Global Development Finance

Harnessing Cyclical Gains for Development

I: Analysis and Summary Tables

Global Development Finance

Harnessing Cyclical Gains for Development

I: ANALYSIS AND SUMMARY TABLES 2004

THE WORLD BANK

1818 H Street, NW
Washington, DC 20433
Telephone 202-473-1000
Internet www.worldbank.org
E-mail feedback@worldbank.org

1 2 3 4 07 06 05 04

Cover photo of women building a road in Indonesia. © Nik Wheeler/CORBIS.
Cover design: Fletcher Design.

ISBN 0-8213-5740-9
ISSN 1020-5454

The cutoff date for data used in this report was March 12, 2004. Dollars are current U.S. dollars unless otherwise specified.

Table of Contents

Tables

Figures

Boxes

Foreword

NEVER BEFORE HAVE DEVELOPED and developing countries shared such a strong interest in ensuring the stable growth of international capital flows. Both South and North stand to benefit from the recovery now under way in the global economy, which coincides with a rebound in financial flows to developing countries. The key question for policymakers is how to channel these gains into investments that promote development and sustainable poverty reduction.

The external environment for developing countries improved in 2003 as global growth gained momentum and as private capital flows recovered from the subdued levels of the past five years. The recovery in private flows was encouraged by expansionary monetary policies in the advanced economies and structural improvements in the developing world. There are, however, important risks that need to be addressed. High-income countries need to adjust toward a more balanced pattern of economic growth and more sustainable financing of current account imbalances. The U.S. current account deficit is now more than 5 percent of gross domestic product, and its financing has important implications for the sustainability of the global economic recovery. The nature and timing of the necessary adjustments will depend on several factors, including how fast economic activity picks up in the rest of the world—particularly in the Euro area—and the success of policymakers in facilitating orderly adjustments in exchange rates. Should the resolution of imbalances in the advanced economies eventually require an abrupt adjustment in international financial markets, including a sharp increase in interest rates, the flow of capital to developing countries might be adversely affected.

Structural measures to promote stability should continue to be pursued, including lengthening the maturity and depth of markets for emerging-market bonds, enhanced transparency and adherence to standards and codes, and the inclusion of collective action clauses in international bond covenants. It will be important for governments in developing countries to maintain prudent macroeconomic policies and to persevere with reforms designed to consolidate the improvement in credit quality. Maintaining the confidence of investors and creditors, particularly in the face of political uncertainties linked to forthcoming elections in several countries, will be important, as will be avoiding an accumulation of excessive, especially short-term, debt. Pursuing these measures will reduce their vulnerability to adverse financial shocks.

To maximize the development impact of these cyclical gains, capital flows should be channeled into areas where they can lay the foundation for long-term economic growth, international competitiveness, and the expansion of trade. Increased investment in infrastructure stands out as an urgent need, with more than a billion people lacking access to safe drinking water, 2.4 billion without adequate sanitation, and 1.4 billion without access to power. Promoting new capital investment in infrastructure requires promoting balanced public-private partnerships, with appropriate risk distribution. International financial institutions can support this process by creating the conditions under which unmet needs can be converted into investment opportunities that are attractive to global capital markets.

Access to capital flows must be broadened. With the exception of trade finance, private capital flows remain heavily concentrated in a few countries and regions. In 2003, just ten countries accounted for 69 percent of foreign direct investment in the developing world, while only five accounted for 60 percent of total bond issuance.

Official development assistance is still an important source of external finance for many countries. But, as private capital flows have rebounded, official aid flows have risen only slightly and remain below the levels needed to achieve the Millennium Development Goals. To meet the goals, along with the expectations raised by the launching of the World Trade Organization (WTO) Doha

Development Round in 2001, donor countries must deliver on their pledges to increase aid and reduce debt owed by the poorest countries, and lower agricultural subsidies and trade barriers. The failure to reach agreement at the Cancún WTO talks in September 2003 makes finding additional sources of finance for these countries especially urgent within the context of broader efforts by the international community to shape coherent and mutually reinforcing aid and trade policies.

Global Development Finance is the World Bank's annual review of the external financial conditions facing developing countries. The current volume provides analysis and summary tables on selected macroeconomic indicators and financial flows. A separate volume contains detailed, standardized external debt statistics for 136 countries. More information on the analysis, including additional material, sources, background papers, and a platform for interactive dialogue on the key issues can be found at www.worldbank.org/prospects.

François Bourguignon
Senior Vice President and Chief Economist
The World Bank

Acknowledgments

THIS REPORT WAS PREPARED BY THE International Finance Team of the Development Prospects Group (DECPG) and drew on resources throughout the Development Economics Vice Presidency, the World Bank operational regions, the International Finance Corporation, and the Multilateral Investment Guarantee Agency.

The principal author was Mansoor Dailami, with direction by Uri Dadush. The report was prepared under the general guidance of World Bank Chief Economist and Senior Vice President François Bourguignon. The main authors for each chapter were as follows:

Overview	Mansoor Dailami, with contributions from the International Finance Team
Chapter 1	Annette I. De Kleine, Mick Riordan, Hans Timmer, Kevin Barnes, and Mansoor Dailami
Chapter 2	Himmat Kalsi and Kevin Barnes
Chapter 3	Dilip Ratha, Dilek Aykut, and Eung Ju Kim
Chapter 4	William Shaw and Neil Bush
Chapter 5	William Shaw, Himmat Kalsi, Neil Bush, and Neeltje Van Horen
Chapter 6	Mansoor Dailami, with the assistance of Neil Bush and Eung Ju Kim
Appendix A	Dilip Ratha

The statistical appendix was prepared by Eung Ju Kim, Kevin Barnes, Fernando Martel-Garcia and Abhijeet Dwivedi of DECPG; the Financial Data Team of the Development Data Group (DECDG), led by Ibrahim Levent and including Nevin Fahmy, Shelly Fu, Michael Lewin, and Gloria R. Moreno; and Punam Chuhan of the Global Monitoring Secretariat. The financial flow and debt estimates were developed in a collaborative effort between DECPG and DECDG. The main macroeconomic forecasts were prepared by the Global Trends Team of DECPG, led by Hans Timmer and including John Baffes, Maurizio Bussolo, Annette I. De Kleine, Betty Dow, Robert Keyfitz, Donald Mitchell, Mick Riordan, Shane Streifel, and Bert Wolfe. The analysis and forecasts were also prepared in conjunction with the Bank's regional chief economists: Shantayanan Devarajan (South Asia), Alan Gelb (Sub-Saharan Africa), Homi Kharas (East Asia and Pacific), Pradeep K. Mitra (Europe and Central Asia), Mustapha Nabli (Middle East and North Africa), and Guillermo Perry (Latin America and the Caribbean). Ratika Narag (Consultant) and Heather Milkiewicz (Brookings Institution) provided research assistance to appendix A and chapter 2, respectively. Background notes and papers were prepared by John Strong, Margaret Osius, Pierre-Richard Agenor, Dhruva Sahai, and Neeltje Van Horen. They are posted in the online version of the report.

The report also benefited from the comments of the Bank's Executive Directors made at an informal board meeting on March 10, 2004.

Many others from inside and outside the Bank provided input, comments, guidance, and support at various stages of the report's publication. Martin Muhleisen (International Monetary Fund), Barbara Mierau-Klein, Mihir Desai (Harvard Business School), Amarendra Bhattacharya, John Panzer, and Nemat Shafik were discussants at the Bank-wide review. In addition, within the Bank, comments and help were provided by Asli Demirguc-Kunt, Hossein Razavi, Leora Klapper, Milan Brahmbhatt, Ziad Alahdad, Ajay Chhibber, Ranjit Lamech, Barbara Lee, Clive Harris, Mark Dorfman, Shahrokh Fardoust, Coralie Gevers, Norbert Fiess, James Hanson, David Rosenblatt, Luis Serven, Mark Sundberg, Richard Newfarmer, Neil Roger, Mohammad Zia Qureshi, Raymundo Morales, Sergio Schmukler, and Marina Halac.

Outside the Bank, several people contributed through meetings, exchanges of views, and sharing perspectives on emerging issues. These include Charles Blitzer and Eliot Kalter (International Monetary Fund); Cyrus Ardalan (Barclays Capital); Robert Phillips (Cameron Mckenna);

Chris Salmon (Bank of England); Rachel Turner (U.K. Department for International Development); Kimberley Wiehl, Lenart Skarp, and Nic Kennedy (Berne Union); Janet West and Simon Scott (OECD); Curt Fitzgerald (Exxon Mobil Corporation); Deborah Fuhr (Morgan Stanley); and Paul Mielczarski and Nikolette Lekka (Credit-Suisse First Boston).

Steven Kennedy edited the report. Maria Amparo Gamboa and Katherine Rollins provided assistance to the team. Dorota Nowak managed production and dissemination activities by DECPG. Book design, editing, and production were coordinated by Cindy Fisher, Susan Graham, and Ilma Kramer of the World Bank Office of the Publisher.

Selected Abbreviations

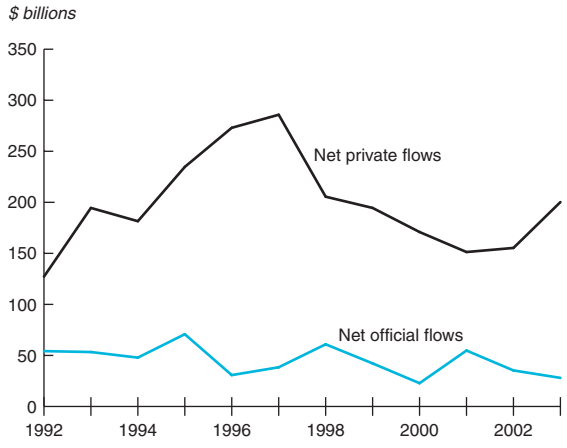
ACH	Automated clearinghouse
ADB	Asian Development Bank
ADR	American depository receipt
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
BIS	Bank for International Settlements
BOT	Build-operate-transfer
CAC	Collective action clause
CDS	Credit default swap
CEEC	Central and Eastern European countries
CIDA	Canadian International Development Agency
CIS	Commonwealth of Independent States
CP	Currency pool
DAC	Development Assistance Committee (of the OECD)
DFID	Department for International Development (of the United Kingdom)
EBRD	European Bank for Reconstruction and Development
ECA	Export credit agency
ECB	European Central Bank
ECLAC	Economic Commission for Latin America and the Caribbean
EIB	European Investment Bank
EMBI	Emerging Market Bonds Index
EMBIG	Emerging Market Bonds Index—Global
ETF	Exchange-traded fund
EU	European Union
FDI	Foreign direct investment
FIAS	Foreign Investment Advisory Service (of the World Bank)
FPC	First principal component
G-5	Group of Five (France, Germany, Japan, the United Kingdom, and the United States)
G-7	Group of Seven (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States)
GATS	General Agreement on Trade in Services
GDP	Gross domestic product
GDR	Global depository receipt
GNFS	Goods and nonfactor services
GNI	Gross national income
HIPC	Heavily indebted poor countries
IBRD	International Bank for Reconstruction and Development (of the World Bank Group)
ICA	International Court of Arbitration
ICC	International Chamber of Commerce
ICU	Investment Climate Unit (of the World Bank)
IDA	International Development Association (of the World Bank Group)
IDB	Inter-American Development Bank
IFC	International Finance Corporation (of the World Bank Group)
IFF	International Finance Facility
IMF	International Monetary Fund
IPO	Initial public offering
IRB	Internal-ratings-based
IRnet	International Remittance Network
JBIC	Japan Bank for International Cooperation
LCIA	London Court of International Arbitration
LCVI	Liquidity, Credit, and Volatility Index (J.P. Morgan)
LIBOR	London interbank offered rate
LMIC	Low- and middle-income countries
M&A	Mergers and acquisitions
MCA	Millennium Challenge Account
MDGs	Millennium Development Goals
MIGA	Multilateral Investment Guarantee Agency (of the World Bank Group)
NAFTA	North American Free Trade Agreement
NEPAD	New Partnership for Africa's Development
NGO	Nongovernmental organization
NPV	Net present value
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of Petroleum Exporting Countries
PAFTA	Pan-Arab Free Trade Area
PPI	Private participation in infrastructure
PPP	Purchasing power parity
PRI	Political risk insurance

PRSP	Poverty Reduction Strategy Paper
SAARC	South Asian Association for Regional Cooperation
SCP	Single currency pool
SWIFT	Society for Worldwide Interbank Financial Telecommunications
U.N.	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
VAR	Value at risk
WOCCU	World Council of Credit Unions
WTO	World Trade Organization

Overview and Policy Messages: Harnessing Cyclical Gains for Development

A STRONG CYCLICAL RECOVERY IN global capital flows to developing countries is underway. Net private flows increased sharply in 2003, reaching $200 billion—their highest level since 1998. The rapid turnaround in private flows from the subdued levels of the two previous years occurred in all regions, except the Middle East and North Africa. Flows to Europe and Central Asia were particularly strong, as eight transition countries approached accession to the European Union in May 2004. Total net capital inflows, including official flows, reached $228 billion (3.6 percent of developing-country gross domestic product [GDP]), up from $191 billion in 2002 (3.2 percent of GDP) (figure 1; table 1). At the same time, the credit quality of developing countries improved markedly, and investor confidence is returning.

Figure 1 Net financial flows to developing countries, 1992–2003



Source: World Bank Debtor Reporting System and staff estimates.

The recovery in capital flows is heavily influenced by cyclical factors—in particular the boost to liquidity arising from stimulative monetary policy in many advanced economies—but it also reflects structural improvements both in developing countries and internationally. The net external liability position of developing countries has strengthened, and the large-scale buildup in developing countries' official reserves—much of which is invested in the financial markets of advanced economies—has introduced a new dimension to the relationship between the developed and developing worlds. More than ever, global capital flows, trade, and exchange-rate policies are intricately linked.

The challenge for international financial policymakers will be to ensure that the cyclical recovery in flows can be sustained over the medium term, and that it can be channeled into areas, such as infrastructure, where it can lay the foundations for sustained growth and poverty reduction, thereby helping to meet the Millennium Development Goals. It will be important to maintain investor confidence, while avoiding the excesses—and increased vulnerability—that have accompanied surges in lending to developing countries in the past. At the same time, aid flows have to increase. These are the central themes of this year's *Global Development Finance*.

The external environment for developing countries has improved *—due to the global economic recovery—*

The signs of global recovery have become increasingly evident over the past year, improving the external environment for developing countries. World economic growth accelerated

Table 1 Net capital flows to developing countries, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e	For more detail
Current account balance	−83.7	−102.4	−6.9	56.2	21.0	78.5	75.8 →	Chapter 1
as % of GDP	−1.4	−1.8	−0.1	1.0	0.4	1.3	1.1	
Financed by:								
Net equity flows	193.7	182.1	194.4	174.8	179.4	152.0	149.5 →	Chapter 3
Net FDI inflows	171.1	175.6	181.7	162.2	175.0	147.1	135.2	
Net portfolio equity inflows	22.6	6.6	12.6	12.6	4.4	4.9	14.3	
Net debt flows	105.3	57.6	13.8	−9.8	−1.2	7.3	44.3	
Official creditors	13.2	34.2	13.7	−5.9	26.9	4.1	−6.3 →	Chapter 4
World Bank	9.2	8.7	8.8	7.9	7.5	−0.2	−1.9	
IMF	3.4	14.1	−2.2	−10.6	19.5	14.0	8.0	
Others	0.6	11.4	7.1	−3.1	−0.1	−9.7	−12.4	
Private creditors	92.2	23.4	0.1	−3.9	−28.1	3.2	50.6 →	Chapter 2
Net medium- and long-term debt flows	84.2	87.0	22.4	5.2	−5.3	1.8	18.6	
Bonds	38.2	39.7	29.8	16.5	12.2	12.7	33.1	
Banks	43.9	52.4	−5.1	−5.8	−10.2	−3.9	−6.6	
Others	2.0	−5.1	−2.3	−5.5	−7.3	−7.0	−7.9	
Net short-term debt flows	8.0	−63.6	−22.3	−9.1	−22.9	1.4	32.0	
Balancing item[a]	−162.5	−120.7	−163.1	−168.6	−119.0	−65.0	6.3	
Change in reserves (− = increase)	−52.8	−16.6	−38.1	−52.6	−80.2	−172.9	−276.0 →	Chapter 1
Memo items:								
Total foreign aid (grants) (excluding technical cooperation grants)	25.3	26.7	28.5	28.7	27.9	31.2	34.3 →	Chapter 4
Net private flows (debt+equity)	285.8	205.5	194.5	170.9	151.3	155.3	200.2	
Net official flows (aid+debt)	38.4	60.9	42.2	22.8	54.8	35.3	28.0	
Total net capital flows (private+official)	324.3	266.5	236.7	193.7	206.1	190.6	228.2	
Infrastructure finance[b]	89.7	70.3	72.1	77.0	53.8	44.7	50.5 →	Chapter 6
Trade finance[c]	24.2	16.1	17.0	21.4	19.3	21.1	23.7 →	Chapter 5
Workers' remittances	66.1	62.9	67.6	68.4	77.0	88.1	93.0 →	Appendix A

Note: e = estimate.

a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries. Over the past two years, there has been a marked reduction in the net accumulation of international assets, other than official reserves, by developing-country residents. These flows are captured in the "balancing item." One explanation for the reduction may lie in a—possibly temporary—reversal of such outflows from China amid speculation about an adjustment in exchange-rate policy.

b. The total volume of capital raised internationally through bank loans, bonds, and equity offering for developing countries' infrastructure.

c. The trade finance figures refer to gross publicly announced commitments from international banks for trade-related purposes. Thus, only the commercial bank lending component of trade finance is included.

Sources: World Bank Debtor Reporting System and staff estimates; IMF, *Balance of Payments Yearbook;* and Dealogic Bondware and Loanware.

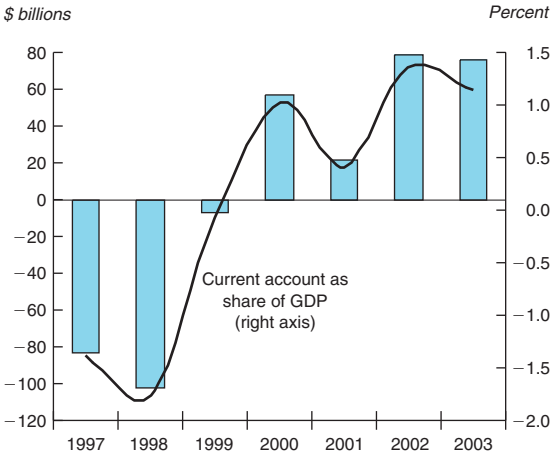
from an annual rate of 1.8 percent in 2002 to 2.6 percent in 2003. It is forecast to jump to 3.7 percent in 2004. With profit margins rising—and interest rates low—global investment is recovering strongly, laying the foundation for continued growth. The recovery also reflects the strong stimulus created by the easing of fiscal and monetary policies in the advanced economies, notably in the United States, where the budget moved from a surplus equivalent to 1.6 percent of GDP in 2000 to a deficit of 4.6 percent of GDP in 2003. Low interest rates in many of the advanced economies helped propel the growth in capital flows to developing countries; modest recent increases in long-term interest rates so far have not sapped that growth.

World commodity markets have moved in tandem with recovery in global economic activity. Non-energy U.S. dollar commodity prices in 2003 averaged 10 percent above their 2002 levels, while metal prices—traditionally a reliable leading indicator—surged toward the end of 2003, driven partly by the interest of fund investors.

—and an improvement in their net liability positions—

Seeking to avoid excessive reliance on external financing, developing countries, as a group, have run large current account surpluses in recent years. In 2003, the surplus in the developing world amounted to $76 billion—about 1.1 percent of GDP (figure 2). The pickup in growth during the

Figure 2 Developing countries' current account balance, 1997–2003



Sources: IMF, *International Financial Statistics*, 2004, and World Bank staff estimates.

year resulted in smaller current account surpluses in several countries, although these were largely offset by Brazil's move into surplus.

Increased reliance on equity finance—together with current account surpluses—has improved the external liability positions of developing countries. By 2003, the total external debt of developing countries had declined to about 37 percent of their GDP, compared with 44 percent in 1999. Despite the recent increase in short-term lending, short-term external debt was about 15 percent of the total debt stock in 2003, down from 19 percent in 1997. Meanwhile, the costs of external debt service have fallen with lower global interest rates—the ratio of debt service to exports for developing countries fell to 15 percent in 2003 from 19 percent in 1997—and many developing-country borrowers have taken the opportunity to restructure their debt to take advantage of the low rates.

—with structural measures to enhance stability—

Structural influences behind the recovery in flows include the increasing maturity and depth of markets for emerging-market bonds and important progress in improving transparency and adherence to standards and codes. The presence of collective action clauses (CACs) in international bond issues—including those of several Latin American issuers—is a welcome further step, and it is encouraging that such clauses have achieved such rapid and widespread acceptance in international capital markets. By making future bond restructurings—should they be necessary—more manageable and predictable, CACs should encourage capital flows in the near term. But they are not a panacea. A large outstanding stock of bonds does not include such clauses. And the handling of the Argentine debt restructuring will have an important influence on investor attitudes—and hence potentially on capital flows. The upswing in bank lending is predominantly short term—net medium-term flows remain negative. Nevertheless structural changes—including strengthened risk management—likely mean that it is more soundly based than in previous upswings.

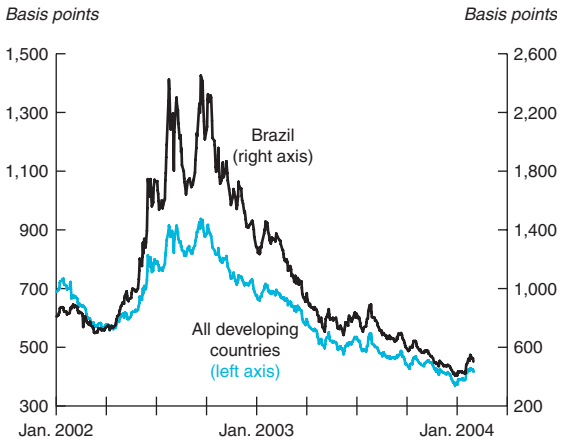
—furthermore, the credit quality of developing countries has improved, reducing the cost of capital—

One of the most important factors behind the recovery in private flows has been an improvement in the credit quality of developing countries. To some extent, the improvement reflects the favorable external environment, with many developing countries benefiting from strong commodity prices and brisk growth in world trade, much of it between developing countries. But many countries also have undergone significant adjustments in recent years, including a move toward market mechanisms and increased openness to international trade and investment. Fiscal policies have generally been more prudent, although concern persists about the sustainability of public debt in several countries. Flexible exchange-rate systems have become much more prevalent, reducing the possibility that an exchange-rate crisis will turn into a debt crisis—and forcing increased awareness of the risks inherent in currency mismatches. Relatively low inflation rates have become established, and many developing countries are showing strong growth in productivity.

The improved credit quality has translated into improved credit ratings, with the average sovereign credit rating of developing countries reaching its highest level since the beginning of 1998. Several developing countries, including India, the Russian Federation, and Turkey, all received upgrades from the major credit rating agencies in 2003.

Investor perceptions that credit risk has fallen have contributed to a major decline in bond spreads. The average spread on emerging-market bonds (EMBIG) fell from more than 725 basis

Figure 3 Spreads on emerging-market bonds, January 2002–February 2004



Source: J.P. Morgan Chase.

points at the end of 2002 to just 390 basis points in early January 2004, before rebounding to 420 basis points by mid-February 2004 (figure 3). Average emerging-market bond spreads for Latin America were halved from more than 1,000 basis points at the end of 2002 to just 535 basis points over the same period, reflecting a more favorable assessment of prospects for Brazil. Although credit quality has clearly improved, the compression in emerging-market spreads may have outstripped improvements in fundamental credit quality, leaving some scope for a future correction. The spread compression has boosted the returns investors have received on emerging-market debt over the past year—and investors will not be able to match these gains in the future.

