Manual (GFS). The revisions substantially modernize and improve the presentation of fiscal accounts and enhance the value of these data for policy analysis as well as for academic research. The new manual is also written to provide analysts with needed flexibility.*

Financial events around the world have underscored how government fiscal policies must take a wide variety of circumstances into account at the design stage. For example, public finance analysts use fiscal statistics to examine many economic issues: the size of the public sector; its contribution to aggregate demand, investment, and saving; the impact of fiscal policy on the economy, including resource use, monetary conditions, and national indebtedness; the tax burden; tariff protection; and the social safety net. In addition, analysts have become increasingly interested in assessing the effectiveness of spending on poverty alleviation, the sustainability of fiscal policies, net debt, net wealth, and contingent claims, including the liabilities of social security schemes.

Fiscal analysts often need to use balancing items, which are select groupings of accounting entries calculated and expressed as a single amount. The new manual provides various balancing items from which analysts can choose one to fit a specific purpose. Examples include the following:

- The *net operating balance*, which is the change in net worth resulting from transactions, is a measure of the sustainability of current government operations.
- *Net lending/borrowing* summarizes the government's financial transactions and is calculated as the increase in financial assets less the incurrence of liabilities. It provides a measure of the government's demand for credit.
- By dividing financial assets and liabilities into domestic and foreign components, the *demand for foreign borrowing* can be calculated.
- The *cash surplus/deficit* is a measure of the cash required to finance a government's operations, including its acquisition of nonfinancial assets.
- The manual also includes an *overall fiscal balance*, which is net lending/borrowing adjusted for alternative treatments of selected transactions in assets (mainly financial assets) because many governments engage in such transactions as a means to carry out public policy rather than to manage its liquidity.

The GFS also introduces some entirely new and important features. For example, transactions and other flows are recorded using the accrual basis in accounting rather than the cash basis in the previous edition (1986). Governments have become adept at separating the time of a cash payment from the associated resource flow. By focusing on resource flows, the new GFS highlights government commitments for future cash flows as well as failures to meet previously scheduled cash flows. The manual includes balance sheets and records economic events other than transactions, such as the effects of exchange rate changes and the occurrence of natural disasters. The inclusion of balance sheets reflects the growing awareness that information on assets and liabilities is necessary for certain aspects of modern fiscal analysis. By including all economic events rather than just transactions with other units, an integrated system that explains all changes in the balance sheet can thus be produced.

Fiscal analysis cannot be conducted in a vacuum. Frequently, fiscal statistics must be combined with statistics related to the rest of the economy. The new GFS is therefore written to work well with the other internationally recognized macroeconomic statistical manuals dealing with the national accounts, balance of payments, and monetary and financial statistics.

Many countries will, of course, require a long transition period to fully convert their fiscal statistics to conform with the new standards. At a minimum, however, countries can convert their statistics classifications according to the new manual. Beginning with the 2002 edition of the *Government Finance Statistics Yearbook*, the IMF's database will be converted in accordance with the new classifications.

The GFS manual is available on the IMF website at <http://www.imf.org/external/pubs/ft/gfs/manual/index.htm>.