—but there is no room for complacency

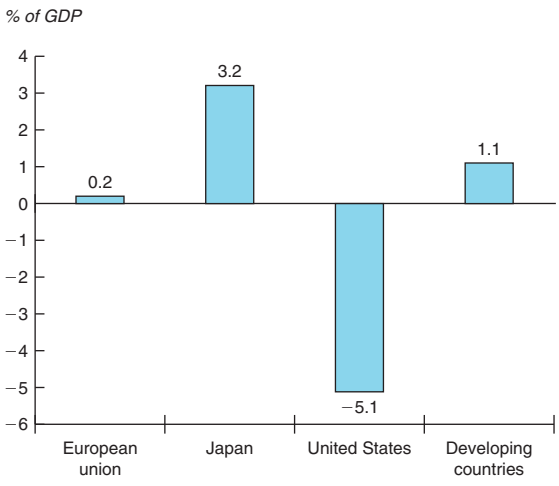
Further increases in interest rates in some advanced economies could dampen flows, and some correction in spreads is possible. Renewed volatility in the financial markets—likely stemming from imbalances in advanced economies—might also have an adverse impact on flows. The string of crises since the mid-1990s exposed vulnerable spots in developing-country debt markets. Together, the countries that experienced those crises account for almost 60 percent of the outstanding debt stock of developing countries. Borrowers in developing countries should bear in mind the lessons of recent years and remain prudent about incurring additional external liabilities. Particular care should be taken to ensure that foreign-currency liabilities are appropriately hedged. Moreover, borrowers should remain wary of possible fluctuations in the availability of finance, particularly in light of the renewed pickup in short-term financing.

Developing countries should also maintain prudent macroeconomic policies and persevere with needed reforms to foster sustainable growth, consolidate the improvement in credit quality, and maintain the confidence of investors and creditors, particularly in the face of political pressures from forthcoming elections in several countries.

To keep the recovery on track, imbalances in advanced economies need to be addressed

The macroeconomic policies of high-income countries must be adjusted toward more balanced global economic growth and more sustainable financing of existing current account imbalances (figure 4). The same developed-country policies that helped prevent the 2001 downturn from deepening pose substantial medium-term challenges. The U.S. current account deficit, to take the most prominent example, is now more than 5 percent of GDP, and the reluctance of private investors to finance that deficit at the prevailing exchange rate has already led to a sharp fall in the value of the dollar against most major currencies. The nature and timing of the necessary adjustments

Figure 4 Global current account balances, 2003



Source: World Bank staff estimates.

will depend on several factors, including how fast economic activity picks up in the rest of the world—particularly in the euro area—and on the success of policymakers in facilitating orderly adjustments in exchange rates. Also important is the willingness of foreign central banks to continue to finance the U.S. current account through the use of accumulated reserves. This policy can continue as long as the surplus countries see higher benefits from trade expansion than costs from reserve accumulation, among them risks of monetary expansion.

Since 2000, the developing world has been a net exporter of capital to the advanced economies. For developing countries as a whole, foreign-exchange reserves rose about $276 billion in 2003, bringing total reserves to $1,227 billion—equivalent to nearly four times their short-term external debt. This buildup reflects a precautionary reaction to the costly crises of the 1990s, as well as broader factors related to trade and exchange rates. It underlines the strong financial interdependence between developed and developing countries. That interdependence, intensified in recent years, gives the developed and developing economies a common interest in addressing the macroeconomic imbalances and long-term risks discussed here.

As the global economic recovery gathers momentum, the phase of generalized easing of monetary policy appears to be coming to an end. The Bank of England and Reserve Bank of Australia recently increased interest rates, and the U.S. Federal Reserve has suggested that it is likely, in time, to return to a more neutral monetary stance, though concerns persist about job creation. Fiscal deficits in high-income countries have widened every year since 2000—from 0.1 percent of GDP to 3.7 of GDP in 2003. If uncorrected, fiscal imbalances could push real interest rates higher globally, potentially dampening capital flows to developing countries as the public sector in advanced economies competes with developing countries for global savings.

As foreign direct investment moves into the service sector, the local investment climate becomes more important

Flows of foreign direct investment (FDI) to developing countries declined in 2003 for the second consecutive year. At $135 billion, they were 23 percent below the level reached in 2001. The equity component of FDI was somewhat more resilient than intercompany debt and reinvested earnings. Much of the decline is attributable to weaker service-sector FDI, which, being largely location bound and generating local-currency earnings that are vulnerable to devaluation risk, is particularly sensitive to the local investment climate and vulnerable to financial crisis. FDI inflows in services rose during the second half of the 1990s to overtake FDI in manufacturing, but in the past two years, in particular, there was a significant drop in Brazil—where investment in telecommunications and energy has fallen steeply, and where the privatization cycle has wound down.

FDI flows are expected to recover in 2004, in line with the global economic recovery. The pace of recovery will depend on the liberalization of service sectors in the developing world, on the restoration of investors' confidence after recent crises, and on the availability of political risk insurance, for which demand remains high. Concern over regulatory risks may have a particular impact on FDI in the banking and utilities industries.

Flows of portfolio equity capital to developing countries topped $14 billion in 2003, up from $5 billion in 2002, as growth strengthened and equity markets rebounded globally. Nevertheless, these flows remain small relative to other sources of capital, reflecting the volatility of emerging-market economies, concerns over corporate governance, limited diversification benefits because of strong correlations with advanced-country equity markets, and a continuing "home bias" on the part of investors. Additional constraints on growth include the technological underdevelopment of stock markets in developing countries and the uncertain quality of their supervisory institutions. Stock exchanges in Latin America and the Caribbean, and in Europe and Central Asia, continue to experience stock delisting, as companies migrate to major global stock exchanges in industrial countries.

The improvement in private capital flows has benefited most regions *—but broader access would be desirable—*

The increase in private capital flows has affected all regions, with the exception of the Middle East and North Africa (table 2).

- Net private flows to Sub-Saharan Africa strengthened slightly in 2003, due mainly to

Table 2 Net private capital flows to developing countries, 1997–2003
$ billions

	1997	1998	1999	2000	2001	2002	2003e
East Asia and Pacific	85.8	7.1	27.5	24.3	38.0	55.2	71.0
Europe and Central Asia	52.9	64.2	47.2	51.5	32.2	55.2	62.9
Latin America and the Caribbean	114.1	98.8	95.0	78.0	58.1	25.6	47.3
Middle East and North Africa	7.8	16.3	4.2	−0.7	7.7	6.1	−3.8
South Asia	8.2	5.3	3.5	9.2	4.0	8.0	10.4
Sub-Saharan Africa	17.0	13.8	17.0	8.6	11.3	5.2	12.4

Note: e = estimate.
Sources: World Bank Debtor Reporting System and staff estimates.

stronger debt flows to South Africa. FDI to the region remained steady—and concentrated in countries rich in petroleum and minerals.

- Flows to many countries in Europe and Central Asia were particularly strong in 2003, as eight transition countries approached accession to the European Union. Effective implementation of EU-related structural reforms and past FDI should contribute to a step-up in productivity growth, although mounting fiscal deficits are likely to pose an increasing challenge.
- South Asia saw a marked strengthening in portfolio equity investment, bank lending, and FDI in 2003, although this was offset in part by a substantial bond repayment by India.

However, private capital flows (except for trade finance) are heavily concentrated on specific countries and regions. For example, East Asia and Latin America accounted for two-thirds of international investment in developing-country infrastructure between 1992 and 2003, while Latin America and Eastern and Central Europe continue to dominate international bond issuance. Ten countries accounted for 68 percent of FDI in 2003, down from a peak concentration of 78 percent in 2000, but still significant. There is an important role for multilateral agencies in promoting broader, sustained access to capital and in facilitating higher levels of official aid for countries that do not have access to international capital flows.

—and efforts should be taken to reduce the transaction costs of workers' remittances

Workers' remittances have become a major source of external development finance for many developing countries. Remittances to developing countries increased by more than 20 percent during 2001–03, reaching an estimated $93 billion in 2003. More remittances were diverted to formal channels from alternatives—a result of efforts to curb money laundering. Also, the increased focus on remittances resulted in better reporting of data in many developing countries.

The development community should view remittances as a welcome source of external finance and strive to improve the financial infrastructure supporting them. Steps should be taken to reduce remittance costs, which remain high. Appropriate policies include improving competition among money transfer agents, increasing access to banking services for migrant workers in source countries and households in recipient countries, and improving the investment climate (by liberalizing exchange restrictions, for example) in the receiving countries.

The landscape for official flows is improving, but increases are not enough to reach the MDGs

Political developments and changes in attitudes are dramatically altering the landscape for official flows. Net official development assistance (ODA) did increase to $58 billion in 2002 but remains well below historical levels and what is required to meet the Millennium Development Goals. Moreover, half the $6 billion increase in nominal ODA reflects debt relief and a further $1 billion higher aid to Afghanistan and Pakistan.

In light of discussions surrounding the 2002 Monterrey Conference, donors have made pledges to increase aid, although actual disbursements will be subject to future decisions and the normal legislative process of each donor country. The international community should do its utmost to ensure that the existing commitments are met

and new ones made. The failure to reach agreement at the Cancún talks on reducing agricultural subsidies and trade barriers makes finding additional sources of finance for the world's poorest countries especially urgent.

Aid donors and recipients are taking steps to change the means of allocating and using aid. Major donors are providing more funds for global public goods and paying more attention to the policy framework in recipient countries when making aid-allocation decisions. The Poverty Reduction Strategy Papers and the New Partnership for Africa's Development are aimed at strengthening policies in recipient countries and ensuring greater ownership of development programs, thereby increasing aid effectiveness. Those steps should be encouraged. In the light of recent international conflicts, which have increased the role of strategic factors in allocating aid, the message of aid effectiveness must not be lost.

In recent years, there has been a sharp decline in nonconcessional net lending. Bilateral nonconcessional lending declined from −$8.8 billion in 2002 to −$11.8 billion in 2003 as donors continued to reduce their lending in favor of grants—and as some developing countries continued to make repayments to the Paris Club under past rescheduling agreements. The sharp decline in nonconcessional lending from multilateral sources partly reflects the decline in emergency financing packages from the International Monetary Fund, particularly in comparison with the large net disbursement in 2001. But lower multilateral lending also reflects the prepayment of loans to the World Bank, particularly by China, India, and Thailand.

Trade finance facilitates international trade and provides access to foreign capital for less creditworthy countries

Developing countries' international trade is equivalent to about one-half of their gross national income. Trade finance supplies the liquidity needed to conduct trade, and governments can support it by ensuring a sound and efficient financial system.

Trade finance to developing countries increased strongly before the East Asian crisis, in response to the growth of developing countries' international trade and in conjunction with their growing participation in the international financial system. Trade finance fell sharply with the crisis but resumed its upward trend thereafter.

Trade finance is particularly important in facilitating finance for firms in less creditworthy countries, in part because traded goods are available as security for lenders. In addition, relationships built with foreign trading partners often ease access to credit, for example, in the form of extended payment terms offered by suppliers. Moreover, developing-country firms involved in international trade, and foreign-owned firms, can serve as intermediaries that pass on credit to firms (particularly in poor countries) that lack direct access to international finance.

Trade finance remains vulnerable to episodes of financial crisis, when commercial banks may reduce their exposure by failing to renew short-term facilities. Nonetheless, finance linked to trade transactions may hold up better than other forms of foreign borrowing—for several reasons. Lenders can rely on security arrangements linked to traded goods. Suppliers' information on their borrowers may limit contagion. Suppliers have an incentive to support their customers during cyclical downturns. And in some cases governments have provided preferential treatment to trade finance in the context of rescheduling agreements. Trade credit from suppliers and customers, in particular, appears to have held up better during crises than bank lending.

Steps governments can take to strengthen trade finance include providing legal standing for electronic documents (to facilitate more efficient letters of credit) and for the assignment of receivables (to encourage factoring).

Channeling capital to long-term infrastructure requires a balanced public-private approach

Infrastructure needs in developing countries remain largely unmet—1.1 billion people lack access to safe drinking water, 2.4 billion are affected by inadequate sanitation, 1.4 billion have no power, and telecommunication links are five times less dense than in the developed world. Worldwide, future demand for infrastructure is likely to come mainly from the developing world. The challenge is to translate this demand into viable investment opportunities that are accessible to private investors and creditors, and to unlock the potential

of the global capital markets to finance them. From 1992 to 2003, total international investment in developing countries' infrastructure is estimated to have been $622 billion—an average of $52 billion a year and 3.8 percent of total gross domestic investment in the developing world.

Since the 1980s, the global infrastructure industry has undergone unprecedented changes, including a technological revolution in the telecommunications industry, deregulation and competition in mature markets, and liberalization in the developing world. The importance of private ownership and finance in electrical power, transport, water, and telecommunications is now well recognized. It is also well recognized that public providers of infrastructure services will continue to play a significant role in infrastructure development, ownership, and operation—at least for the next few years. The challenge, therefore, is to achieve stable investment environments and creditworthy public and private infrastructure enterprises that can access these global capital markets.

The issues to be addressed in tapping global and domestic capital markets to meet the infrastructure financing needs of developing countries are three. First, a strong institutional framework for the protection of creditors' rights, effective covenants, and reliable avenues of legal enforcement and remedy. Second, growth, maturation, and stability in local capital markets—these markets provide both long-term local-currency financing and hedging against exchange-rate risk. Third, a renewed effort to improve the creditworthiness of public infrastructure providers—both to facilitate their access to capital markets and to make private equity investment in public-private ventures less risky.

As multilateral institutions incorporate the Millennium Development Goals into their targets and strategic vision, they have come increasingly to view infrastructure financing within the broader context of financing for development. They can help meet infrastructure needs in developing countries through their own lending and by leveraging private capital.

1

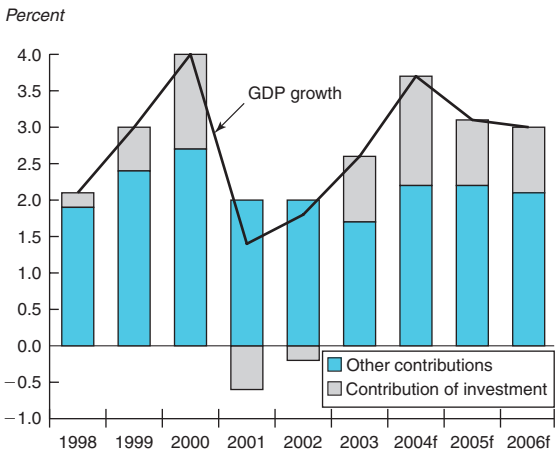
The Global Upturn and the Need for Adjustment

THE GLOBAL ECONOMIC environment affecting capital flows to developing countries improved appreciably in 2003. Global growth gained momentum in the second half of 2003 as the locus of economic activity shifted towards business investment spending. Renewed confidence in international financial markets led to a considerable decline in risk spreads in bond markets and fueled a strong rally in equity prices. Worldwide, GDP growth increased from 1.8 percent in 2002 to 2.6 percent during 2003; it is projected to rise to 3.7 percent in 2004 (table 1.1). Echoing the message of global recovery, key markets around the world rebounded. Nonenergy commodity prices in 2003 averaged 10 percent above their 2002 levels, while metal prices—traditionally a reliable leading indicator—surged at the end of 2003. A further 10 percent gain in commodity prices is expected this year. Global trade posted 4.5 percent growth in 2003 and should climb to 8.7 percent in 2004.

The recent global economic downturn—and now the recovery—has been strongly influenced by the business investment cycle. In response to the sharp drop in investment that followed the bursting of equity bubbles in mid-2000, governments in high-income countries quickly eased macroeconomic policies, and monetary policy drove global interest rates to historic lows. Firms started to work off excess capacity and cut costs. By 2003 profits began to rise, and with them so did investment. A step-up in capital spending, or in some countries a reduced rate of decline in investment, accounts more than all other factors for the acceleration of global GDP growth in 2003 (figure 1.1). The upturn in investment will likely gain strength in 2004 as recoveries in leading regional economies spread to lagging ones.

Another characteristic of the global recovery is that developing countries as a group are markedly outperforming the high-income countries. Developing countries' GDP grew 4.8 percent in 2003, compared to a 2.1 percent advance in the high-income countries. The low- and middle-income countries are on track this year to surpass the record 5.2 percent growth achieved in 2000, before the global slowdown. Trade performance, in particular, shows that developing countries have become an increasingly important pillar for global economic activity. In 2003 the volume of developing countries' imports and exports increased by 13.4 percent, more than five times the 2.5 percent

Figure 1.1 Contribution of investment to global GDP growth, 1998–2006



Note: *f* = forecast.
Source: World Bank.

Table 1.1 Global outlook in summary, 2002–2006

% change from previous year, except interest rates and oil price

						GEP 2004 forecasts	
	2002	2003e	2004f	2005f	2006f	2003	2004
Global conditions							
World trade volume[a]	3.5	4.6	8.7	7.9	7.1	4.6	7.9
Consumer prices							
G-7 countries[b,c]	1.3	2.0	1.4	1.7	1.9	1.4	0.9
United States	1.6	2.3	1.5	2.3	2.7	1.9	1.2
Commodity prices ($ terms)							
Non-oil commodities	5.1	10.0	10.4	−2.9	−2.8	6.9	1.0
Oil price (OPEC average)	24.9	28.9	26.0	23.0	20.0	26.5	22.0
Oil price (% change)	2.4	16.0	−10.0	−11.5	−13.0	6.3	−17.0
Manufactures unit export value[d]	−1.3	6.5	4.3	−1.7	−0.8	4.0	−0.4
Interest rates							
$, 6-month (%)	1.8	1.2	1.5	3.5	3.7	1.0	2.0
€, 6-month (%)	3.3	2.3	2.0	2.4	3.4	2.1	2.1
Real GDP growth[e]							
World	1.8	2.6	3.7	3.1	3.0	2.0	3.0
Memo item: World (PPP weights)[f]	2.9	3.7	4.6	4.1	3.9	3.1	3.9
High income	1.4	2.1	3.3	2.6	2.5	1.5	2.5
OECD countries	1.4	2.0	3.1	2.6	2.4	1.5	2.5
Euro area	0.9	0.4	1.7	2.3	2.3	0.7	1.7
Japan	−0.3	2.7	3.1	1.4	1.2	0.8	1.3
United States	2.2	3.2	4.6	3.2	2.9	2.2	3.4
Non-OECD countries	2.3	2.6	5.0	4.5	4.2	2.1	4.1
Developing countries	3.4	4.8	5.4	5.2	5.0	4.0	4.9
East Asia and Pacific[g]	6.7	7.7	7.4	6.7	6.3	6.1	6.7
Europe and Central Asia	4.6	5.5	4.9	4.8	4.7	4.3	4.5
Latin America and the Caribbean	−0.6	1.3	3.8	3.7	3.5	1.8	3.7
Middle East and N. Africa	3.3	5.1	3.7	3.9	4.0	3.3	3.9
South Asia	4.3	6.5	7.2	6.7	6.5	5.4	5.4
Sub-Saharan Africa	3.3	2.4	3.4	4.2	3.9	2.8	3.5
Memo items:							
Developing countries							
excluding transition countries	3.3	4.6	5.5	5.2	5.0	3.9	4.9
excluding China and India	2.1	3.4	4.4	4.5	4.2	3.0	4.1

Note: PPP = purchasing power parity; GEP 2004 = *Global Economic Prospects and the Developing Countries,* World Bank, January 2004; *e* = estimate; *f* = forecast.
a. Goods and non-factor services.
b. Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
c. In local currency, aggregated using 1995 GDP weights.
d. Unit value index of manufactured exports from major economies, expressed in U.S. dollars.
e. GDP in 1995 constant dollars; 1995 prices and market exchange rates.
f. GDP measured at 1995 PPP weights.
g. Now excludes the Republic of Korea, which has been reclassified as high-income OECD.
Source: World Bank data and staff estimates.

increase for high-income countries. The important role that the official foreign-exchange reserve assets of countries, such as China, are now playing in the financing of the U.S. current account deficit is yet another example of the growing role of developing countries in the global economy. And strong growth performance underscores the fact that many structural improvements in developing countries over the last decade are paying off.

But the global economy is emerging from the pervasive slowdown of recent years facing major macroeconomic challenges, which could have a critical bearing on the outlook for developing countries and the availability of external capital to finance their development. A growing share of the large and persistent current account deficit in the United States has been financed by the investment of foreign reserves that foreign central banks—particularly from Asia—have accumulated as a result of their trade and exchange-rate-management policies. Policy adjustments will be required—in high-income countries, to ensure an

orderly resolution of imbalances—and in developing countries, to guard against potential downside risks. Moreover, an end to the generalized easing in monetary policies—which has played some role in the recent strength of capital flows to developing countries—is likely. Policy challenges in two main areas are identified in this chapter:

- Macroeconomic policies in high-income countries—including fiscal adjustment in the United States, easier monetary policy in Europe, and flexible exchange-rate-management policies—could contribute to an orderly adjustment of current account imbalances. Fiscal adjustment is also necessary if real interest rates are not to rise, potentially crowding out the availability of capital to finance development.
- Developing countries should recognize the threat that these imbalances pose to the sustainability of the recent strengthening of capital flows and the risk of continuing fluctuations in the availability of external finance. Stronger inflows can help lay the foundation for sustained growth and poverty reduction if used effectively, but developing countries should be cautious of accumulating excessive debt, particularly short-term. And they should take the opportunity to manage their external liabilities, consolidate fiscal positions, and intensify ongoing reform efforts—including efforts to mobilize domestic savings—to further reduce their vulnerability to adverse financial shocks.

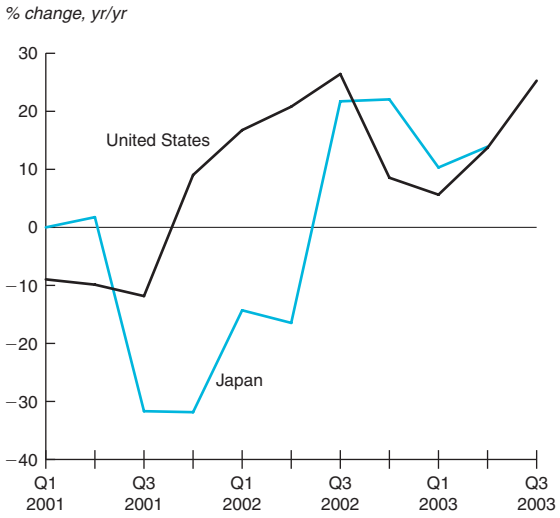
Adjustment, recovery, and imbalances in the high-income countries

After three years of below-potential growth, GDP in the high-income countries is likely to expand at a rate of 3.3 percent in 2004, well above the 1990s annual average of 2.5 percent. The shape of the recovery reflects the character of the slowdown that started in 2000, the macro policy stimulus that immediately followed the slowdown, and the adjustments made by the private sector in the last three years.

An investment-led recovery

The global economic slowdown of 2001 came after a decade of exuberant expectations and overinvestment—especially in high-tech markets. After equity markets collapsed, and investors reassessed the long-term profitability of new—often Internet-related—activities, the magnitude of excess capacity became apparent. Adjustment in the private sector was needed to reverse the sharp decline in capital spending.

Figure 1.2 Corporate profits in Japan and the United States, 2001–04



Note: The measure used in the United States is based on national accounts adjusted for industry valuation and capital consumption.
Sources: U.S. Department of Commerce and Japan ESRI.

Corporate profits have gradually improved in the high-income countries (figure 1.2) as firms have worked off many of the financial imbalances accumulated in the late 1990s—notably excess capacity and large inventories. In the late 1990s, the run-up in asset values was accompanied by overinvestment in key global industries—among them telecommunications, power, and information technology—which aggravated and extended the slump in global investment in 2001–02. During the last three years, however, businesses in the countries of the Organisation for Economic Co-operation and Development (OECD) restructured their balance sheets, cut back on operational expenses (including labor costs), and reduced capacity (World Bank 2003a). In adjusting, corporations took advantage of low interest rates to restructure debt and cut debt-service payments. These rationalizations enhanced price/earnings ratios and fueled a rise in equity prices. By the end of 2003, equity prices in high-income countries were some 25 percent above their level of a year earlier—in developing countries they had risen by

40 percent (see chapter 3)—suggesting a return of investor confidence.

The pickup in investment is likely to gain strength in 2004, as recovery in leading regional economies spreads to other countries. Europe is following the United States and Japan with a lag of approximately six months, mirroring conditions at the beginning of the slowdown, when investment declined first in the United States and Japan—the locus of many high-tech activities—and later in Europe.

The upturn in investment is likely to bring both Japan and the United States above their long-term potential growth in 2004. The GDP growth forecast of 4.6 percent for the United States and of 3.1 percent for Japan is in both cases more than 1 percentage point above the average growth rate of the last 10 years. Although it is impossible to determine potential growth exactly, and the prediction of turning points is similarly difficult, it is likely—as forecast—that growth will slow after 2004 in these two large economies. Japanese growth is increasingly tied to import demand in China and other developing countries in the region. As Chinese imports grew at an annualized rate of 40 percent in the last quarter of 2003, Japanese GDP was estimated to have advanced at an annualized rate of 7 percent, the highest since 1990. An expected return to more sustainable rates of trade expansion in the region in 2005 adds to the expected moderation of Japanese growth. For the Euro area, the picture is different. Entering recovery later, and constrained by the strong euro, GDP growth (expected to be 1.7 percent) is likely to remain below potential in 2004, before accelerating in subsequent years.

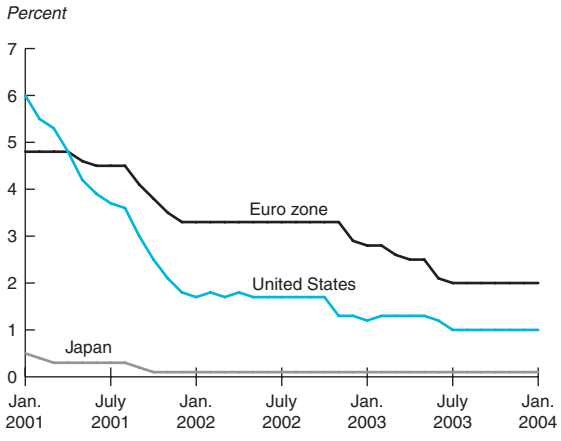
This growth pattern, combined with a gradual narrowing of budget deficits and some further weakening of the U.S. dollar, would allow a reduction of the U.S. current account deficit in the coming years. However, the key risks to the outlook lie precisely in these areas. Large budget deficits tend to persist long after fiscal stimulus has done its job of boosting growth in the economy. If the deterioration is not reversed, higher interest rates become more probable, and policymakers lack a key weapon to use against potential new shocks to the economy. Global current account imbalances generate risk, because it is unclear how long—and under what conditions—international investors will remain willing to finance the shortfalls. In some circumstances, an abrupt change in that willingness may trigger disorderly currency fluctuations.

Macroeconomic policies were instrumental in reinvigorating growth

Policymakers in the advanced economies have pursued expansive fiscal and monetary policies in recent years as they have sought to reverse the slowdown in economic activity that followed the correction in global equity markets in mid-2000. Even in Japan, which entered a recession with a fiscal deficit exceeding 6 percent of GDP and policy interest rates at 0.5 percent—and so had limited room for further traditional measures—efforts have been made to stimulate the economy through monetary ease. The United States, in particular, eased monetary policy very aggressively; the federal funds rate was reduced 13 times from the end of 2000 to mid-2003, from 6.5 percent to 1 percent (figure 1.3). The reductions buoyed consumer spending and housing-related activity. The European Central Bank (ECB), fearing inflation, was more cautious than the U.S. Federal Reserve at the outset of the crisis. Even so, it reduced its repurchase rate from 4.75 percent in late 2000 to 2 percent in early 2004.

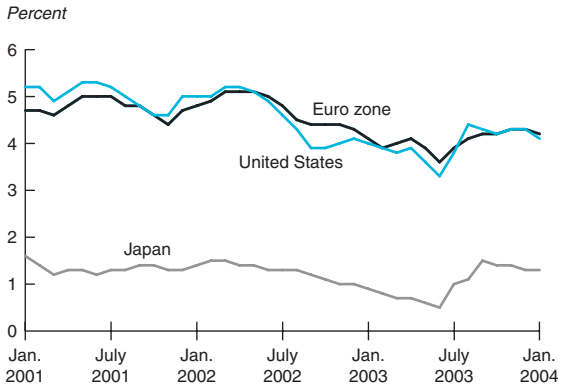
Long-term interest rates fell noticeably as the global economy slowed, but they have rebounded somewhat from their lows of mid-2003 as fears of deflation have receded. In early 2004, 10-year

Figure 1.3 Short-term interest rates in the Euro zone, Japan, and the United States, 2001–04



Source: Datastream.

Figure 1.4 Long-term interest rates (10-year government bond yields) in the Euro zone, Japan, and the United States, 2001–04



Source: Datastream.

government bond rates in Europe and the United States stood at 4.1 percent, compared with 3.6 percent and 3.3 percent in mid-2003 (figure 1.4). As a consequence of the turnaround in interest rates, the substantial boost to consumption that resulted from the wave of mortgage refinancing in the United States has apparently begun to wane.

As the global economy recovers, the phase of generalized easing of monetary policy appears to be coming to an end. The Bank of England and Reserve Bank of Australia recently increased interest rates and indicated that further rises were likely. The U.S. Federal Reserve has suggested that it will, in time, return to a more neutral monetary stance, although the disappointing rate of new job creation still causes worry. Further easing is possible in some countries and regions. Most notably, the recent strength of the euro against the dollar amid continuing sluggish domestic conditions in the Euro area, as well as the easing of inflation in the zone to rates below central bank targets, may give the ECB some room to reduce interest rates.

Fiscal deficits in high-income countries have widened every year since 2000—from 0.1 percent of GDP to 3.7 percent of GDP in 2003. The shift has been most pronounced in the United States, where the budget moved from a surplus of 1.6 percent of GDP in 2000 to a 4.6 percent deficit in 2003. But fiscal relaxation was the rule elsewhere as well. Fiscal deficits in the Euro area averaged 2.8 percent in 2003 compared to an average balanced budget in 2000, with France and Germany breaching the deficit limit of 3 percent of GDP set by the EU Stability and Growth Pact. In Japan the deficit was nearly 8 percent of GDP in 2003, 1.5 percentage points worse than in 2000. The budget gaps are not wholly the result of recession-induced declines in revenue.

Countercyclical fiscal policies helped prevent the recession from deepening, but they have created substantial medium-term challenges. Growing deficits in the United States foreshadow higher long-term real interest rates, as U.S. government borrowing competes for available finance with borrowers not only from the private sector, but also from developing countries. Recent simulations by the International Monetary Fund (Muhleisen and Towe 2004) suggest that, without corrective policies, a possible 15 percent increase in the ratio of U.S. public debt to GDP could eventually cause average real interest rates in the industrialized countries to increase by 50 to 100 basis points.

Financing of the U.S. current account deficit is a key vulnerability

On current trends, the U.S. current account deficit is likely to widen to about $590 billion—5 percent of GDP—in 2004, the fifth consecutive year in which the deficit has exceeded the previous high of 3.4 percent of GDP reached in the late 1980s. The deterioration in the U.S. fiscal balance since 2000 (6 percentage points of GDP) has played an important role in widening the country's current account deficit, more than offsetting an adjustment in the balance of private sector saving and investment equivalent to 5 percentage points of GDP. Once the financing of the U.S. external shortfall became more difficult, the current account deficit came to represent a substantial global imbalance.

Beginning in late 2002, demand began to falter among private overseas investors for dollar-denominated assets—at least at the prevailing exchange rate. Since then the dollar has fallen against nearly all major currencies, depreciating 30 percent against the euro and 20 percent against the yen by early 2004. The dollar's decline has reduced the competitiveness of European and Japanese exporters, while stimulating U.S. trade. The third quarter of 2003 saw a substantial fall in foreign private investment in U.S. assets, although this was largely offset by a reversal in the rate at which U.S. private investors accumulated assets abroad (table 1.2). Foreign demand for U.S. assets rebounded during the fourth quarter, however, as net

Table 1.2 Financing of U.S. current account deficit, 1999–2003

$ billions

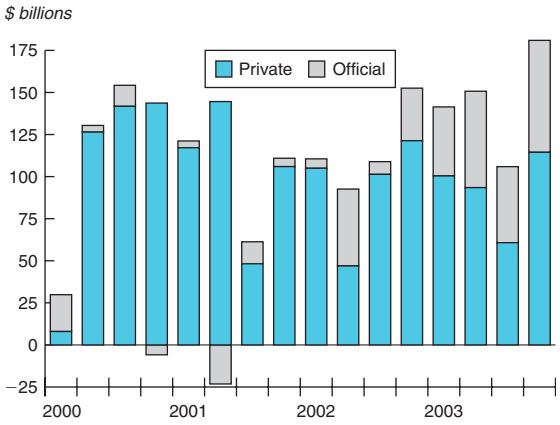
	1999	2000	2001	2002	2003
Current account balance	−290.8	−411.5	−393.7	−480.9	−541.8
Financing requirement	**282.1**	**411.8**	**398.7**	**484.5**	**540.3**
Net foreign official assets	**43.5**	**37.7**	**5.1**	**94.9**	**207.7**
As share of financing requirement	*15.4*	*9.2*	*1.3*	*19.6*	*38.4*
Net flows in FDI and Banking	**42.5**	**131.1**	**15.0**	**−28.4**	**−3.0**
Net flows in FDI	64.5	162.1	31.6	−98.2	−72.8
Net flows in banking	−22.0	−31.0	−16.6	69.8	69.8
As share of financing requirement	*15.1*	*31.7*	*3.7*	*−5.9*	*−0.5*
Net flows in portfolio assets	**178.3**	**302.0**	**326.8**	**419.2**	**339.3**
Corporate bonds	140.9	151.2	226.5	193.5	276.7
Corporate equities	−1.4	85.8	10.4	37.5	−54.1
Other long-term securities	43.1	96.4	85.2	76.3	−48.1
U.S. government securities	−4.3	−31.4	4.7	111.9	164.8
As share of financing requirement	*63.2*	*73.3*	*82.0*	*86.5*	*62.8*
Other (including statistical discrepancy)	17.8	−59.0	51.9	−1.2	−3.7

Source: U.S. Department of Commerce and World Bank staff estimates.

flows into U.S. private assets increased by some $115 billion.

With the decline in demand for U.S. assets among private investors, a growing share of the burden of financing the U.S. current account deficit has been shouldered by official institutions in developing countries that have invested reserves accumulated through good trade performance, effective exchange-rate management, and the strengthening in capital flows (see figure 1.5 and box 1.1). Inflows of foreign official assets to the United States amounted to $208 billion during 2003, compared with $95 billion for the whole of 2002, financing almost 40 percent of the U.S. current account deficit. Foreign official institutions purchased a net $150 billion of U.S. long-term securities in 2003, compared with $40 billion in 2002. Traditionally invested chiefly in Treasury

Figure 1.5 Net financial flows to the United States, 2000–03



Sources: U.S. Department of Commerce and World Bank staff estimates.

Box 1.1 Reserve accumulation in developing countries

The rate of reserve accumulation in the developing countries surged to $276 billion in 2003 from $173 billion in 2002 and $78 billion in 2001. Reserves in China increased by $117 billion to reach $403 billion in 2003. Other countries also saw notable increases in reserves: India's rose by $26 billion to $97 billion; Russia's by $30 billion to $73 billion; and Brazil's by $12 billion to $49 billion. Developing countries have been steadily building reserves in reaction to the costly crises of the 1990s—precautionary motives may therefore explain some of the increase, particularly in countries such as Brazil and Turkey, which are emerging from crises. However, the

Box 1.1 *(continued)*

recent acceleration in reserve accumulation is above what would be expected based on precaution alone.

In some countries, including those with the largest accumulations, the rise in reserves is the result of exchange-rate-management policies operating in a context of strong trade performance and high capital inflows. The reserves of some advanced economies—particularly in Asia—also increased strongly for similar reasons. Japan's reserves rose by about $200 billion over 2003 to stand at $650 billion, as a result of intervention to limit the appreciation of the yen against the dollar, and Korea's reserves also increased significantly.

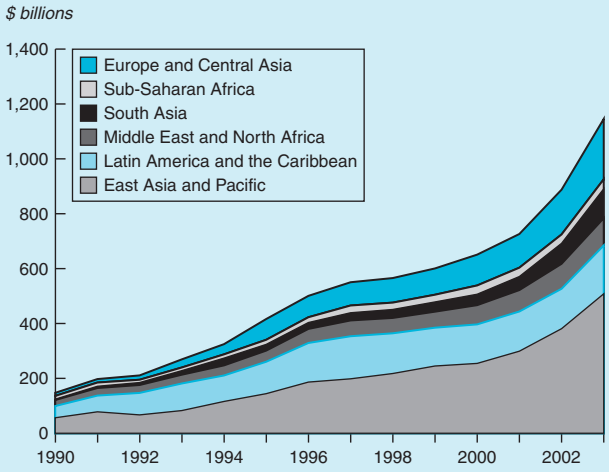
Although just a few countries account for the bulk of the increase in reserves, most have seen some rise in recent years. In aggregate, developing countries' total reserves were approximately $1.2 trillion at the end of 2003, 75 percent above the level of three years ago. Since 2000, reserves have risen in all six World Bank regions. Of the 132 developing countries that reported data for 2003, 102 increased reserves.

The rise in international reserves is substantial relative to indicators typically used to measure the adequacy of reserves. The ratio of reserves to imports of goods and nonfactor services for developing countries as a group rose from 42 percent in 2000 to 59 percent in 2003. Over the same period, developing countries' reserves increased from twice to almost four times the size of short-term debt.

Higher reserves come at a cost. Reserves are typically invested in liquid, low-risk instruments that are easily converted into cash at a known value. Some three-quarters of global foreign exchange reserves are held in U.S. dollars, with a large share in Treasury securities (McCauley and Fung 2003). In many countries, the monetary authorities have issued securities in an effort to sterilize the impact of rising reserves on domestic monetary conditions; they pay interest on those securities at rates that are sometimes much higher than those they earn on their reserves. Moreover, instead of holding reserves, governments could reduce their debt in international capital markets (at spreads that may be several hundred basis points above LIBOR). Thailand has indicated that it will repay public external debt over the coming year rather than increase reserves. In December 2003, China used $45 billion of its foreign-exchange reserves in the recapitalization of the Bank of China and China Construction Bank. Other countries may seek to limit the cost of holding reserves by choosing to hold a portion in higher yielding assets, accepting some increase in risk.

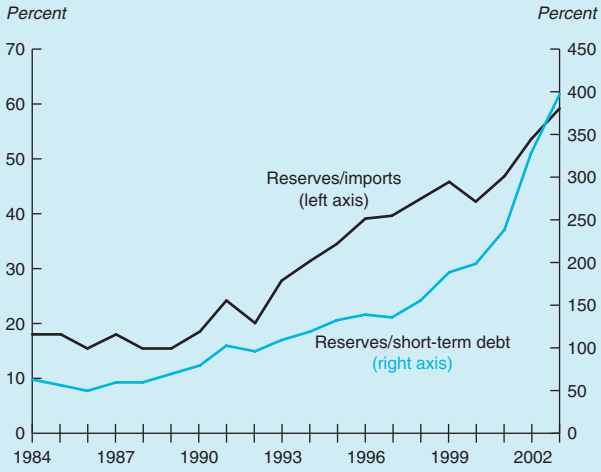
Given the critical role that foreign official assets are playing in financing the U.S. current account deficit and in the market for U.S. securities, the portfolio choices of reserve managers in developing countries could have a significant impact on these markets. Portfolio managers may need to balance their desire for higher returns against the risk of triggering shifts in asset prices, including exchange rates.

International reserves in developing countries, 1990–2003



Note: Estimates for 2003 refer to end-December for most countries. Where not, the most recent available data are used.
Source: International Financial Statistics.

Ratios of reserves to imports and reserves to short-term debt, 1984–2003

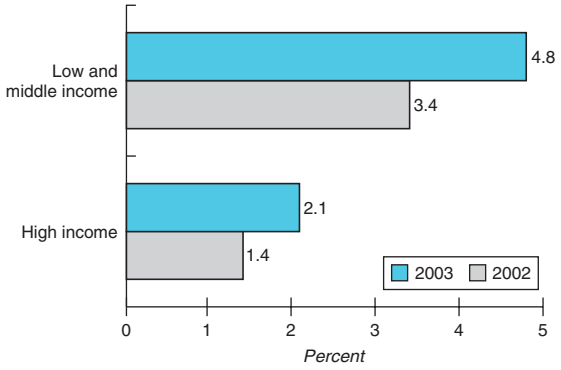


Source: World Bank data.

securities, a growing share of U.S.-dollar reserves has been invested in other securities, particularly bonds of U.S. government agencies, as reserve managers have sought to increase returns and limit quasi-fiscal losses. For example, as of December 2003, the U.S. Federal Reserve was holding $232 billion of government agency bonds on behalf of foreign central banks. Heavy purchases of such securities by central banks, especially from Asia, have helped keep Treasury bond yields relatively low, particularly for securities of relatively short maturity.

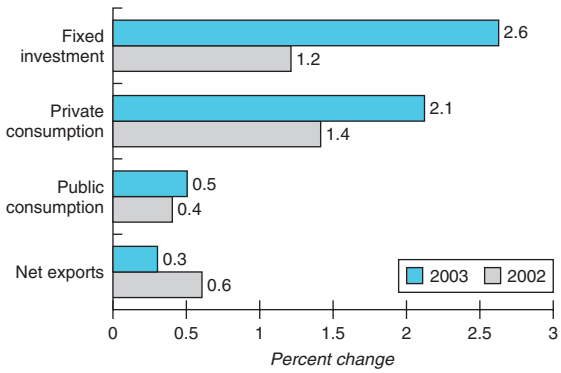
The timing and extent of any future adjustment in the U.S. current account remains highly uncertain. Equally uncertain is how foreign investors' appetite for U.S. assets will respond to exchange-rate changes and developments in the real economy and asset markets in the United States and elsewhere. But the critical role of foreign official assets, including those of developing countries such as China, in the financing of the U.S. current account deficit and in the market for U.S. government securities underlines the interdependence of developed and developing countries and their common interest in resolving existing imbalances. As the current configuration of financing is unlikely to be sustained indefinitely, a combination of dollar depreciation and slower growth in U.S. domestic demand relative to the growth of demand abroad will be required. A gradual tightening of U.S. fiscal policy could reduce the possibility of a severe and abrupt correction brought about by market forces.

Figure 1.6 GDP growth in low- and middle-income and high-income countries, 2002–03



Source: World Bank.

Figure 1.7 Contributors to GDP growth in developing countries by demand component, 2002–03



Note: Excludes statistical discrepancies.
Source: World Bank.

Developing countries: a favorable outlook, but risks remain

As a group, developing countries grew much faster than the industrial countries in 2003, although the accomplishments of individual economies varied widely. GDP per capita in the low- and middle-income countries increased by 3.5 percent during the year, compared with a 1.6 percent advance in the high-income group. With faster population growth in the developing world, the differential in real GDP growth was larger: 4.8 percent versus 2.1 percent (figure 1.6). Developing-country growth is likely to pick up to 5.4 percent in 2004—the strongest in two decades—before easing back toward 5 percent gains over 2005–06. In East Asia, which is leading the global cycle, economies may begin to cool somewhat sooner than in other regions.

Capital spending is driving growth

Developing countries have not missed out on the revival of global investment, with capital spending accelerating broadly from 4.9 percent growth in 2002 to 10.8 percent in 2003. The acceleration more than doubled investment's contribution to output, making it the principal driving force for growth (figure 1.7). Capital spending has been spurred by the boom in China, where investment increased by 23 percent in 2003; by an 11.7 percent surge in South Asian spending, where foreign direct investors eye India's growth potential; by a rebound in the EU accession countries of Central

Europe (5.9 percent growth in 2003), which are already reaping positive effects from their imminent integration; and by strong capital outlays among oil-exporting countries following several years of elevated oil prices. Oil exporters in the Middle East and North Africa saw growth of 13.5 percent; and in the Commonwealth of Independent States, 14.2 percent. Latin American investment outlays continued to contract during 2003, but the 1 percent decline was less sharp than the 7 percent fall in 2002. Indeed, the bottoming out of capital-stock adjustments has contributed to a pickup in GDP growth in the region, while signaling nascent recovery in fixed investment. Sub-Saharan Africa appears not to have shared fully in the acceleration of investment, with capital spending near 6 percent growth in 2002–03, although recent observations are insufficient to justify firm conclusions.

Public sector spending grew steadily across developing countries—in line with GDP. In addition to reflecting the more prudent macroeconomic policies of recent years, the steady growth also suggests that fiscal policy, on average, is not as cyclically influenced as in the high-income group (box 1.2). Improved fiscal policies have helped to avoid further widening of budget and current account deficits, while supporting local currencies and muting inflationary tendencies. Despite the strong cyclical rebound in economic activity, median local-currency inflation (GDP deflator) for developing countries as a group dropped to 4.2 percent in 2003, much better than the average of 5.5 percent over the last three years and 8.9 percent over the last decade.

Box 1.2 The fiscal response of low- and middle-income countries to the downturn

The 2001 recession prompted countercyclical fiscal action in many industrial countries but in just a few of the low- and middle-income groups. As a result of automatic stabilizers (increased social benefits and reduced tax payments) and active policies (tax cuts and additional spending, especially in the United States), the fiscal balance in high-income countries as a group shifted from a surplus of 0.1 percent of GDP in 2000 to a deficit of 3.7 percent in 2003. Over the same period the fiscal deficit of low- and middle-income countries together slipped by less than half a percentage point (see figure).

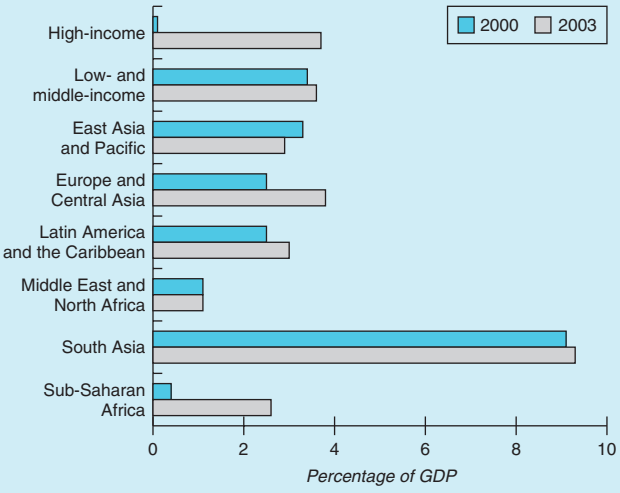
Why are developing countries less likely to adopt countercyclical fiscal policies?

- Automatic fiscal stabilizers such as a progressive tax system and social safety nets are not as common in low- and middle-income countries as in high-income ones. Some social policies in developing countries (for example, consumer subsidies when global commodity prices are high) are even procyclical.
- Fiscal stimulus often kicks in too late to make countercyclical policies effective (often true in high-income countries as well).
- Many developing countries entered the slowdown with higher public debt and deficits than high-income countries, and are more vulnerable to loss of confidence in financial markets.
- Numerous governments depend on external financing, and capital inflows into developing countries tend to be procyclical.

In view of the cautious fiscal policies of developing countries, the rebound of domestic demand is all the more encouraging.

Sources: IMF 2003 and Talvi 2000.

Fiscal deficits in high-income and developing countries as a percentage of GDP, 2000 and 2003



Sources: IMF and World Bank.

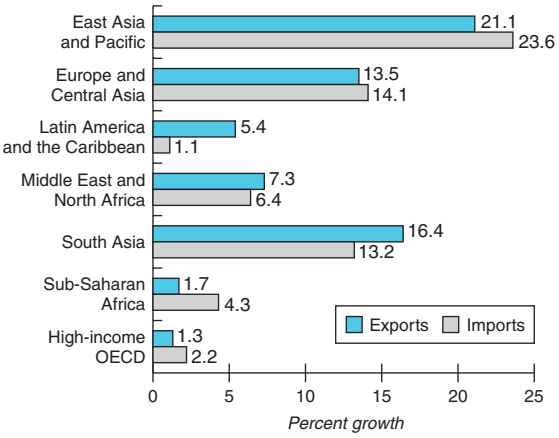
Rapid growth of developing-country trade

The performance differential between the low- and middle-income countries and their high-income counterparts was even greater in international trade than in output growth. This was true for developing countries in Asia and Europe particularly, which experienced double-digit growth in both export and import volumes (goods and services), against 1.8 percent growth for high-income OECD countries (figure 1.8).

In 2003, growth in import demand of developing countries (13.3 percent) matched growth in exports (13.5 percent)—implying that the expansion in foreign markets did not come at the cost of high-income countries. In other words, increased competition from developing-country exports was offset by the developing countries' increased demand for imports. Import demand in East Asia, in particular, spurred Japanese export growth to 10 percent in 2003. And within East Asia, China has emerged as a powerhouse for trade, with a surge of 40 percent in import volumes in 2003, suggesting that accession to the World Trade Organization was more than just an administrative change. Although trade developments during 2003 did not contribute significantly to developing-country GDP growth—in an accounting sense—the continued rapid integration of developing countries into global markets is likely to spur long-term productivity by improving allocative efficiency and stimulating competition and innovation. It is worth noting that while developing countries accounted for some 24 percent of world trade in 2003, their import demand was responsible for more than half of the year's growth in trade volumes (figure 1.9).

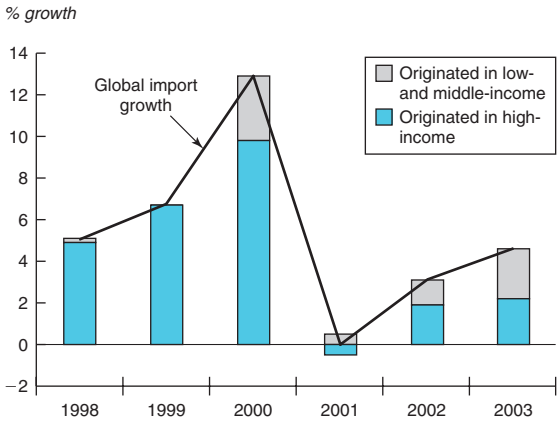
For commodity exporters, recovery has meant more than larger trade volumes: substantial gains in prices have multiplied export revenues (table 1.3). During 2003, energy and nonenergy commodity prices (in U.S. dollar terms) advanced

Figure 1.8 Growth in imports and exports of goods and nonfactor services, 2003



Source: World Bank.

Figure 1.9 Global import growth and developing countries' contribution, 1998–2003



Source: World Bank data and projections.

Table 1.3 Export revenues of developing countries, 2000–06

% growth in U.S.-dollar revenues

	2000	2001	2002	2003	2004f	2005f	2006f
Low- and middle-income	20.9	−0.1	8.1	18.6	14.3	10.6	10.0
East Asia and Pacific	21.9	−1.7	13.8	22.0	18.8	17.2	14.3
Europe and Central Asia	20.0	4.9	9.5	27.1	17.4	7.1	6.3
Latin America and the Caribbean	19.2	−3.6	0.3	7.0	8.6	8.7	8.7
Middle East and North Africa	28.6	4.7	0.2	11.6	8.1	3.3	7.4
South Asia	18.0	1.9	14.5	19.2	14.7	8.0	8.7
Sub-Saharan Africa	17.8	−4.6	7.3	15.5	−0.1	0.9	4.7

Note: f = forecast.
Source: World Bank staff estimates.

by 16 and 10 percent above 2002 levels. The strongest gains were seen for metals, the most cyclical of all commodities, which gained 28 percent over the year. In large measure, the dollar price increases of 2003 reflected the weakening of base currencies, and commodity prices rose only slightly relative to domestic prices of other goods for buyers and sellers around the world (box 1.3). However, further gains in 2004 are expected to translate into genuinely stronger real commodity prices in many importing and exporting countries.

Other factors underpinning the recovery

For 2004 and beyond, the outlook for developing countries is positive. Further improvement in the external environment is likely to combine with increasingly favorable domestic conditions. The main risk to this propitious scenario is the possibility of a sudden rise in international interest rates, which, as discussed earlier, could result from a disorderly unwinding of current account imbalances and associated volatile movements in exchange rates. The challenge for policymakers in developing countries is to be prepared for the contingency of higher rates in the short to medium terms. Pursuing prudent fiscal policies and avoiding overexposure to short-term external debt could reduce overall vulnerability to such potential shocks.

Improvements in the external environment are expected in the form of stronger import demand in

Box 1.3. Commodity prices and exchange rates

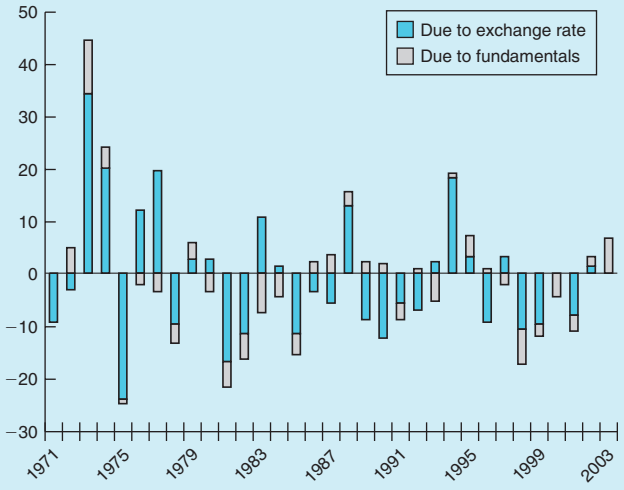
Primary commodity prices are notoriously volatile, reflecting a barrage of supply and demand shocks. From 1995 to 2001, the World Bank's index of dollar-denominated commodity prices fell by more than 35 percent, before rebounding by 14 percent over the next two years. In real terms (deflated by the U.S. GDP deflator), the downturn was an even steeper 42 percent. However, these price swings reflect not only market forces, but also the arbitrary choice of the dollar as the currency in which prices are expressed. What part of the price volatility reflects demand and supply factors and what part the chosen currency?

Sellers and buyers of commodities base their actions on relative prices (commodity prices deflated by a domestic deflator). Yet outside the United States those real prices are not necessarily the deflated dollar prices. German construction firms pay for copper and wood with euros; cocoa farmers in Côte d'Ivoire receive CFA francs. For these agents, dollar prices may be quite misleading. For instance, in 2001 the price of gold fell by 2.9 percent in dollars but rose 35 percent in South African rands. Prices expressed in a basket of currencies weighted with country shares in world trade would give a better indication of the experience of typical commodity buyers and sellers. Changes in such a weighted index of real commodity prices may be interpreted as the impact of demand or supply shocks.

The figure at right decomposes changes in real, dollar-denominated commodity prices into real exchange-rate effects of the dollar against a commodity-trade-weighted basket of currencies and a residual reflecting market forces (which is relevant for typical buyers and sellers). The sharp declines in dollar prices in the late 1990s

Decomposition of changes in real U.S.-dollar commodity prices, 1971–2003

Percentage points



Source: World Bank staff estimates.

following the Asian crisis are seen to be mainly due to market forces (that is, real declines for the average seller and buyer), and to a lesser extent to the weakening of the dollar. By contrast, the rebound in dollar prices in recent years barely compensated for the weakening of the dollar and did not translate into higher real prices for the average seller and buyer. The real commodity price index was unchanged in 2003, compared to an average 0.6 percent decline historically.

high-income countries, additional firming of non-oil commodity prices, and continued rise in capital flows to developing countries. Imports of goods and services by high-income countries are projected to accelerate from a 2.7 percent rate of growth in 2003 to 6.8 percent in 2004. As GDP growth within this group converges over the coming years, and as current account positions reverse gradually, import demand in Europe and Japan is likely to outpace that of the United States—from 2005 onward.

Building on the robust 10 percent advance of 2003, the rally in non-oil commodity prices is anticipated to continue, with an additional 10.4 percent gain in 2004. Firming demand, relatively tight supplies, low stocks levels, and continued weakness of the dollar are key supporting factors. The combination of these factors and improving external demand should lead to continued robust growth in nominal export revenues (see table 1.3). Agricultural prices are projected to increase by 5.1 percent, with the strongest rise in fat and oil prices due to tight supplies and robust demand in East Asia. Beverage prices remain at extremely modest levels by historic standards, as supplies from new low-cost coffee producers, notably Vietnam and Brazil, cut short a cycle of sharply rising prices. Metal prices, in contrast, are anticipated to surge nearly 26 percent during 2004—double the increase of 2003. Many markets already have moved into deficit due to declining stocks, earlier supply cuts, and broadening of demand growth in areas outside China. Non-oil commodity prices are likely to peak in 2004, before declining by around 3 percent in 2005, as higher prices bring on new supplies and, in the case of metals, reactivation of idled capacity.

Oil prices are anticipated to average $26 a barrel in 2004, down from about $29 in 2003, assuming that OPEC manages production sufficiently to keep its prices in the upper half of its target band. Oil prices began 2004 above $30 a barrel, due to very low stocks and strong investment-fund demand. Some of the major OPEC producers justify higher prices because the decline in the U.S. dollar has eroded their purchasing power, which may have prompted the organization's decision in February to cut production quotas further. Oil prices are expected to decline in 2005 and beyond, as large non-OPEC supplies come on stream—from the Caspian, the Russian Federation, and West Africa—and as many OPEC countries, including Iraq, develop new capacity. Price risks remain if OPEC maintains its resolve to keep oil prices high—or to move its band higher because of the dollar—even in the face of declining market share.

For the immediate future, the global recovery in economic activity, the high degree of liquidity in international capital markets resulting from stimulative monetary policies, and the general improvement in perceived credit quality in developing countries appear to be sufficiently strong to support robust capital flows to developing countries. Aided by the relaxation of foreign-ownership restrictions in China, India, and elsewhere, flows of foreign direct investment (FDI) are expected to reverse their decline of the last two years. Moreover, the strengthening of domestic demand in many developing countries is likely to increase demand for external finance. Firm oil prices will likely increase the external financing requirements of oil importers.

Against the background of the improving external environment, GDP growth for all low- and middle-income countries is likely to accelerate from 4.8 percent in 2003 to 5.4 percent in 2004 (table 1.4). If it does, it will exceed the 20-year record of 5.2 percent set in 2000. Growth of capital

Table 1.4 Developing-country growth, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	3.4	5.2	3.0	3.4	4.8	5.4	5.2	5.0
Contribution to growth (points)								
Private consumption	2.1	2.6	1.8	1.4	2.1	2.9	3.0	2.8
Fixed investment	0.6	1.7	0.8	1.1	2.6	2.3	1.8	1.8
Net foreign balance	0.4	−0.2	0.2	0.6	0.3	−0.3	−0.1	0.2
Current account balance (share of GDP)	−1.4	1.0	0.4	1.3	1.1	0.5	0.1	0.1
Fiscal balance (share of GDP)	−7.1	−3.4	−3.6	−4.0	−3.6	−3.4	−3.3	−3.1

Note: *e* = estimate; *f* = forecast.
Source: World Bank data and staff estimates.

spending in the developing countries is likely to have peaked at 10.8 percent in 2003; it should now slow to single-digit gains, easing the pace of GDP growth to still robust advances of 5 percent over 2005–06. Such growth performance should enable a further narrowing of fiscal deficits from the peak levels of 2002. As part of the global rebalancing of external positions, current account surpluses—one percentage point of GDP in 2003—should dissipate gradually over the next few years.

Regional prospects

EU accession and oil shape the outlook for Europe and Central Asia

The economies of the Europe and Central Asia region grew by 5.5 percent in 2003, up from 4.6 percent the year before. As was the case for many regions, the pickup in growth was led by a firming of capital spending. Investment's contribution to GDP growth tripled to 1.8 percentage points in 2003 from 0.6 points in 2002 (table 1.5). Determinants of growth in the region have differed notably between Central and Eastern Europe, where links with the Euro area are growing closer, and the Commonwealth of Independent States (CIS), where trends in the oil and gas sector predominate. Despite sluggish activity in the Euro area, growth in Central and Eastern Europe (excluding Turkey) accelerated from 3 percent in 2002 to 4.1 percent in 2003, as several countries increased export-market shares in the European Union as part of the broader integration process. Shipments to the European Union, for example, now account for 30–33 percent of the national incomes of Hungary and the Czech Republic. Growth in the Baltic States continued on a robust track, with a GDP advance of 7 percent, up from 6.3 percent in 2002. Investment was a key driving factor in this outturn, rising by 13.2 percent in the year. Fiscal stimulus also played a broader role in the upturn in Central European demand. The Russian Federation and other countries of the CIS expanded from growth of 4.7 percent in 2002 to 6.6 percent in 2003, powered by a 8.6 percent advance in consumer spending and investment growth of 12.5 percent. The underpinnings for domestic growth continue to be strong oil revenues. For the Russian Federation, this yielded a fiscal surplus in 2003—for the fourth year in succession—amounting to 1.4 percent of GDP, and a massive current account surplus of $42 billion, or 9.9 percent of GDP.

The outlook for 2004 and beyond is for continued robust growth in the region as a whole, again characterized by distinct driving forces, risks, and policy challenges in the major country groups. Growth in Central and Eastern Europe is expected to approach 4.5 percent, as effective implementation of EU-related structural reforms provides a stronger foundation for expansion. Net FDI inflows declined from 3 percent of GDP in 2002 to 2.1 percent in 2003, as the privatization process in several accession countries neared completion. But large stocks of FDI accumulated over recent years, together with the EU accession process, should offer favorable conditions for productivity growth (box 1.4). The main risks and policy challenges are mounting fiscal deficits and

Table 1.5 Growth in Europe and Central Asia, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	−1.4	6.8	2.4	4.6	5.5	4.9	4.8	4.7
Contribution to growth (points)								
Private consumption	0.0	2.9	2.0	3.2	3.7	3.3	3.1	2.9
Fixed investment	−2.2	2.5	−0.7	0.6	1.8	1.6	1.7	1.7
Net foreign balance	1.3	−1.4	1.1	−1.2	−0.1	−0.5	−0.6	−0.4
Current account balance (share of GDP)	−0.7	1.9	1.9	0.8	0.7	−0.4	−0.8	−0.9
Fiscal balance, share of GDP	−11.4	−2.5	−3.7	−3.7	−3.8	−3.5	−3.4	−3.2
Memo items: real GDP growth								
Central and Eastern Europe	1.7	4.8	−0.4	4.4	4.4	4.5	4.6	4.4
Excluding Turkey	0.9	3.6	3.0	3.0	4.1	4.3	4.6	4.5
Commonwealth of Independent States	−3.9	9.2	5.7	4.7	6.6	5.4	5.1	5.1

Note: e = estimate; *f* = forecast.
Source: World Bank staff estimates.

Box 1.4 The integration dividend in Central Europe

The European Union will expand dramatically in May 2004, when eight transition countries—Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia—along with Cyprus and Malta, come into the fold. Per capita income in 2002 in the accession countries, measured in purchasing power parity, ranged from 36 percent of the EU average in Latvia to 71 percent in Slovenia (see first box figure). How quickly, and to what extent, will the new members narrow the gap with EU living standards?

Lessons from Portugal, Spain, and Greece point to policies as key—

The accession experiences of three recently joined members suggest that market access alone will not narrow the income gap. Instead, the pace of convergence will largely depend on the policy environment. In the first five years after joining the European Union in 1986, Portugal and Spain consolidated their budget deficits, introduced new value-added taxes, and tightened money growth, triggering significant increases in FDI inflows. In contrast, in the first five years following its accession in 1981, Greece's budget deficit rose sharply and money growth remained expansionary, at nearly 25 percent a year. After rising markedly just before accession, FDI inflows to Greece shrank in the first five years of membership. The culmination of these developments led to a narrowing of the income gap in Portugal and Spain but to a widening of the gap in Greece (box table).

Per capita GDP for Greece, Portugal, and Spain as a share of the European Union average, various years

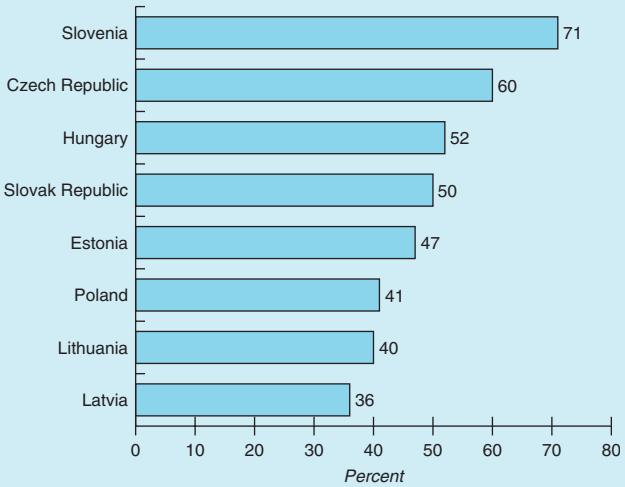
Percentage

	Accession year	5 years after accession	15 years after accession
Greece	77	72	65
Portugal	58	66	71
Spain	73	78	82

Source: World Bank staff estimates.

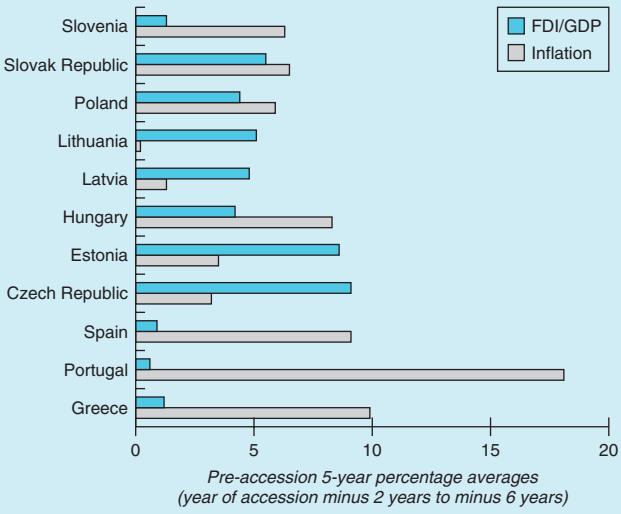
The eight transition countries are more oriented toward the European Union than were their three southern European counterparts at a similar stage in the accession process. The eight, for example, have already witnessed a massive reorientation in trade to EU markets, as a group, and to a country have been receiving more significant inflows of FDI as a share of GDP and have narrower inflation differentials to the present European Union than did the three earlier candidates (box second figure). In addition, the eight already have adopted much of the *acquis communautaire* (EU body of law). On the other hand, once the new members enter the union, they can expect significantly lower EU aid flows (from cohesion and structural funds) as a share of GDP than those received by Greece, Portugal, and Spain, which amounted to 2–3 percent of GDP.

Per capita GDP for accession countries as a share of the European Union average, 2002



Source: World Bank.

CPI inflation differential (vs Germany) and FDI as a share of GDP



Source: World Bank.

Box 1.4 *(continued)*

—and prospects for catching up are promising

While these factors are not readily quantifiable, the outlook for convergence between the present European Union and its newest members is good. Significant FDI inflows are expected to continue—fueled by falling trade and transactions costs, coupled with a positive policy environment, attractive relative labor costs, and reduced risk. The only likely countervailing factor is likely to be slower growth related to privatization. The timing of accession in mid-2004 is auspicious, given an expected upward trend in growth in the core EU countries. The accession could well turn out to enhance the prospects for the European Union as a whole, especially as transitional restrictions on labor movement—set to last seven years after accession—are lifted.

vulnerability to increases in global interest rates. Fiscal deficits increased in a number of countries—notably in Poland and Hungary, to 6 and 9.4 percent of GDP in 2003, respectively—reflecting countercyclical policies and structural increases in outlays for civil service wages, healthcare, and pensions. Fiscal adjustment in the accession countries will become an increasing challenge, as EU resources will only partially fund the spending requirements of the new members. To benefit more fully from the accession process, governments should rein in fiscal deficits, while avoiding spikes in short-term debt flows. For the region as a whole, short-term debt increased sharply from $1.5 billion in 2002 to $17 billion in 2003.

In the CIS, growth is projected to ease from the 6.6 percent registered in 2003 toward 5 percent by 2005–06, due in large measure to moderating oil prices and lower tax revenues. For the Russian Federation principally (but also for Azerbaijan, Kazakhstan, and Turkmenistan), high oil prices since 2000 helped shore up fiscal balances, reduced interest-rate risk, and, combined with structural reforms, notably in the Russian Federation, improved business sentiment. For example, rising investor confidence resulted in a doubling of international lending flows to the Russian corporate sector during 2003. The primary policy challenge for the oil-rich countries of the CIS is to broaden the capacity and efficiency of sectors outside of oil and gas, and to prepare for lower oil prices in the future. Although the medium-term outlook suggests relatively high oil prices—$26 a barrel in 2004 and $23 in 2005—the secular trend in price remains downward, and sudden sharp declines will remain a risk factor.

Strong growth in South Asia with intensified financial links

Led by buoyant growth in India (accounting for 75 percent of regional GDP), South Asia achieved a GDP advance of 6.5 percent in 2003, a sharp pickup from the 4.3 percent registered in 2002 (table 1.6). Domestic demand provided the impetus for growth during the year—with the contribution of consumption to regional GDP growth ratcheting

Table 1.6 Growth in South Asia, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	5.2	4.2	4.7	4.3	6.5	7.2	6.7	6.5
Contribution to growth (points)								
Private consumption	2.9	1.9	3.2	2.4	4.0	4.0	3.7	3.6
Fixed investment	1.3	1.1	0.8	1.9	2.7	2.7	2.6	2.5
Net foreign balance	−0.1	1.7	0.6	1.7	0.8	0.2	0.1	0.3
Current account balance (share of GDP)	−1.5	−0.7	0.5	1.4	0.7	0.5	0.3	0.3
Fiscal balance (share of GDP)	−11.0	−9.1	−8.5	−9.7	−9.3	−9.1	−8.9	−8.6
Memo items: real GDP growth								
South Asia excluding India	4.4	5.1	3.1	3.4	5.4	5.9	5.8	5.7

Note: e = estimate; *f* = forecast.
Source: World Bank staff estimates.

up from 2.4 percentage points in 2002 to 4 points in 2003, and that of fixed investment from 1.9 to 2.7 points. In Pakistan, government consumption was sustained at low double-digit rates supported by foreign assistance flows. Relief from drought was an important element in the region's growth picture during the year, as rural incomes and consumption rebounded sharply. Yet acceleration in domestic demand was also tied to intensified inflows of international funds. Workers' remittances to the region—which increased from $13 billion in 2001 to $17 billion during 2002, and further to $18.2 billion in 2003—have been key contributors to the vibrancy of private consumption. FDI, still negligible a decade ago, increased to $5.1 billion in 2003 from $4.1 billion the preceding year. And portfolio equity flows jumped to $7 billion from $1 billion in 2002. These signs of increased international confidence—India, for the first time, was upgraded to investment-grade status—provided support for recovery in domestic investment. And South Asia's exports of goods and services—led by a 25 percent rise in Pakistan, in part due to an expansion of textile exports—continued the double-digit gains begun in 2002, enabling countries to import at a similar pace without substantial deterioration of external balances.

Sources of growth for South Asia are likely to become more diversified—with burgeoning services exports from locations such as Bangalore, India, and the growing practice of outsourcing from the OECD economies. Peace talks between India and Pakistan, coupled with the regional trade initiatives of the South Asian Association for Regional Cooperation may further boost international confidence. Grounded in these developments, the strength of the South Asian economy is anticipated to endure, with output rising to peak growth of 7.2 percent in 2004, followed by a degree of moderation. To maintain an accelerated pace of growth, however, policymakers face several challenges. Inflexibility in labor markets, weak bankruptcy frameworks, and infrastructure bottlenecks remain a constraint to economic performance and international competitiveness. And the impending phaseout of the international multifiber arrangement in 2005 poses a challenge, especially for the smaller countries of South Asia. But the principal policy challenge is India's large general government deficit of more than 10 percent of GDP, which threatens to push up interest rates while crowding out private investment and limiting policy options. Fiscal consolidation has reduced deficits in Sri Lanka, while Bangladesh, Nepal, and Pakistan have considerably smaller deficits—though in these countries as well, further consolidation would protect the economies from potential downside risks.

Growth in East Asia propelled by China and the high-tech upturn

The developing countries of East Asia and the Pacific are leading the global turnaround in investment, with an 18.6 percent advance in capital spending in 2003 (table 1.7). Capital formation has underpinned GDP growth, which accelerated to 7.7 percent last year, up from 6.7 percent in 2002 and 5.6 percent the year before. Healthy investment spending was supported by sanguine financial-market sentiment, which translated into lower interest-rate spreads and a partial revival of portfolio flows. FDI flows, on the other hand, have been slow to rebound, except in China. East

Table 1.7 Growth in East Asia and Pacific, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	7.8	7.2	5.6	6.7	7.7	7.4	6.7	6.3
Contribution to growth (points)								
Private consumption	3.6	3.5	2.5	2.7	3.1	3.0	3.7	3.5
Fixed investment	2.9	3.2	3.2	4.3	6.4	4.3	2.5	3.0
Net foreign balance	0.3	−0.2	−0.5	0.8	−0.1	−1.0	−0.5	0.2
Current account balance (share of GDP)	0.4	3.4	2.5	3.6	2.7	2.0	1.4	1.4
Fiscal balance (share of GDP)	−1.0	−3.3	−3.3	−3.4	−2.9	−3.1	−2.9	−2.7
Memo items: real GDP growth								
East Asia & Pacific excluding China	4.7	5.8	2.4	4.4	5.0	5.9	6.5	4.9

Note: e = estimate; *f* = forecast.
Source: World Bank staff estimates.

Asian industrial production and export growth—up 20 percent for the year—benefited smartly from the upturn in global demand for high-tech products.

The engine of regional growth continues to be China, both through its direct impact on aggregate GDP (amounting to two-thirds of the region) and, increasingly, as an important export market for other regional economies. China's output grew by 9.1 percent in 2003, with capital spending up 23 percent and trade flows rising 35–40 percent. It is likely that during 2003, exports from the rest of East Asia to China overtook—for the first time—exports from these economies to Japan. This development is offsetting some concerns among East Asian countries about competitive pressures from Chinese exports in third markets.

Robust near-term momentum in world high-tech demand, healthy gains in East Asian rural incomes due to higher prices for agricultural commodities, and improving balance sheets of banks and corporations in several postcrisis economies should prove sufficient to sustain stronger growth (74 percent) in 2004. Yet output gains are forecast to moderate over the period to 2006, as cyclical highs may indeed have been reached in late 2003. And there are further risks to the generally buoyant view. On the domestic front, the ability to restrain credit creation, to monitor developments in specific sectors in danger of overheating, and to foster improved political stability could prove challenging for policymakers. In the international context, risks stemming from efforts to reverse the U.S. current account deficit, volatile exchange-rate movements, and rising protectionist tendencies could adversely affect the region's prospects. Capital inflows are contributing to a substantial accumulation of foreign reserves above conventional benchmarks, and in turn to a strong expansion of domestic credit, with implications for potential overheating in already fast-growing economies. Strengthened financial-sector regulation and supervision, in addition to greater exchange-rate flexibility, among other responses, could help mitigate risks from credit expansion and runaway growth. Against this background, and with robust GDP outturns, policymakers in China are seeking to prevent overheating and to engineer a soft landing from the current investment boom.

Sub-Saharan Africa—continuing to lag

In contrast with accelerating growth in other developing regions, GDP growth in Sub-Saharan Africa slowed to 2.4 percent in 2003 from 3.3 percent in 2002 (table 1.8). However, these aggregate developments mask divergent trends. The West African energy sector continued to boom, thanks to resilient oil prices and strong investor interest, although linkages to other sectors of these economies remain weak. With steady new discoveries of oil reserves, African oil accounts for a growing share of global production (figure 1.10). In many other countries, however, adverse weather conditions dampened agricultural production and slowed domestic demand, while a falloff in export growth, due to sluggish conditions in Europe, caused a compression of imports. In South Africa, export growth was further restrained by sharp appreciation of the rand in response to higher gold prices and tighter monetary policy to curb inflation. The

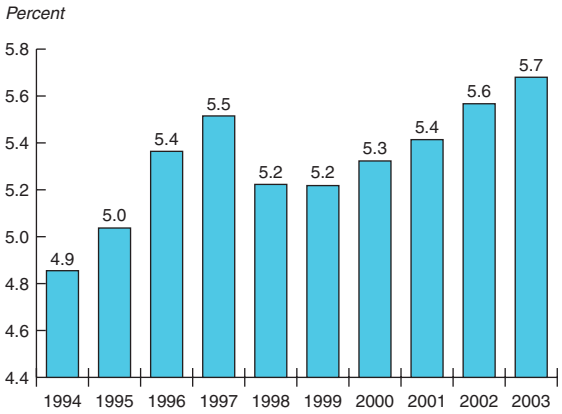
Table 1.8 Growth in Sub-Saharan Africa, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	2.2	3.1	3.1	3.3	2.4	3.4	4.2	3.9
Contribution to growth (points)								
Private consumption	1.3	0.4	2.2	2.3	1.5	1.9	2.1	2.3
Fixed investment	0.6	0.7	1.4	1.3	1.1	1.2	1.0	0.9
Net foreign balance	−0.3	0.5	−0.7	−0.9	−0.9	0.5	0.8	0.6
Current account balance (share of GDP)	−1.9	−0.1	−2.6	−2.5	−2.6	−3.8	−3.5	−3.0
Fiscal balance (share of GDP)	−3.7	−0.4	−1.3	−2.3	−2.6	−2.1	−1.9	−1.8
Memo items: real GDP growth								
Oil exporters	2.1	4.0	3.0	4.0	3.8	3.8	4.8	4.4
Excluding oil exporters & South Africa	3.0	2.0	3.8	2.7	2.5	4.6	4.7	4.5

Note: e = estimate; *f* = forecast.
Source: World Bank staff estimates.

Figure 1.10 Sub-Saharan African oil production as a share of world oil production, 1994–2003



Source: World Bank data.

volatility of domestic performance across Africa is reflected in international capital flows to the region, with the stock of debt fluctuating around $210 billion, roughly equivalent to two-thirds of GDP. Net flows of long-term debt, either negative or slightly positive over the 1998–2001 period, increased by 0.4 percent of GDP in 2002 and 1.5 percent in 2003. Portfolio equity contracted from a net inflow amounting to 2.8 percent of GDP in 1999, to a net outflow of 0.1 percent of GDP in 2002, before rallying somewhat in 2003. And FDI inflows appear to have narrowed slightly from 2.3 percent of GDP in 2002 to 2.1 percent in 2003.

Over the next two years, the region should be able to maintain GDP growth at over 4 percent. For non-oil-producing countries, currency realignments and increased demand should continue to support global commodity prices, while oil prices are expected to moderate but to remain at still high levels relatively. This would imply regional per capita income growth of 1.4 percent in 2004 and near 2 percent thereafter, compared to 0.5 percent per year for the previous 10 years. Significant structural reforms—in addition to good weather and greater political stability—are needed to achieve this potential. The downside risks to these projections are large and multiple. Intractable problems of disease and poor infrastructure will persist over the forecast period, and while policy is moving broadly in the right direction, investment risks remain high and business environments generally poor. Taxation, labor laws, and excessive regulation have been identified as particular problems (World Bank 2003b). Finally, despite genuine progress in resolving some of the region's most egregious civil conflicts (Angola and Liberia), the situation in the Democratic Republic of Congo, Somalia, Sudan, and Zimbabwe remains unstable.

Buoyant oil sector boosts growth in the Middle East and North Africa

Despite severe disruption in the Middle East and North Africa—tied in large measure to the Iraq conflict—GDP growth jumped from 3.3 percent in 2002 to 5.1 percent in 2003, the strongest economic performance since 1991 (table 1.9). Underpinning the advance was a sharp upturn in growth for the region's oil-exporting economies, to 5.7 percent from 3.6 percent during 2002. Higher

Table 1.9 Growth in the Middle East and North Africa, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	3.3	4.4	3.5	3.3	5.1	3.7	3.9	4.0
Contribution to growth (points)								
Private consumption	1.2	1.8	2.6	1.8	1.0	1.7	1.8	1.6
Fixed investment	0.8	0.7	1.3	0.2	2.3	0.9	1.2	1.0
Net foreign balance	1.1	1.6	−0.1	−1.2	0.6	0.6	0.2	1.3
Current account balance (share of GDP)	−1.7	7.1	4.4	4.6	4.2	2.6	2.0	2.8
Fiscal balance (share of GDP)	−1.5	−1.1	−1.9	−2.9	−1.1	−3.3	−3.3	−3.0
Memo items: real GDP growth								
Resource poor, labor abundant countries	3.8	3.8	4.5	2.9	4.2	3.9	4.2	4.3
Resource rich, labor abundant countries	3.5	4.4	4.0	5.7	5.9	5.0	4.8	5.0
Resource rich, labor importing countries	3.2	6.2	2.0	1.1	4.7	2.6	2.7	2.8

Note: e = estimate; *f* = forecast.
Source: World Bank staff estimates.

oil prices and a ramp-up in crude oil production provided substantial revenue gains, supporting increased public current and capital spending. A pickup in growth among the diversified exporters (from 3 to 3.9 percent in the year) reflected a rebound from severe drought in the Maghreb, including a strong 6.0 percent advance in Tunisia from 1.7 percent in 2002, which additionally reflected a pickup in its tourism. Other countries—the Arab Republic of Egypt, Jordan, and the Syrian Arab Republic—witnessed a stabilization or moderate slowing of output. Despite security tensions throughout the year, capital spending expanded by 10 percent, providing a 2.3 percentage point fillip to growth in 2003, up from 0.2 points during 2002. Robust advances were made in Algeria, the Islamic Republic of Iran, and Saudi Arabia, supported by rising petroleum revenues. Soaring oil receipts maintained the region's aggregate current account surplus near $25 billion, or 4.2 percent of regional GDP.

The regional outlook hinges on international and domestic developments affecting groups of countries in the heterogeneous region. As crude-oil production is scaled back once again (with OPEC quota reductions expected in 2004), growth among key oil exporters is expected to ease to 3.7 percent in 2004 and to maintain a similar pace of expansion through 2005. Current account surpluses should remain sizeable, however, providing resources that could be effectively channeled toward structural reforms. In the case of Iraq, however, the continued recovery in oil production will support the recovery in GDP growth, as the interim government focuses on building capacity for essential services, reconstruction, and job growth with the assistance of international donors. The softening of growth among the economies of the resource-rich and labor-importing countries (Gulf Cooperation Council), in particular, should be more than offset by firming activity among the more diversified economies, as well as continued strong growth among the resource-rich, labor-abundant countries of the region—notably Algeria and the Islamic Republic of Iran. Gradual recovery in Western Europe will be critical in stimulating exports from the Maghreb, as well as enhancing prospects for tourism and remittance revenues across the region. The balance of these factors suggests that regional growth should achieve 4 percent by 2006.

This outlook requires enduring efforts toward structural reform. Oil producers must manage volatile oil revenues (box 1.5). Others must reduce their reliance on the public sector. Many of the region's countries have initiated measures to support expansion of the private sector and trade in an effort to improve growth prospects. Investment reforms and gradual opening of economies to trade have been pursued to varying degrees in Jordan and Tunisia, two early reformers, and in the Arab Republic of Egypt and Morocco, as well as in the resource-based economies of Algeria and the Islamic Republic of Iran. Among other initiatives, countries have been pursuing strengthened trade ties with Europe through the Euro-Med trade agreements, while intraregion trade is being promoted through the Pan Arab Free Trade Area. While gains have been achieved, reforms targeted at the investment climate and at trade have lagged in comparison to other developing regions. Geopolitical tensions form the principal backdrop of risk to the outlook, which may threaten steps toward freer trade and constrain the free movement of labor and, in turn, worker remittances.

A return to growth in Latin America and the Caribbean

Growth recovery in the region has been slow, partly due to uneven performance across countries. Regional GDP advanced by 1.3 percent in 2003, following contraction of 0.6 percent during 2002. Excluding countries recovering from acute crises, such as Argentina, Uruguay, and República Bolivariana de Venezuela, the strongest performers were in the Andean group, where Chile, Colombia, and Peru recorded growth above 3 percent for the year.

Diverging patterns have also been recorded for the Caribbean and Central American country groups. Recent growth performance and prospects are below average for the former group, whereas a positive 3.1 percent growth rate was achieved by Central America in 2003 and, thanks to the recently signed CAFTA agreements, sustained economic growth in a 3 percent range is expected for the near future. In contrast with the situation in other developing regions, output gains in Latin America and the Caribbean relied more on stronger net exports in 2003, which contributed 1 percentage point to growth. Domestic demand provided a net drag on regional dynamics, as both

Box 1.5 The benefits and hazards of oil funds

Pitfalls of oil funds—

The ability of oil-and-gas-exporting economies to effectively use export revenues as catalysts for stronger economic growth and poverty reduction has been, at best, mixed. Several factors play a role:

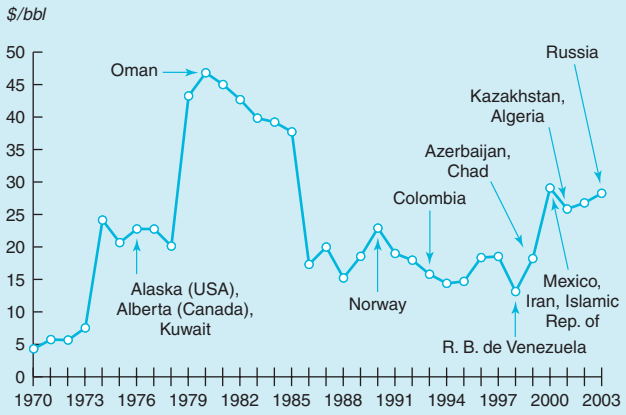
- Windfall profits and high export revenues in times of high oil prices damage prospects in other tradable sectors because of real exchange-rate appreciation: the so-called Dutch disease.
- Energy-based revenues are volatile and unpredictable. Because government budgets depend heavily on the oil revenues, such volatility can easily lead to fiscal instability.
- Energy resources will eventually become exhausted. The prospect does not create a natural investment climate for long-term sustainable development.

—can be managed

Oil funds, delinked from the current budget and invested abroad, potentially help alleviate these problems. Further, compared to the imbalances associated with petrodollar recycling during the 1970s, creation of oil funds suggests improvement in the management of oil rents. Delinking the volatile part of oil revenues from current budgets contributes to fiscal stability. By investing oil revenues abroad, instead of spending them domestically, the hazards of exchange-rate appreciation can be mitigated in the event of temporarily high oil prices. Long-term funds may help prepare a country for the depletion of resources. They are usually administered separately from other government accounts, and without the protections of adequate transparency, good governance, and institutional controls, these funds can be subject to the influence of the politically powerful. At the extreme, this can mean outright theft, but a more common danger is raiding the funds to finance current expenditures without necessary checks and balances. Therefore, complete transparency and clear rules guiding contributions and withdrawals are needed if the funds are to be a catalyst for long-term growth.

Given the potential benefits, an increasing number of oil exporters have created some form of oil fund, particularly since the 1990s. This trend partly reflects the relatively recent firming of oil prices since 1998 and the subsequent need to manage windfall revenues. Several countries have adopted oil funds as part of a broader effort to reorganize and revitalize their hydrocarbon sectors and to make the transition from centrally planned systems (figure), and new oil exporters are emerging, for example Kazakhstan.

Price of oil and the creation of oil funds in selected countries, 1970–2003



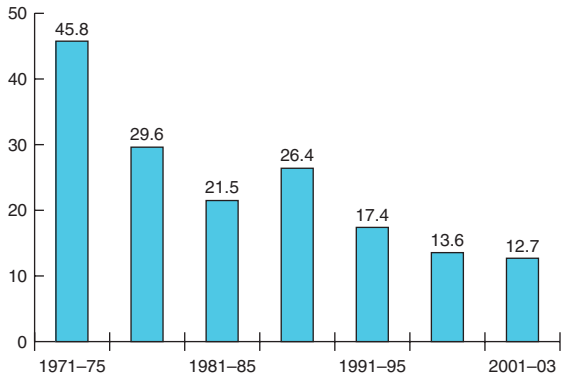
Source: Davis 2001.

private consumption and fixed investment sapped 0.2 percentage points from GDP growth. During the first three quarters of 2003, export growth outpaced that of imports for most countries, while trade surplus positions became common.

In the continuing process of adjustment after financial difficulties, Latin American domestic spending was dramatically curtailed, cutting the aggregate current account deficit from $53 billion in 2001 to $2.6 billion by 2003. In mirror image, net financial-resource flows into the region dropped sharply over the period from a peak of $138 billion in 1998 to $38 billion in 2002—or from 6.9 percent of GDP to 2.3 percent—the largest swing for any region. Flows stabilized at an estimated $46 billion in 2003. The evolution of financial flows reflects a weakening in FDI inflow from 5 percent of GDP in 1998 to just over 2 percent in 2003, due to the end of the privatization boom and the economic difficulties in Brazil and Argentina. Net flows of long-term debt declined from 3.2 percent of GDP in 1998 to an outflow

Figure 1.11 Volatility of export growth in Latin America and the Caribbean, 1971–2003

Standard deviation of monthly growth rates for five-year periods (%)



Source: World Bank staff estimates.

equivalent to 0.6 percent in 2002, before turning slightly positive again in 2003.

With recovery now seen to be broadening, especially after gaining traction in Brazil and Mexico during late 2003, GDP growth for the region is expected to advance by 3.8 percent in 2004 (table 1.10). As domestic demand revives, import growth is likely to grow in step. With prudent fiscal policies, significant deterioration of external accounts should be avoided. Fundamental underpinnings for recovery include improved macroeconomic management that has reined in inflation across the region; a decades-long pursuit of outward-oriented development strategies that has not only altered the level of trade flows but also reduced the volatility of export earnings; and more competitive and flexible exchange-rates (figure 1.11). The policy challenge is to target a sustainable pace of growth—especially by addressing the important structural issue of improving productivity growth—and to avoid temptations to overborrow in the context of the weaker dollar and lower interest-rate spreads. Indeed, the principal risk to the outlook for Latin America is a sudden rise in international interest rates.[1]

Advanced-economy policies and the outlook for development finance

There have been various forces behind the current global recovery. Rationalization and balance-sheet consolidation by the private sector have occurred against the backdrop of an acceleration of growth in Asia and technological advances that have underpinned high productivity gains. In addition, aggressive macroeconomic policy responses by high-income countries have been important in improving the external financing conditions of developing countries. However, the current macroeconomic policies in advanced economies are not sustainable in the long term, and there needs to be adjustment towards more balanced global economic growth and more sustainable financing of existing current account imbalances.

How the current imbalances are resolved will have a critical bearing on the availability of finance for developing countries. The nature and timing of this adjustment will depend on several related factors: the speed with which economic activity picks up in the rest of the world—particularly the Euro area; the success of policymakers in

Table 1.10 Growth in Latin America and the Caribbean, 1991–2006

Percentage growth rates, points, ratios

	1991–2000	2000	2001	2002	2003e	2004f	2005f	2006f
Real GDP growth	3.4	3.7	0.3	−0.6	1.3	3.8	3.7	3.5
Contribution to growth (points)								
Private consumption	2.7	2.5	0.4	−1.4	−0.1	2.4	2.4	2.1
Fixed investment	0.8	0.6	−0.5	−1.3	−0.2	1.3	1.2	0.9
Net foreign balance	−0.3	−0.7	0.4	1.9	1.0	−0.1	0.3	0.1
Current account balance (share of GDP)	−2.8	−2.3	−2.8	−0.9	−0.2	−0.5	−0.9	−1.0
Fiscal balance (share of GDP)	−8.6	−3.0	−2.9	−3.0	−2.4	−1.4	−1.1	−1.2
Memo items: real GDP growth								
Central America	4.5	3.2	1.9	2.0	3.1	3.1	3.0	2.9
Caribbean	4.3	5.8	2.7	3.0	0.5	0.8	2.9	3.0

Note: e = estimate; *f* = forecast.
Source: World Bank staff estimates.

facilitating orderly adjustments in exchange rates; the continued willingness of private investors—and official institutions—to finance existing current account imbalances without sharp adjustments in asset prices and exchange rates; and the willingness of policymakers to reevaluate stimulative policies as the recovery in activity gathers strength. A gradual tightening of fiscal policies in high-income countries—particularly in the United States—could contribute to an orderly resolution of the current imbalances and stability in the flows of capital to the developing world.

Note

1. When on January 27, 2004, the U.S. Federal Reserve Board noted that increases in interest-rate spreads had made many Latin American economies more vulnerable, currencies depreciated and stock markets fell, reversing the steady improvements of 2003.

References

Davis, Jeffrey, Rolando Ossowski, James Daniel, and Steven Barnett. 2001. "Stabilization and Savings Funds for Nonrenewable Resources." IMF Occasional Paper 205. International Monetary Fund, Washington, D.C.

IMF (International Monetary Fund). 2003. "Public Debt in Emerging Markets: Is It Too High?" *World Economic Outlook* (September).

McCauley, Robert, and Ben S. C. Fung. 2003. "Choosing Instruments in Managing Dollar Foreign-Exchange Reserves." *BIS Quarterly Review* (March).

Muhleisen, Martin, and Christopher Towe, eds. 2004. "U.S. Fiscal Policies and Priorities for Long-Run Sustainability." IMF Occasional Paper 227. International Monetary Fund, Washington, D.C. January.

Talvi, Ernesto. 2000. "How Should Fiscal Policy Be Set over the Business Cycle?" PREM Note 47, World Bank, Washington, D.C. November.

World Bank. 2003a. *Global Development Finance 2003*. Washington, D.C.

World Bank. 2003b. "Doing Business in 2004: Understanding Regulation." Washington, D.C. October.

2

Private Debt Finance for Developing Countries

IN 2003, NET PRIVATE DEBT FLOWS TO developing countries strengthened markedly. The 2003 net inflow of $51 billion compares favorably with the net inflow of $3 billion in 2002 and a net outflow of $28 billion in 2001 (table 2.1). The recovery in net debt flows mirrored an increase in gross debt financing from bonds and syndicated loans, which was 34 percent higher in 2003 than 2002. It was led by a jump in new bond issuance, from $56 billion in 2002 to $86 billion in 2003 (figure 2.1 and table 2.2). Short-term lending, including from commercial banks, also increased strongly, but this increase was heavily concentrated in a few countries, mainly in Europe and Central Asia.

Low yields on alternative investments in developed countries—coupled with better credit quality in emerging markets and a keener appetite for risk among investors for much of the year—encouraged a greater supply of external financing in 2003. Moreover, 2003 saw none of the major financial crises that in the past have precipitated a sudden contraction in bank lending or an interruption in bond issuance. Structural changes in the banking industry continued to exert a moderating influence on lending, although bank lending was probably particularly sensitive to improved perceptions of credit quality.

Table 2.1 Net debt flows to developing countries by region, 2000–03

$ billions

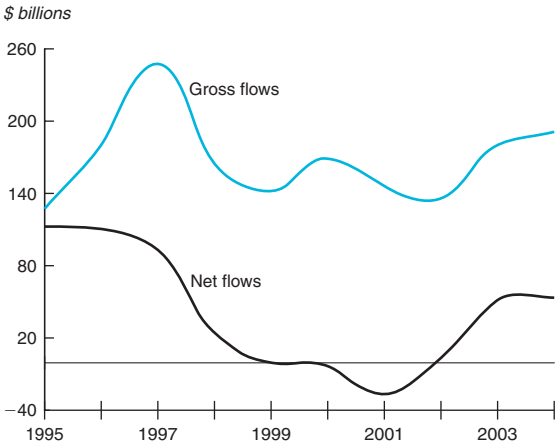
	2000	2001	2002	2003
Total	−3.9	−28.1	3.2	50.6
Disbursements	194.0	198.3	202.8	210.3
Amortizations	188.8	203.6	201.0	191.7
Short-term, net	−9.1	−22.9	1.4	32.0
East Asia and Pacific	−24.7	−11.3	−3.1	9.4
Europe and Central Asia	21.1	0.1	22.7	36.0
Latin America and the Caribbean	1.4	−14.1	−20.6	9.3
Middle East and N. Africa	−3.4	2.0	3.8	−5.7
South Asia	2.9	−2.8	2.8	−1.7
Sub-Saharan Africa	−1.3	−2.0	−2.2	3.4

Source: World Bank Debtor Reporting System.

Demand for external finance continued to be restrained by improved saving-investment balances in many emerging-market countries. That restraint reflects a desire in developing countries to limit leverage. But it also reflects the development of domestic sources of finance, including deeper domestic capital markets. This has been mirrored in the large current account surpluses run by several developing countries and further increases in already high rates of reserve accumulation. Overall these adjustments have resulted in significant improvements in the external liability positions of developing countries, which have been a factor in recent credit-rating upgrades.

Strong liquidity and only modest increases in demand for capital lie behind the major decline in the premiums demanded by investors for taking on developing-country credit risk. The average spread on emerging-market bonds (EMBIG) fell from 725 basis points at the end of 2002 to just 390 basis points at the end of January 2004—its lowest level since 1997—before climbing again to 420 basis points by mid-February. This compression in emerging-market spreads may, however, have outstripped the fundamental improvement in credit quality. It will be difficult for investors in emerging-market debt to match the very strong returns they have achieved recently. There are signs that emerging-market bond spreads have recently become very sensitive to expectations about the course of monetary policy, particularly in the United States.

Figure 2.1 Debt flows to developing countries, 1995–2003



Sources: World Bank Debtor Reporting System and Dealogic Bondware and Loanware.

Table 2.2 Gross market-based debt flows to developing countries, 2000–03

$ billions

				2003		
	2000	2001	2002	Year	H1	H2
Total	170	143	135	181	83	98
Bonds	60	63	56	86	44	42
East Asia and Pacific	5	7	12	11	4	8
Europe and C. Asia	15	11	16	26	16	10
Latin America	36	38	22	41	20	21
Mid. East and N. Africa	2	5	3	1	1	0
South Asia	0	0	0	0	0	0
Sub-Saharan Africa	1	2	2	6	3	3
Banks	111	80	79	95	39	56
East Asia and Pacific	21	9	21	24	11	13
Europe and C. Asia	23	15	17	29	9	20
Latin America	46	38	20	22	11	12
Mid. East and N. Africa	7	7	12	7	2	5
South Asia	4	3	2	4	1	3
Sub-Saharan Africa	9	7	6	8	4	3

Note: H = half.
Sources: Dealogic Bondware and Loanware and World Bank staff calculations.

There was some progress in 2003 in strengthening the overall financial architecture, with the widespread acceptance of collective action clauses in new bond issues. But a substantial stock of bonds remains without such clauses. Efforts also continued to revise the Basel Capital Accord to bring the capital that internationally active banks must hold into better alignment with the risks inherent in different types of lending.

The recovery in private debt flows and narrowing of bond spreads continued amid increasing evidence of a turnaround in the business cycle in industrialized countries. The turnaround pushed long-term interest rates higher, potentially reducing the attraction of investing in developing-country debt. This suggests that private debt financing is likely to grow only moderately in 2004. At the same time, the availability of funds is likely to be strongly influenced, as in the past, by investors' perceptions of developing countries' credit risk. Countries' demand for funds should rise with stronger economic activity.

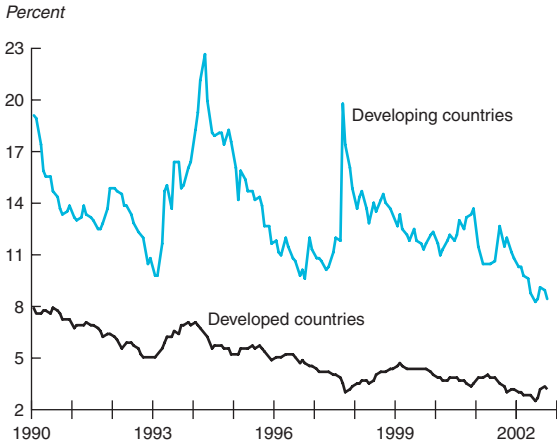
But important risks remain. Further increases in interest rates in advanced economies could dampen flows, and some correction in spreads is possible. Renewed volatility in the financial markets—likely stemming from imbalances in the advanced economies—may also have an adverse impact on flows. And the handling of the restructuring of Argentine debt could have an important influence on investor attitudes.

The recent improvement in the terms on which financing is available to developing-country borrowers provides an opportunity for refinancing and debt management. Some developing-country borrowers have already taken advantage of that opportunity. But it is important that borrowers heed the lessons of recent years and remain prudent about incurring additional external liabilities. Particular care should be taken to ensure that foreign-currency liabilities are appropriately hedged. Moreover, borrowers should beware of possible future fluctuations in the availability of finance, particularly in light of the renewed pick-up in short-term financing.

Conditions affecting the supply of funds

A combination of low yields in developed countries and greater appetite for risk among investors in 2003 played a significant role in augmenting the supply of capital and in channeling more of that capital to developing countries. In particular, bond issuance jumped an impressive 55 percent over 2002. The increase in bond issuance accounted for all of the increase in *net* long-term private-source debt flows and 43 percent of the increase in total private debt flows (including short-term) in 2003. Moreover, changes in the external financing environment had more of an impact on bond financing than on bank lending,

Figure 2.2 Yields on debt to developing and developed countries, 1990–2003



Note: Developing-country yields refer to yields on benchmark emerging-market bond indexes and developed-country yields refer to average of long-term (10-year) benchmark government yields for the United States, Europe, and Japan.
Sources: Bloomberg, J.P. Morgan Chase, and World Bank staff calculations.

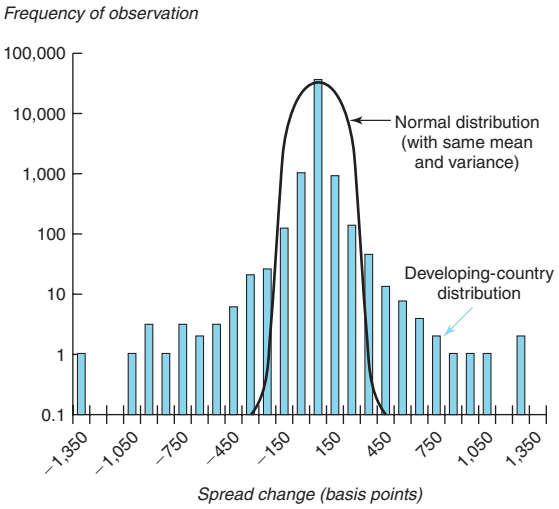
as bonds are tradable assets and thus provide investors flexibility to adjust their risk exposure more easily and swiftly than in other sectors of capital markets.

Average long-term yields in Europe, Japan, and the United States, which had been edging down in 2002 due to economic weakness, declined further in the first half of 2003, reaching their lowest level in 50 years before beginning to turn around late in the year (figure 2.2). The decline provided an incentive for investors to allocate funds into higher yielding developing-country debt, as previous declines had done over the past decade. Increasingly developing-country investments have joined the mainstream. Investors have moved funds in and out of developing countries opportunistically, substituting assets in developed countries for developing-country investments, rather than remaining faithful to the asset class. Though most investors in the class have a relatively long investment horizon, emerging-market debt funds thus remain potentially volatile. In 2003, the average long-term (10-year) government yields on developed-country debt declined to 2.9 percent from an average of 3.5 percent in 2002. Yields on developing-country debt declined as well, but, at an average rate of 9.1 percent, they continued to provide investors an opportunity for substantial returns over developed-country debt, albeit at a higher risk.

Debt flows to developing countries have seldom been motivated purely by nominal rates of return, particularly since the mid-1990s. Credit risk concerns—or perceptions of risk, which are influenced by the *overall* risk sentiment in capital markets—have had an important influence as well (see *Global Development Finance 2003*). Developing-country debt, for much of its history, has been highly sensitive to events, positive and negative. The value of that debt has fluctuated widely, as demonstrated by a statistical analysis of the distribution of daily changes in benchmark risk premiums (figure 2.3). A significant part of the distribution of developing-country spreads lies far outside the boundaries of a normal distribution that might be achieved with the same mean and variance. In other words, it has a "fat-tailed" distribution. This implies that developing-country debt is inherently more risky than the usual alternatives. Accordingly, changes in risk perceptions in the external financing environment have played a disproportionately strong role in influencing capital flows to developing countries.

Alongside the incentive of higher returns, crucial factors shaping investors' portfolio-allocation decisions have been the perception of the credit risk associated with developing countries and investors' overall appetite for risk. Both improved in 2003. The perception of lower credit risk has come about as investors have lowered their expectation of

Figure 2.3 Distribution of daily change in spreads, Jan. 1998–Oct. 2003



Source: World Bank staff calculations based on J.P. Morgan Chase data.

systemic risk associated with developing-country debt. The investor base for developing countries is now more diversified, keeping in check the herd mentality. More investors now treat developing-country investments as part of a more diversified portfolio that provides a better buffer during times of stress—in part due to the depth, breadth, and liquidity of the mature markets in which such portfolios can be traded. Increasing mainstreaming of developing-country investments also reduces volatility, as investment allocations are made more strategically (for example, by risk-allocation committees of investment funds) and with a long-term investment horizon. In the early 1990s, by contrast, the investor base consisted mainly of specialized investors who focused primarily on developing countries. Those investors aimed to minimize the misalignment of their own portfolio's performance against those of their peers, an effort that often led to a simultaneous and extreme fluctuation of expectations that greatly affected the availability of capital for developing countries.

Joint efforts by the international financial institutions, capital market participants, and developing countries to strengthen the overall financial architecture and the flow of information also have helped to support investor confidence. Those efforts have resulted in the adoption of sounder economic policies, as well as in greater transparency in the liability positions of many developing countries. More research is being done by investors and promoters of developing-country debt. Many more developing countries currently carry ratings by independent credit rating agencies than during the early 1990s. Moreover, changes in the ratings have become much more congruent with changes in countries' economic fundamentals and their prospects for external financing.

The string of crises since the mid-1990s exposed vulnerable spots in developing-country debt markets. Together, the countries that have experienced crises have accounted for almost 60 percent of the outstanding private-capital debt stock of developing countries. That market-based financing continues to be available to developing countries indicates that investors have acknowledged the risky nature of those investments and are finding ways to cover their exposure—for example, through the credit derivative market. Finer distinctions among countries' creditworthiness, in great part due to better research and information, have reduced the probability of shocks rippling with the same intensity through the entire credit spectrum and across countries. The probability that investors' asset values will be preserved has therefore increased. The impact of successive shocks on developing-country debt prices and the quantity of new debt acquisition both have been lower in recent years than in the late 1990s, when spikes in risk premiums were typically more intense and interruptions to capital-market access more frequent and prolonged. The average of the peaks in the developing-country risk premium during the crises in Turkey (2000), Argentina (2001), and Brazil (2002) was about 900 basis points, much lower than the average of about 1,550 basis points during the Mexican (1994) and Russian (1998) crises.

Further statistical analysis indicates that episodes of contagion resulting from a simultaneous deterioration of investors' expectations (as opposed to that warranted by countries' macroeconomic fundamentals), and the severity of those episodes, have declined over time (table 2.3).

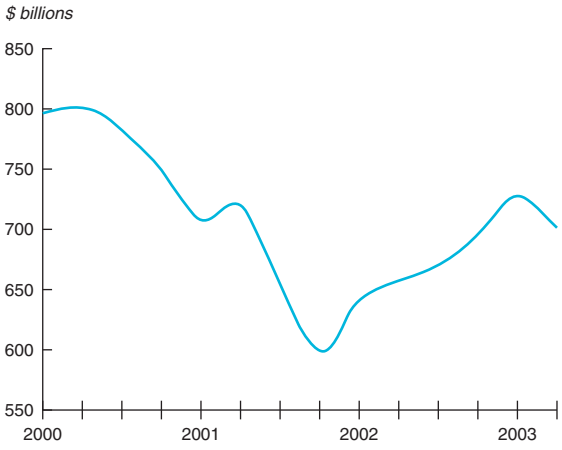
Table 2.3 Declining severity of contagion over time

Proportion of variance in daily changes in spreads explained by the first principal component

Crisis	Analysis period		Variation explained
Argentina	Jan. 2001	Jun. 2001	0.27
	Oct. 2000	Dec. 2001	0.41
Brazil	Nov. 1998	Apr. 1999	0.54
	Dec. 1998	Sep. 2000	0.45
Brazil/Turkey	Jan. 2002	Aug. 2002	0.27
	Sep. 2002	Sep. 2003	0.29
East Asia	Sep. 1997	Feb. 1998	0.70
Mexico	Dec. 1994	May 1995	0.69
Russian Federation	Jul. 1998	Dec. 1998	0.65

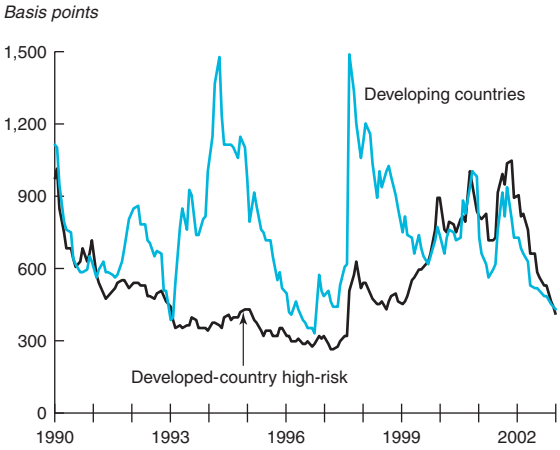
Note: Developing-country spreads have often shown systematic co-movements, especially around shocks. Statistical characteristics of the spread data for various countries taken as a set can be used to analyze market conditions and the impact of shocks. Increases in spreads across the board after an adverse localized shock that should not warrant ripple effects across countries suggest signs of contagion. The statistical technique of principal component analysis enables an estimation of the impact of the implicit underlying variables that are assumed to influence the joint dynamics of the dependent variable (in this case the set of spreads). This technique transforms a set of systematically correlated variables (spreads) into a set of uncorrelated variables that possess explanatory power for the dependent variable and are ranked by reducing variability. The first principal component (FPC) explains the greatest amount of variation, or dispersion from the mean, in the dependent variable. In the above analysis, the declining value of variation being explained by the FPC over time suggests that an increasingly smaller portion of variation in the change in spreads can be attributed to one combination of implicit underlying explanatory variables. Instead, the explanatory power is being increasingly spread out over a variety of factors. This suggests that the severity of contagion from a particular event may be declining, as investors increasingly differentiate risk across countries.
Source: World Bank staff calculations.

Figure 2.4 U.S. corporate profits, 2000–03



Source: Bloomberg.

Figure 2.5 Spreads on developing countries and on developed-country high-risk debt, 1990–2003



Sources: Bloomberg and J.P. Morgan Chase.

The proportion of variance in daily changes in developing-country spreads that can be attributed to particular shocks (measured by first-principal-component analysis) is much lower in recent years than it was until the late 1990s.

In 2003, the recovery in corporate profitability and economic growth in developed countries helped ease investors' risk aversion (figure 2.4). A reduction in the overall level of uncertainty associated with the future course of business and the economic environment has often helped spur investor appetite for risky assets. One implicit measure of risk appetite, the Liquidity, Credit, and Volatility Index (LCVI) (box 2.1), indicated a higher investor tolerance for risk in 2003 than in 2002. Its components showed that liquidity in the markets improved more or less continuously throughout 2003. Despite periods of volatility in capital markets due to interest-rate uncertainties in the United States, the heightened liquidity provided high-risk borrowers, including developing countries, with fertile fields for new financing.

Of particular importance was the improvement in investor sentiment toward developed-country high-yield debt, as investors in such debt are also a significant source of funds for developing countries' debt (figure 2.5). Although spreads on high-yield debt historically stayed below the developing-country spreads, investor sentiment in this sector had suffered since 2000 due to high rates of bankruptcy, corporate failures, and low profitability, all of which drove up the high-yield risk premium in 2002 to its highest levels since the early 1990s—nearly 1,100 basis points. Combined with reduced fears of contagion and systemic crisis in developing-country debt, the improved attitude toward risk has reinforced the incentive of yield differentials between developed and developing countries and encouraged investments in developing-country bonds.

Conditions affecting the demand for funds

Since the crises of the late 1990s, several adjustments to domestic economic balances have reduced demand for external finance. These adjustments in many cases reflect a reduction in debt leverage, particularly in the corporate sector, and increasing reluctance of borrowers to expose themselves to the risks of borrowing in foreign currency. Domestic investment rates have also fallen in some regions.

Of equal importance has been the development in recent years of deeper domestic capital markets in countries such as Brazil, Chile, Hungary, India, the Democratic People's Republic of Korea, Malaysia, Mexico, Poland, South Africa, and Turkey. Apart from helping reduce their dependency on external finance—and thus their exposure to exchange-rate and liability mismatches—the development of local bond markets serves several functions—among them mobilizing domestic savings, providing an operational tool for economic management policies, and setting benchmarks for a

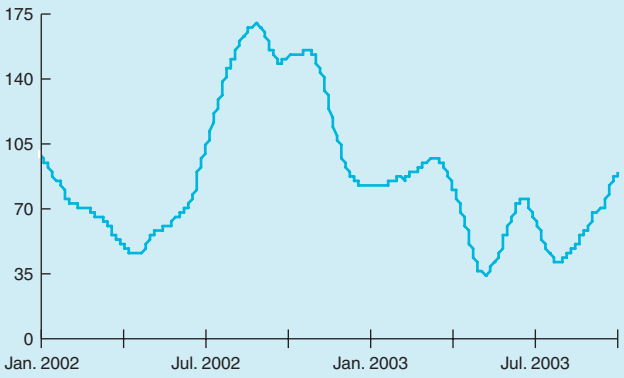
Box 2.1 General risk appetite and sentiment toward developing countries

Developing-country investments have entered the investment mainstream, becoming a small part of many investors' portfolios, rather than a stand-alone asset class dominated by investors focused exclusively on developing countries. With this shift, the overall appetite for risk in various segments of the capital markets has become an important driver of developing-country capital flows. Because wealth effects and uncertainties unrelated to developing countries can affect the overall investor risk appetite, they can affect the terms of new funding as well. Indeed, periods of heightened investor risk aversion have coincided with higher developing-country risk premiums.

Isolating changes in the riskiness of an asset from changes in investors' general appetite for risk remains cumbersome, partly because of interlinkages in capital markets and partly because of the statistical issue of endogeneity. However, observations of coincidental trends in statistical measures across various capital-market segments can provide a sense of the changing preferences of investors for risky assets.

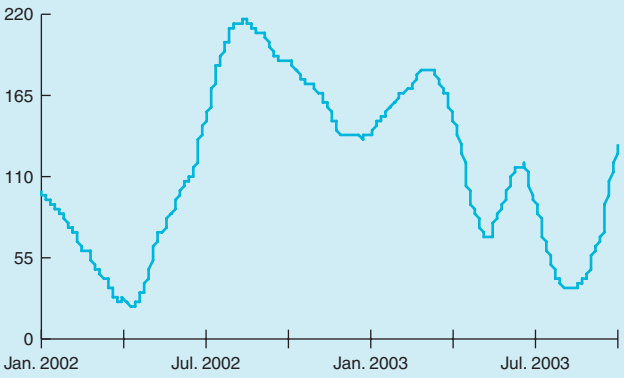
One leading measure of implicit investor risk sentiment is the Liquidity, Credit, and Volatility Index (LCVI) of J.P. Morgan. The LCVI attempts to capture changes in investors' overall risk attitude through measures of liquidity, volatility, and credit risk. It is an equally weighted average of U.S. swap spreads, benchmark and off-the-run U.S. Treasury spreads, the degree of rank correlation between the performance of countries' currencies and their interest rates, foreign-exchange market volatility, U.S. corporate high-yield spreads, emerging-market spreads, and implied volatility of stocks. By monitoring variables across several debt, foreign-exchange, and equity markets, the index is able to pick up indications of overall investor sentiment. Since 2000, it has been positively correlated (coefficient of 0.62) with developing countries' benchmark spreads, indicating that increases in general investor risk aversion have coincided with increases in developing-country spreads. In 2002, amid growing uncertainty about the military conflict in Iraq and political and economic uncertainties in Brazil and Turkey, the LCVI spiked, followed by a swift decline in risk aversion starting in October 2002. In 2003, overall risk appetite increased in relation to 2002, with short periods of lower appetite. Increases in interest-rate uncertainty in the United States on the back of its economic recovery raised volatility in capital markets and led to spikes in the LCVI in mid- and late 2003. However, the benchmark spreads on developing countries weathered these episodes of heightened volatility, although new bond issuance declined between June and August 2003 as borrowers avoided issuance under turbulent pricing conditions.

LCVI index, 2002–03



Note: Increase indicates heightened risk aversion.
Source: J.P. Morgan Chase.

Volatility component of LCVI, 2002–03



Note: Increase indicates heightened volatility.
Source: J.P. Morgan Chase.

variety of fund-allocation functions in the economy. These markets have typically undergone considerable modernization in microstructure, in terms of trading practice, clearance and settlement mechanisms, and electronic transfer of securities, as well as in market capitalization and pricing procedures. Such markets now offer a range of money market, treasury bill, and dated securities. Pension

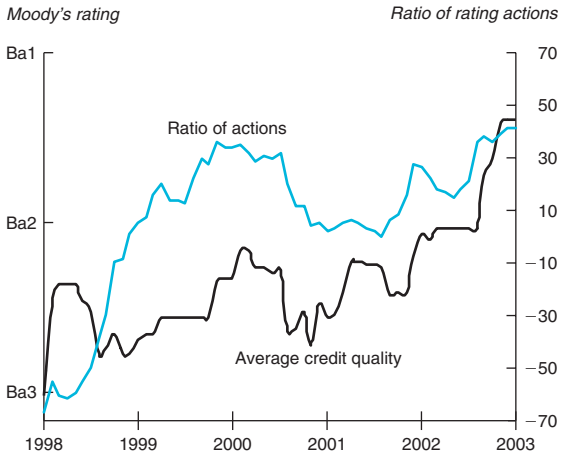
reform has played an important role in developing domestic markets in several countries, particularly in developing a large local institutional investor base. Domestic markets have provided borrowers with access to financing in local currency, important for borrowers operating in the nontradable sectors and for sovereign issuers seeking to avoid currency risk. In 2003, companies such as Mexico's Coca-Cola, FEMSA, and Cemex found it advantageous and possible to raise even quite large loans by issuing bonds in domestic markets, reducing their need to draw on international markets.

Improved external liability positions and rating upgrades bolster investor sentiment

Better credit quality in developing countries in 2003 translated into better credit-risk ratings. Rating upgrades (and improved economic prospects) in certain developing countries that had experienced substantial economic and financial difficulties recently (Brazil, Pakistan, the República Bolivariana de Venezuela, the Russian Federation, and Turkey), were particularly important in influencing investor sentiment. As upgrades exceeded downgrades, the overall creditworthiness of developing countries, proxied by their sovereign ratings on Moody's rating scale, increased to its highest level since the beginning of 1998 (figure 2.6). Average credit quality based on ratings of countries on the Standard and Poor's rating scale also showed an improvement in 2003. However, overall creditworthiness measured on Standard and Poor's ratings was more conservative, and the improvement in credit quality somewhat lower, than those based on Moody's ratings, as has generally been the case since 1998. Changes in ratings reflect progress on several domestic fronts, including the ability to service external debt, stability in the political and economic climate, prospects for economic growth, and increasing resilience of several countries to external shocks. But concern over the sustainability of public-debt positions in some countries continues. In contrast to developing countries, *global* credit quality was down for most of 2003, although the pace of decline eased as the year progressed. It is not clear that the general trend toward rating upgrades will be maintained. Standard and Poor's recently indicated that it expected downgrades to exceed upgrades over the coming year in Latin America.

Credit quality varied across regions. The average rating for Latin America (B1) remained the lowest of all regions—almost two notches below the developing-country average of Ba2. By contrast, average credit quality in Europe and Central Asia (Ba1) reached its highest point since 1997. Credit quality in East Asia (Baa3, the investment-grade threshold on the ratings scale) continued to nudge up, building on improvements since 2001.

Figure 2.6 Quality of developing-country credit, 1998–2003



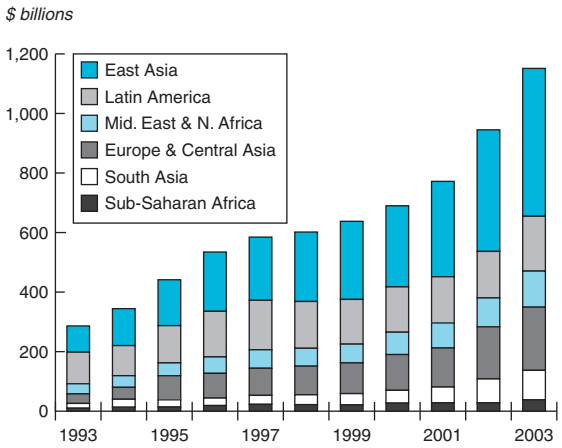
Note: The average credit quality is calculated based on weighted averages of long-term foreign-currency credit ratings of countries by Moody's Investor Service. The weights applied are the total outstanding foreign-currency debt as reported by the World Bank. The ratio of actions refers to all credit-rating actions carried out in relation to emerging markets, namely upgrades, downgrades, changes in outlooks, reviews, and credit watches.
Source: World Bank staff calculations based on Moody's Investor Service and J.P. Morgan Chase.

One factor contributing to the improvement in investor sentiment and the tendency toward ratings upgrades is the fall in net external debt of developing countries since the late 1990s. Many developing countries have also built up substantial reserves (figure 2.7).

Despite a jump of almost $93 billion in total developing-country debt in 2003 (in part due to cross-currency valuation effects due to the decline in the exchange rate of the U.S. dollar against other major world currencies), the total external debt of developing countries declined to about 37 percent of their gross national income (GNI), compared with 44 percent in 1999.

Short-term debt, against which countries must maintain adequate liquidity, fell from 19 percent in 1997 to about 14 percent of the total outstanding debt in 2002, before increasing again to 15 percent in 2003 (table 2.4). Over the same period, the level

Figure 2.7 International reserves of developing countries, 1993–2003



Source: International Monetary Fund.

Table 2.4 Selected indicators of debt burden, 1997–2003

Percent

	1997	2000	2001	2002	2003
Short-term debt/ total debt	18.6	14.1	14.5	13.9	15.0
Total debt stock/exports	130.1	117.0	116.5	111.4	98.2
Total debt service/exports	18.2	19.4	19.4	17.8	15.0
International reserves/ total debt stock	29.8	31.8	35.8	42.6	51.4
International reserves/ months of imports	4.4	4.5	5.0	5.8	6.1

Source: World Bank Debtor Reporting System.

of developing-country international reserves, measured as a ratio of their outstanding short-term debt, jumped from about 1.5 to 3.5—a much thicker buffer to deal with potential external shocks. In 2003, international reserves were high enough to cover imports for six months, compared with four months in 1997. Overall, the sources of foreign-exchange revenue, critical to servicing external debt, are better matched with the total debt burden of developing countries. For example, the total debt stock as a percentage of developing-country exports of goods and services was around 98 percent in 2003, compared with 130 percent in 1997.

External liability positions, however, vary widely by developing region. The total external debt of East Asia declined to 26 percent of the region's GNI in 2003 from 40 percent in 1998. As a whole the region is maintaining international reserves worth nearly five times its short-term debt, compared with an average of three and a half times for all developing countries. By contrast, the total debt stock of Latin America and the Caribbean and of Europe and Central Asia has increased from the late 1990s. However, these regions are maintaining higher international reserves to cover their short-term liabilities.

Although the net external liability positions of many developing countries have improved markedly in recent years, the issue of public debt has been receiving increasing attention from analysts and investors. Public debt has increased markedly across a broad range of emerging-market economies in recent years, largely reflecting movements of interest and exchange rates on existing debt, the recognition of off-balance sheet and contingent liabilities, and the recapitalization of banking systems in some countries. Primary fiscal balances have typically weakened somewhat since the 1990s in most regions and have not offset the impact of other factors on public debt-to-GDP ratios. Public debt now averages about 70 percent of GDP in emerging-market economies, with the progress made as a result of large privatization programs in the first half of the 1990s having been reversed in many regions (IMF 2003). There have been defaults, or restructurings of distressed public debt, in Argentina, Ecuador, Pakistan, the Russian Federation, Ukraine, and Uruguay. In the light of the typically low level and high volatility of public revenues and the structure of public debt—with a relatively high proportion of debt external or linked to foreign exchange rates and domestic debt typically relatively short-term—the sustainable ratio of public debt-to-GDP in emerging markets may be somewhat lower than is normal in developed countries.

Ongoing structural change in financing

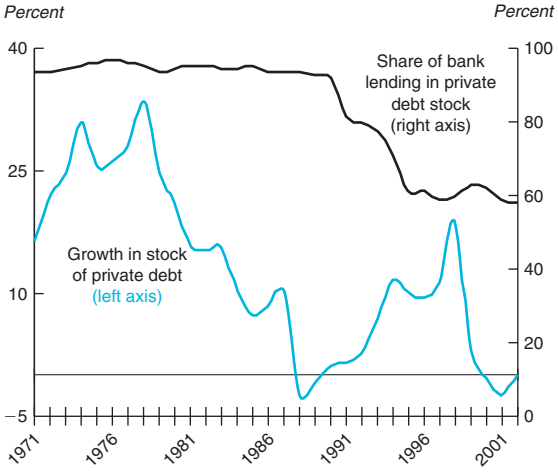
The pattern of external financing for developing countries has changed greatly over time and especially in recent years, following a string of financial and economic crises in the 1990s. Bond financing has grown from its roots in distressed commercial bank debt to become a major, albeit volatile, source of financing. In addition, structural—and strategic—changes in the international banking system have occurred during the same period.

Since the financing pattern in 2003 reinforced these changes, a brief historic review helps put into perspective the recent developments in bond and bank flows to developing countries.

Historically, bank lending and bond financing have alternated in providing financing for developing countries. After cycles of default on external debt (primarily bond debt) during the 1820s, 1870s, and 1930s, growth in debt financing during the 1970s was driven primarily by bank lending. Faced with high crude oil prices, most developing countries ran sizeable current account deficits (averaging 1.2 percent of GDP during the 1970s, excluding the Middle East and North Africa). At the time, commercial banks were awash with liquidity from the revenues of oil-exporting countries. Slow economic growth in developed countries amplified the attraction of the higher returns available in developing countries, leading banks to take on sizeable exposures there. However, as real interest rates in major developed countries increased and commodity prices (a key determinant of foreign exchange revenue for many developing countries) declined, bank debt burdens in many countries became unsustainable, beginning a cycle of decline in credit growth in developing countries. Net long-term bank lending to developing countries fell dramatically during the 1980s.

A second downturn in the credit growth cycle occurred after a period of credit expansion in the 1990s that was fueled by bond financing. The average annual rate of growth in the stock of bond debt in the 1990s was 23 percent, compared with 2 percent for bank lending (figure 2.8). Bond financing continues to fuel the current credit growth cycle for developing countries, as it did in the 1990s.

Figure 2.8 Growth in private debt and share of bank lending in private debt, 1971–2002



Source: World Bank Debtor Reporting System.

Bond flows responded strongly to the external environment and domestic conditions

Bond financing in 2003 was very responsive to changes in investor sentiment, as reflected in both the price and quantity of such financing. Bank lending, on the other hand, remained relatively subdued and stable.

A sharp rally in bond spreads

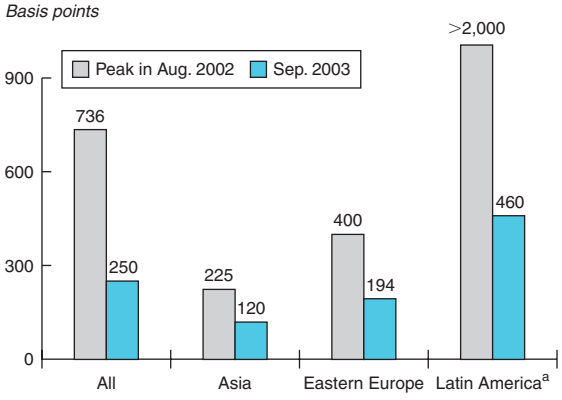
The combination of the stimulus from the external financing environment and the effects of domestic economic conditions in developing countries manifested itself strongly in a sharp decline in benchmark spreads for developing countries. The credit-default swap (CDS) spreads, which reflect the market-clearing premium for insurance against the probability of a country defaulting on its debt, dropped sharply in 2003, indicating an improvement in risk perception of developing countries (box 2.2). In a CDS contract the buyer is obligated to make to the seller periodic payments in exchange for the right to sell the underlying security at a preestablished value should a credit event occur during the life of the contract. Overall, CDS spreads for developing countries declined by almost 490 basis points in 2003—to 250 basis points from their peak of 736 in August 2002—indicating a significant drop in the implied probability of default (figure 2.9). The decline in spreads was accompanied by an equally strong drop in the volatility of CDS spreads to 13 percent in September 2003, from close to 50 percent in August 2002. CDS spreads for Asia, at 120 basis points, were the lowest of all regions, declining from 225 in August 2002. In comparison, spreads for Latin America were almost four times higher, at around 460 basis points. However, these spreads had contracted sharply from more than 2,000 basis points at the height of the uncertainty surrounding Brazil in 2002.

Apart from the CDS market, which reflects transactions (as opposed to indicative prices sometimes used to estimate conventional spreads) and a longer term assessment of risk, investors' strong

Box 2.2 The developing-country credit-default swap market

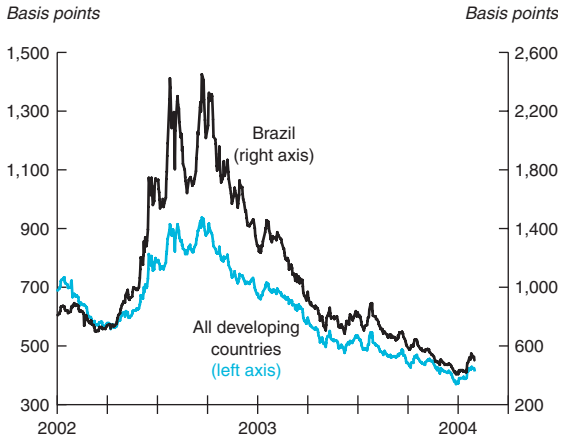
Trading in the market in sovereign credit-default swaps increased markedly in 2003, after falling in 2002, as Argentina, which had been the second most active country in 2000, became inactive following its default in 2001. Emerging-market countries dominate the market for sovereign credit default swaps, with more than 90 percent of trading activity linked to such credits (Packer and Suthiphongchai 2003). Brazil, Mexico, the Philippines, and South Africa are the most active credits, followed by China and Colombia. The availability of an increasingly liquid credit derivative market has provided investors and lenders with greater flexibility to manage their risk exposures and ensure risks are borne by those most willing to do so. However, given the relative novelty of the market and the relatively light supervisory framework for some institutions, such as insurance companies, which are selling credit protection, concerns about the potential systemic consequences of a major credit event or events remain.

Figure 2.9 Credit default swap spreads for all developing countries and selected regions



a. CDS spreads for Latin America reached a peak of more than 2,000 basis points.
Source: J.P. Morgan Chase.

Figure 2.10 Developing country spreads, 2002–04



Source: J.P. Morgan Chase.

appetite for exposure to tradable developing-country debt was evident in the secondary market for international bonds. That increased appetite fueled the sharpest and longest rally ever seen in developing-country secondary-market benchmark spreads, which tumbled from a peak of almost 950 basis points in September 2002 to close to 390 basis points by the end of January 2004, the lowest level since mid-1997 (figure 2.10 and box 2.3). The compression was led by Brazil, whose spreads dropped by almost 2,000 basis points during the same period. (Brazilian spreads had increased by about 1,750 basis points between March and September of 2002, in the face of uncertainties over general elections and economic difficulties in the country.)

Several features in the spreads' rally pointed to increasing sophistication of investors with regard to developing-country risk and a more seasoned approach by borrowers in contracting new debt.

The decline in developing-country spreads was spectacular on its own and by historic standards. Apart from the current rally, three other major episodes of spread compression can be identified since the early 1990s, when developing-country bond financing began to evolve. The decline in spreads through April 2003 (the first seven months of the rally) was by about 475 basis points, more than double the average degree of spread compression in the previous three episodes (figure 2.11). The fact that spreads declined sharply despite considerable uncertainty over global economic growth, the Iraq war, and volatile equity markets at the beginning of 2003 made the rally even more impressive.

Furthermore, the decline in spreads occurred for countries across all regions and across the

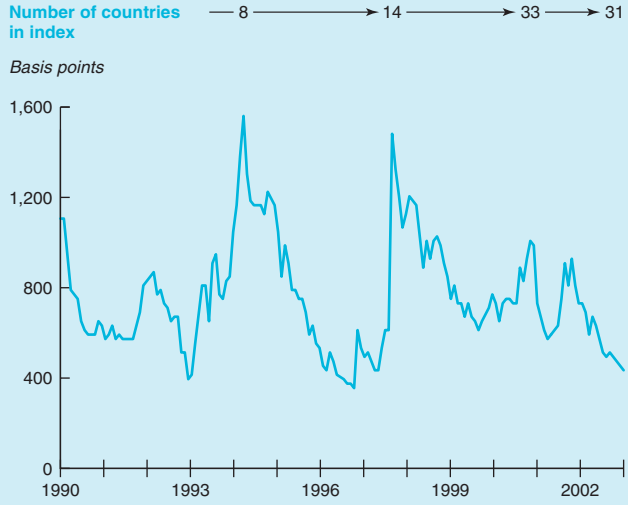
Box 2.3 Characteristics of developing-country spread measures

The most commonly used data on secondary-market spreads for developing countries comes from several emerging-market bond index (EMBI) series compiled by J.P. Morgan Chase. These market-capitalization-weighted indexes include U.S. dollar–denominated Brady bonds, Eurobonds, traded loans, and sovereign or quasi-sovereign local-market debt instruments for a range of emerging markets. The proportionality of instruments used in the indexes varies according to the overall composition of emerging-market debt at various points in history. These data provide a comprehensive picture of developing-country spreads but have some distinct characteristics:

- *Expanding country coverage.* As the universe of developing countries accessing capital markets has expanded over the years, various index series have evolved as well. The countries included in each successive index increased, rising from 8 in the early 1990s to 33 in 2002, before declining to 31 in 2003 (see timeline in the first figure below). Starting out with EMBI in 1990, the index evolved into EMBI+. EMBIG (for EMBI Global) was introduced in 1998. The credit risk embodied in various indexes has changed over time.
- *Reweighting.* The weights assigned to individual countries and instruments are reshuffled frequently due to changing country coverage, changing recommendations by the investment bank to investors on how to allocate portfolios most efficiently, and changes in the outstanding debt of countries. Occasionally the reweighting can have a significant impact on the overall level of spreads for developing countries, as when Argentina's weight in EMBIG dropped from close to 16 percent before default (December 2001) to about 2 percent by 2003 (see second figure below).
- *Instrument coverage.* The mix of securities included in various indexes varies. For example, the recent EMBIG, apart from including international bonds (its largest component), also includes certain local-currency bonds and tradable loans. The original EMBI was composed primarily of Brady bonds.
- *Representative prices.* Occasionally, indicative prices have to be used. The prices recorded for various trades may not necessarily be an adequate representation of overall investor sentiment toward a particular country at a particular point in time.

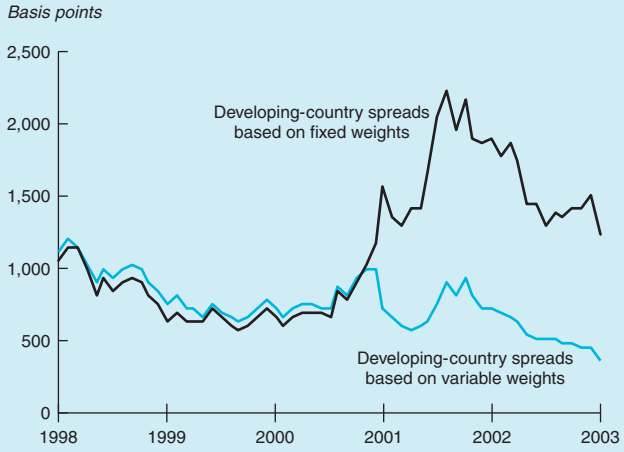
These characteristics, apart from posing other limitations, complicate historical comparison of spreads at the aggregate level, as not all indexes go back to the same point in history. For example, by early October 2002, emerging-market spreads had widened to their second highest point since early 1999. It would appear at first glance that the rise in spreads was nowhere as high as it had been in previous episodes. However, among other things, the changes in weights assigned to countries included in the overall developing-country spread index should be kept in mind when comparing movements in spreads over time. A better perspective can be obtained by also comparing spreads for individual countries, preferably holding constant the financial securities whose prices make up the spreads for that country, as well as other variables.

Developing-country spreads, 1990–2003



Source: J.P. Morgan Chase.

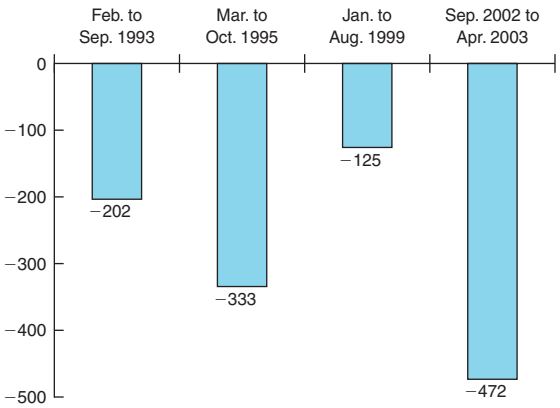
Comparison of spreads using fixed versus variable weights, 1998–2003



Sources: J.P. Morgan Chase and World Bank staff calculations.

Figure 2.11 Episodes of compression in developing-country spreads, 1993–2003

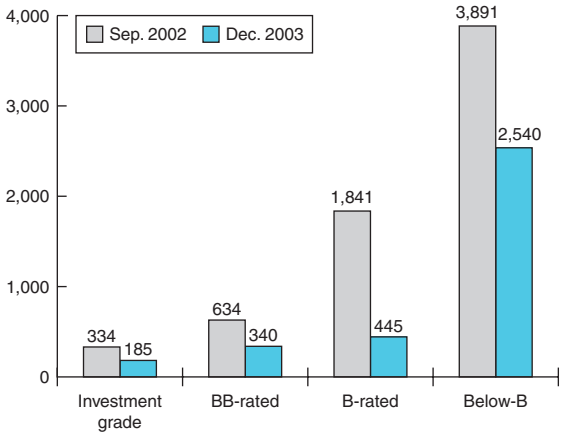
Decline in first seven months of episode; basis points



Source: World Bank staff calculations based on J.P. Morgan Chase data.

Figure 2.12 Decline in developing-country spreads by credit-risk category

Basis points



Source: World Bank staff calculations based on J.P. Morgan Chase data.

entire spectrum of credit risk, albeit raising questions about the widespread effect of market liquidity (figure 2.12). Commensurate with credit risk patterns, spreads continued to differ across regions. Average spreads for Asia declined to 210 basis points by the end of 2003 from close to 300 basis points at the beginning of the year, while spreads for Latin America halved to around 500 basis points from almost 1,000 basis points. In terms of credit risk classification, spreads on investment-grade-rated countries declined from 272 to 185 basis points from the start to the end of 2003, while those for countries rated at the bottom of the credit spectrum dropped from 3,555 to 2,600 basis points.

The limited demand for new funds by borrowers, especially earlier in 2003, reinforced the rally in spreads. Because new bond issuance did not keep up with the sharp and swift increase in the supply of capital, investors sought to acquire developing-country debt through secondary-market trading in existing debt, driving up prices and further narrowing spreads.

And an incremental buildup in bond issuance

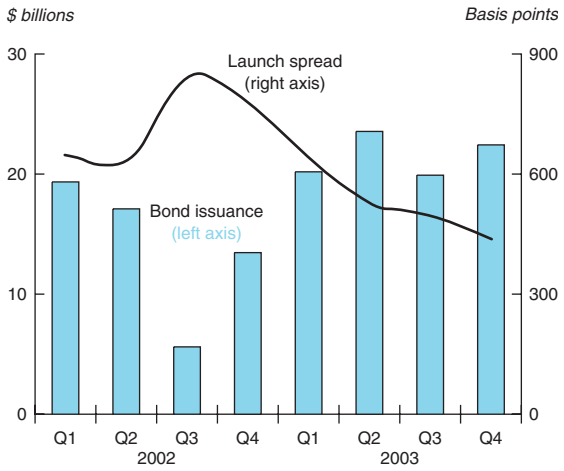
Since the late 1990s, borrowers have generally remained cautious about contracting new debt. Following the financial crisis of 1997–98, the East Asian countries adjusted their financing requirements to work with less debt; they have purposely avoided issuing bonds to the same extent as they did before the crisis. Borrowers in other regions have been periodically reminded of the risks of high international debt by the experience of countries that were major borrowers in the mid- to late 1990s and became victims of financial problems in recent years. The volatility in external financing conditions helped hasten the development of local bond markets, as did pension reforms. Most of the growth occurred after 1997, on the heels of the turbulent period experienced by developing countries in the international bond markets. Domestic capital markets have become an important source of corporate finance in East Asia and in some countries in Latin America.

Nevertheless, the decline in benchmark spreads provided enticing opportunities for all categories of borrowers to lock in new international debt at competitive terms, since secondary-market spreads influence pricing of new bond issues. Developing countries, however, did not immediately respond to the sharp decline in spreads with a flood of new bonds. Although new bond volume increased strongly in early 2003, the jump reflected pent-up demand from the interruption in issuance in late 2002 as the political uncertainties in Brazil and Turkey played out, as well as tarnished investor sentiment in the high-yield corporate sector in developed countries. Instead of a barrage of issues, which could have occurred given the strong investor interest, heightened liquidity, and declining risk aversion, bond flows to developing countries

increased gradually over 2003 (figure 2.13). Even more significant, borrowers lower down on the credit spectrum, those particularly vulnerable to shifts in investor sentiment, tapped bond financing under well-established market trends that generally favored borrowers.

Overall for 2003, bond financing for both sovereign and corporate-sector borrowers rose over 2002. Sovereign borrowers led the recovery in bond flows, accounting for almost two-thirds of the $44 billion bond issues by developing countries in the first half of 2003. But even sovereign borrowers showed a certain degree of prudence in acquiring new debt. Almost 60 percent of the sovereign borrowing was done by investment-grade-rated borrowers, those having the greatest capacity to adapt to changes in external financing conditions. Bond issuance by Mexico accounted for almost half

Figure 2.13 Bond issuance from developing countries, 2002–03



Sources: Dealogic Bondware and World Bank staff calculations.

Box 2.4 Evolution of markets for developing-country international bonds

The now-thriving developing-country bond markets were born from distressed commercial bank debt. Led by Mexico in 1982, many developing countries had suspended payment on unsustainable bank debt by the late 1980s. In 1989, the U.S. Treasury, with the help of the International Monetary Fund and the World Bank, advanced the Brady plan. The idea was to restructure bank debt into liquid, tradable, and safe securities, the repayment of which (principal and sometimes interest) was secured against U.S. Treasury zero-coupon bonds that were to be held in a trust until the restructured bonds matured. In addition, countries were to undertake economic reform to work their way out of economic and financial stress. The restructuring resulted in Brady bonds worth $155 billion. Mexico was the first to issue them. By the mid-1990s, 17 countries, mostly in Latin America, had implemented Brady-style debt exchanges. The debt restructuring of each country resulted in a unique array of Brady bonds, with two features in common. Creditors could exchange their loans for either "par" or "discount" bonds. The par bonds carried below-market interest but preserved the principal value of the debt. The discount bonds provided a floating interest rate but reduced the value of the principal by 30 to 50 percent.

Following the establishment of a liquid Brady bond market in 1989, investor confidence in developing countries gradually started to recover and grow, thus making possible the modern era of developing countries' access to international bond markets and development of their domestic bond markets. Over time, those markets have grown in depth, breadth, and sophistication under the influence of the domestic economic situation in each country, the composition of their investor base, and international financial policies and frameworks. Although bond issuance by developing countries dates back to the early 1800s, its importance in the 1980s was minimal, averaging only about $3 billion per year between 1980 and 1989. After bond-market access for most Latin American countries was curtailed for a decade following the bank-debt crisis, the majority of issues came from East Asian countries. China and Malaysia accounted for almost 82 percent of the regional bond volume between 1983 and 1989. Hungary, the Russian Federation, and Turkey accounted for the bulk of the remaining developing-country bond market. As investor confidence was still low, bond issuance was dominated by sovereign and public-sector borrowers, which accounted for almost 90 percent of bond issuance during that period.

The currency composition of bonds issued during 1983–89 suggests that Japanese and European investors were instrumental in supporting bond-market development for developing countries. While the U.S. market did absorb a significant portion of developing-country bonds until 1984, bond issuance in Japanese and European currencies

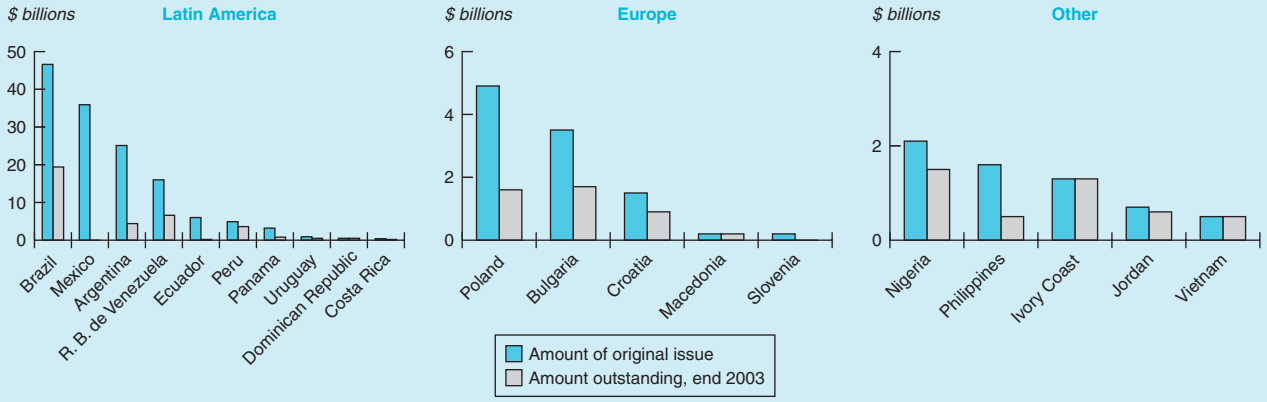
Box 2.4 *(continued)*

accounted for almost 60 percent of the total developing-country bond issues during the 1980s. Most of the issues in the U.S. market were by borrowers that possessed an image of lower credit risk, especially those from Asia. Declining interest rates in the United States worked in favor of investors and borrowers, who capitalized heavily on floating-rate notes in expectation of further declines in interest rates. The U.S. role waned after 1989, as investors were saturated with exposure through Brady bonds and continued to smart from losses suffered on bank loans.

As more investors joined the ranks of the banks that were major holders of developing-country bonds in the early 1990s, developing-countries' international bond issues gathered pace. Issuance increased from $4 billion in 1990 to a peak of $99 billion in 1997, with the number of countries issuing bonds increasing four times over the same period. The share of bond financing in developing countries' total net private debt flows increased from 6 percent in 1990 to 46 percent in 1997. Many countries in Latin America re-established their access to bond markets, with the region as a whole accounting for almost 60 percent of developing-country bond issuance during 1990–97. With the growth in international bond markets, the size of the Brady bond market has been declining since the mid-1990s. Countries have been retiring their Brady bonds for the purposes of cost-effectiveness and liability management through swaps or buyback operations. Almost two-thirds of the original stock of Brady bonds—including all of Mexico's—had been retired by the end of 2003 (see figure).

Between 1998 and 2002, developing-country gross bond issuance declined to an annual average of $60 billion (compared with a peak of $99 billion in 1997). A series of crises beginning with Thailand in 1997, followed by the Russian Federation (1998), Brazil (1999), Turkey (2000), and Argentina (2001), took a heavy toll. Periods of credit squeeze alternated with periods of abundance, often in reaction to short-term developments. The relative inexperience of investors with developing-country bonds, and the inherent riskiness of such investments, worsened shocks through contagion.

Stock of Brady bonds issued and outstanding

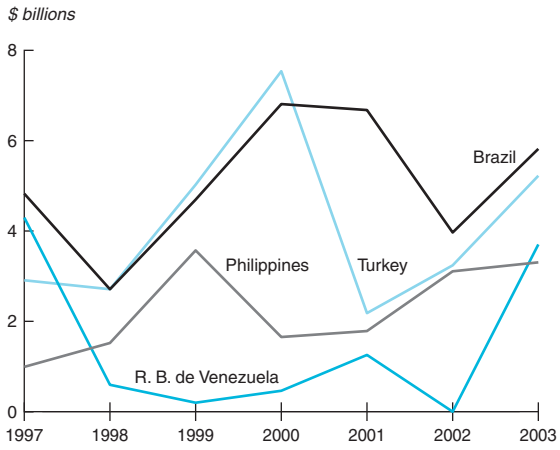


Sources: Bloomberg and various central banks.

of the total investment-grade issuance by sovereigns in the first half, with most of the remainder being from Chile, Hungary, Poland, and South Africa. A noticeable exception to the overall investment-grade setting was the return of Brazil, rated B2 (five levels below the investment-grade threshold), to bond markets after being shut out since early in 2002. Reportedly, institutional investors showed keen interest in Brazil's bond issues. Strong participation by institutional investors in other countries' bonds was also reported. Such investors typically have long-term investment horizons, which contribute to a relatively stable financing environment.

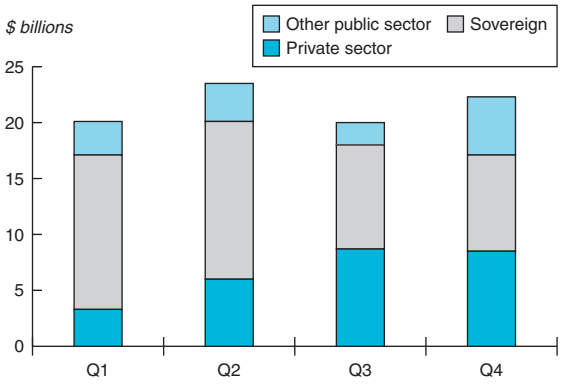
As signals of investor confidence became stronger, despite the economic uncertainties in developed countries, sovereign borrowers rated below investment grade came to account for a much larger share of total sovereign bond flows. The share of such borrowers jumped to nearly

Figure 2.14 Sovereign bond issuance, 1997–2003



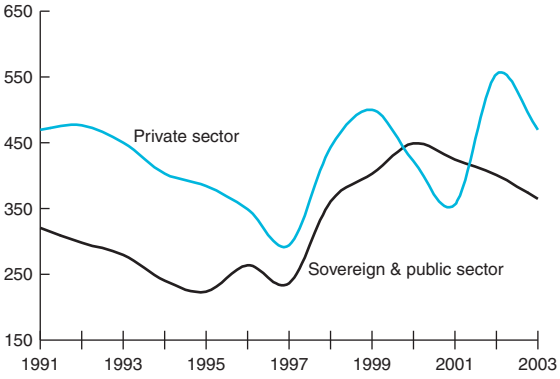
Sources: Dealogic Bondware and World Bank staff calculations.

Figure 2.15 Breakdown of bond issues by type of borrower, 2003



Sources: Dealogic Bondware and World Bank staff calculations.

Figure 2.16 Average spreads on new bond issuance, 1991–2003



Source: World Bank staff calculations based on Dealogic Bondware data.

70 percent in the second half of 2003. There was a particularly large jump in issuance from Brazil, the Philippines, and the República Bolivariana de Venezuela, which accounted for more than half of all sovereign issuance from non-investment-grade-rated countries in the second half of 2003. Turkey, which had been an active borrower in the first half of 2003, remained active in the second half. Sovereign bond financing from these countries, all of which underwent financial and economic pressures not very long ago, was back up to levels close to the peaks of the 1990s (figure 2.14). Pakistan regained access to international capital markets with a $500 million bond issue in February 2004, less than five years after being forced to restructure previous bonds.

Bond financing for private sector borrowers grew gradually as a share of total developing-country bond issuance in 2003 (figure 2.15). Borrowers from Europe and Central Asia, Latin America, and South Africa accounted for almost all of the doubling in private sector bond financing in 2003 over 2002. Benign financing conditions facilitated access for corporate borrowers from several small and infrequent market participants, such as Bulgaria, Colombia, Estonia, and Kazakhstan. In addition, access conditions for the private sectors of Brazil, the Philippines, and the Russian Federation (countries recovering from financial crises) also improved. Corporate borrowing from Russia reached an all-time high, while that from the Philippines was close to its peak levels of the mid-1990s.

Despite the easing of the corporate sector's access to bond financing in 2003, markets maintained a distinct tiering for credit risk, which was reflected in the pricing of new bonds. The difference in the average risk premium (the spread charged over the risk-free rate in primary markets when new issues are priced) between sovereign and public-sector bonds compared with private-sector bonds remained among the highest since 1995. While the average primary-market spread for sovereign borrowers (365 basis points) reached its lowest level since 1998, the average spread for private sector borrowers (near 500 basis points) was close to the 1990s peak (figure 2.16).

Bank lending picked up

Announced new international bank loans increased slightly in 2003, compared with subdued levels in the previous two years. In 2003, new loans reached $95 billion, compared with $79 billion in 2002. The pickup in deals occurred mainly in Central Asia and Eastern Europe, with gross new lending at $29 billion in 2003, compared with $17 billion in 2002.

New loans to East Asia picked up only slightly to $24 billion from $21 billion in 2002. Even then, the 2003 figures were boosted by a $2.6 billion package to restructure the debt of a power project in Indonesia. New bank lending to Latin America edged up to about $22 billion.

Syndicated bank lending to the Middle East and North Africa was modest at just $7 billion in 2003, compared with an unusually strong $12 billion in 2002, when large loans for Saudi Arabia and Iran boosted the total. New loans to borrowers in Sub-Saharan Africa increased slightly to $8 billion in 2003, up from $6 billion in 2002. This was concentrated on borrowers from Angola, Ghana, Nigeria, and South Africa.

In Latin America, the public sector increased its share of new loans to 39 percent of the regional total in 2003 from 26 percent in 2002 and just 16 percent in 2001. The $9 billion raised by the Latin American public sector in 2003 included a $2 billion loan contracted by the Mexican government to help finance the retirement of its Brady bonds.

Net bank lending turns positive

New syndicated loans account for only a proportion of total bank lending, however, and not all of the commitments are typically disbursed immediately. Using a more comprehensive measure, including short-term flows, net bank lending turned positive in 2003 (table 2.5). Despite the increase in commitments, net medium-term bank lending continued to contract. The turnaround followed a contraction in bank claims in 2002 associated with the crises in Argentina and Brazil, and concentrated on these countries.

There was no significant rebound in bank lending to Brazil in 2003, despite the marked recovery in creditor sentiment. This reflected weak demand, partly due to the availability of alternative sources of financing. Lending to Argentina, too, was stagnant in 2003, although the pullback in lending associated with the country's financial crisis seems to have been completed in 2002. International lending to Mexico contracted in 2003, in part reflecting weaker demand for external finance due to the development of local capital markets as an alternative source of finance.

Table 2.5 Net bank flows to developing countries, 2001–03

$ billions

	2001	2002	2003
All developing countries	−40.4	−10.0	17.5
East Asia and Pacific	−11.9	−4.4	3.6
Europe and Central Asia	−1.7	18.5	22.1
Latin America and the Caribbean	−17.7	−21.1	−4.0
Middle East and North Africa	−2.4	−1.3	−4.9
South Asia	−2.8	3.2	2.5
Sub-Saharan Africa	−3.9	−5.0	−1.8

Note: Includes short-term and other non-bond private flows.
Source: World Bank Debtor Reporting System.

Net repayments to banks in the East Asia and Pacific region moderated in 2003, after substantial net repayments in 2002. While borrowers from Indonesia and the Philippines continued to reduce their liabilities to banks, outflows from Thailand moderated. Lending to borrowers in South Asia, which previously had been contracting, started to increase again in 2003, possibly in response to a perception of improved credit quality, as reflected in the upgrade of India's credit rating early in 2003.

Bank lending to Eastern Europe and Central Asia increased further in 2003, with lending to the Russian Federation particularly strong. This likely reflected the generally high, and improving, credit quality in the region, as several countries neared accession to the European Union. Moreover, many European banks boosted lending in support of multinational companies active in Eastern Europe and in support of their local operations. The increase in short-term flows was particularly strong. Borrowers in Sub-Saharan Africa continued to make moderate net repayments to commercial banks in 2003, as has been the pattern in recent years.

Overall, banks have recently reduced corporate lending in both developed and developing countries, across all regions. The shift was most pronounced in Latin America. By the third quarter of 2003, bank claims on the nonbank private sector in Latin America accounted for 61 percent of claims on Latin America, down from 69 percent in

Table 2.6 Average spreads on medium- and long-term announced loans, 1999–2003

Basis points

Year	All	East Asia & Pacific	Europe & C. Asia	Latin Am. & Carib.	Mid. East & North Africa	Sub.-S. Africa
1999	186	165	196	343	96	181
2000	156	134	182	246	104	210
2001	170	179	250	222	80	196
2002	166	113	264	247	104	163
2003	165	146	286	237	69	175

Note: Spreads are taken from Dealogic Loanware and cover only loans for which the spread is quoted relative to Libor. They do not make allowance for other arrangements, such as commitment or underwriting fees. Average spreads reflect the specific composition of loans in a given region and year; changes may reflect changes in that composition.
Source: World Bank staff calculations based on Dealogic Loanware data.

the third quarter of 2002. Over the same period, bank claims on public sector entities increased slightly in the major emerging-market economies.

Decline in bank margins relatively modest

Unlike the sharp decline in bond-market premiums, the average pricing margin charged on new syndicated loans in 2003 was virtually unchanged from the previous year at 165 basis points (table 2.6). Margins for bank lending are relatively less affected by short-term developments in the capital markets because such lending is more relationship-based. Average margins edged up, however, for medium-term loans in most regions. Margins remain very tight for the majority of borrowers in Eastern Europe and East Asia, but some borrowers face significantly wider margins. Typical margins for trade-related lending to private borrowers in the Russian Federation were about 300 basis points. The average maturity of new syndicated loans recovered to 49 months in 2003, from 45 months in 2002, but it remained slightly below the level of earlier years. Some 17.9 percent of new syndicated loans had a maturity of one year or less, compared with 15 percent in 2002.

The changing strategies of international banks

The moderate recovery in bank lending in 2003 comes against a background of a general retrenchment of banks from cross-border bank lending since 1997. Several factors account for that retrenchment, and their continuing influence is likely to keep international bank lending moderate over the medium term.

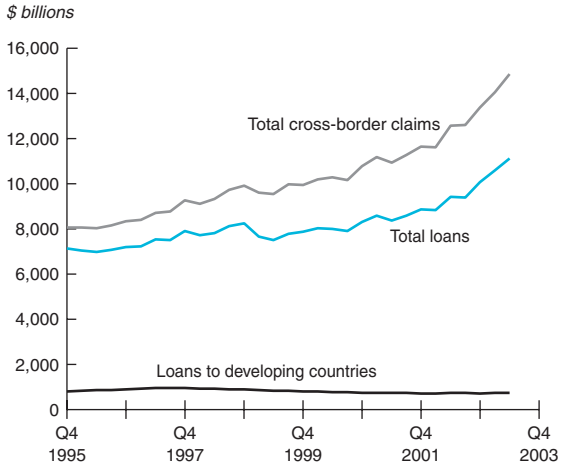
International bank lending has been disproportionately affected by the reduction in demand for external borrowing, since many of the emerging-market borrowers, particularly in Asia, that have sought to reduce their leverage previously borrowed predominantly from international banks. The ability of domestic financial institutions in some countries to access international capital markets accounts for some of the reduction in the demand for bank lending. Top-tier Brazilian banks, for example, have used structured bond issues, secured by remittance transfers, to raise funds on international markets and have on-lent the proceeds.

The experience of successive financial crises after the mid-1990s sensitized commercial banks to the risks of lending to developing countries and prompted managements to review their risk strategies. As a result, the risk-management techniques and procedures used by internationally active banks have been greatly strengthened in recent years, with the widespread adoption of value-at-risk models and a greater emphasis on stress-testing. Enhanced scrutiny of risky lending, including to developing countries, typically remains in place.

Banks have reduced the risk profile of their lending by reducing their lending to emerging markets in general—and to riskier countries within these emerging markets in particular. According to figures from the Bank for International Settlements (BIS), the share of reporting banks' international claims on developing countries as a proportion of their total international claims fell from 12.9 percent in mid-1999 to just 8.6 percent in September 2003. Within each of the major regions there has been a shift in the proportion of lending toward relatively highly rated countries, and away from countries with relatively low credit ratings. According to BIS calculations, the average credit rating of the emerging-market lending portfolio of reporting banks improved from about B in mid-1999 to over B+ in March 2003, holding the credit rating of individual countries constant at 1999 ratings (McGuire 2003).

There has also been a more general strategic change in the operations of many internationally active banks. That change has typically involved a move toward business lines that generate fee income—such as market-making, bond- and equity-underwriting, and asset management—and away from traditional interest-earning activities. In 2002,

Figure 2.17 Cross-border claims of BIS-reporting banks, 1995–2003



Source: Bank for International Settlements.

for example, only about 30 percent of Deutsche Bank's revenue derived from interest-earning activities, although a figure of 50–60 percent was more typical for international banks. Some banks are seeking to combine the provision of traditional banking services with other financial services, including insurance, hoping to benefit from the cross-selling of services. In mid-2003, holdings of securities accounted for 25 percent of BIS-reporting banks' cross-border claims, compared with 11.5 percent in 1995. Similarly, 18.9 percent of bank claims on developing countries consisted of securities' holdings in 2003, compared with 7.4 percent in 1995 (figure 2.17).

The wide range of strategies followed by internationally minded banks have had an impact on their lending to developing countries. Nearly all large banks seek to provide their domestic customers with international services, and many aim to provide corporate and investment banking services globally to these clients. Some of the largest banks are seeking to establish a global presence, including local retail banking in many countries. Others have sought to supplement their domestic activities with a local presence concentrated in specific regional markets. British-based Standard Chartered is one bank that is targeting its future growth on building on an established presence in emerging markets, rather than on competing in the developed-country markets.

Nevertheless, some banks that formerly were very internationally active have decided to review the countries and business lines in which they are active and to be much more selective about their investment choices and deployment of resources. In markets where a wider distribution network is an immediate priority, such institutions are now emphasizing joint ventures with local partners, rather than acquisitions. Some banks, particularly in Germany, have been trying to reduce the size of their balance sheets by reducing risk-weighted assets.

Banks have also taken advantage of advances in capital markets and improved technology to free up their balance sheets by converting pools of loans they have originated into securities that can be traded in capital markets. According to this practice, a portfolio of assets is transferred from the balance sheet of the originating bank to a special purpose vehicle, which refinances itself by issuing securities on the reference portfolio to capital markets at a margin. Cross-border lending to developing countries may have become relatively less attractive for international banks to the extent that it is less amenable to securitization than other forms of lending, for example, because it is less homogenous than credit card or mortgage lending.

Changing regional patterns of international bank finance

There have been important regional influences on the pattern of bank lending. In particular, cross-border bank lending has been the predominant form of international external finance for East Asia, and regional demand for such financing has fallen significantly since the East Asian crisis.

North American and, most strikingly, Japanese banks have sharply reduced their cross-border lending to developing countries since the Asian crisis of 1997 (table 2.7). By September 2003, lending by Japanese banks to developing countries was just one-third of its level in June 1997. This change, of course, reflects the weakened state of the Japanese banking system, as well as reduced demand from Japanese companies operating in other countries (figure 2.18). Over the same period, cross-border lending by North American banks to developing countries fell by 24 percent (figure 2.19). European banks, which accounted for a little over one-half of bank lending to developing countries in 1997, increased their exposure, particularly between 1997 and 2000. They now account for nearly two-thirds of such lending.

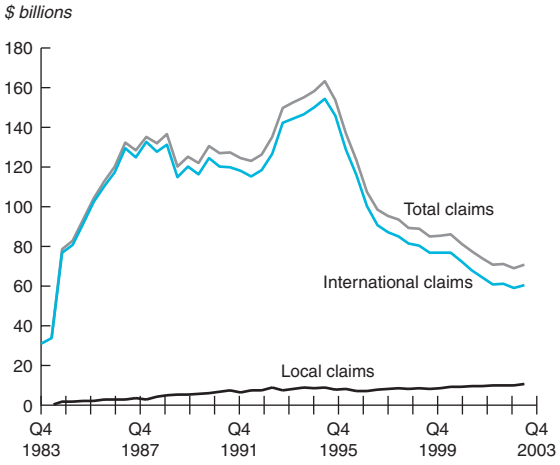
Table 2.7 International claims of BIS-reporting banks

$ billions

	Total	U.S. and Canada	Japan	Europe	Residual
All developing countries					
Jun. 1997	711.1	115.4	120.6	368.3	106.8
Dec. 2000	749.4	99.7	60.2	479.7	109.8
Sep. 2003	735.1	88.1	44.9	475.0	127.0
East Asia and Pacific					
Jun. 1997	232.9	20.7	92.5	94.2	25.6
Dec. 2000	171.7	12.2	39.5	78.2	41.8
Sep. 2003	151.5	13.7	25.6	82.9	29.3
Europe and Central Asia					
Jun. 1997	118.6	12.2	3.9	81.7	20.8
Dec. 2000	178.9	6.9	4.8	138.0	29.1
Sep. 2003	222.0	11.1	4.4	174.2	32.4
Latin America and the Caribbean					
Jun. 1997	251.1	70.1	14.5	127.1	39.3
Dec. 2000	285.5	67.9	10.4	183.2	23.9
Sep. 2003	222.7	54.7	8.8	126.8	32.4
Middle East and North Africa					
Jun. 1997	47.9	3.4	2.8	31.1	10.6
Dec. 2000	51.9	4.5	1.5	36.8	9.0
Sep. 2003	56.2	1.8	1.2	38.2	14.9
South Asia					
Jun. 1997	26.1	3.1	4.6	12.3	6.1
Dec. 2000	28.0	3.0	2.6	17.2	5.2
Sep. 2003	30.4	3.2	1.1	16.7	9.4
Sub-Saharan Africa					
Jun. 1997	34.6	6.0	2.2	21.8	4.6
Dec. 2000	33.5	5.1	1.3	26.1	1.0
Sep. 2003	52.2	3.7	3.7	36.2	8.7

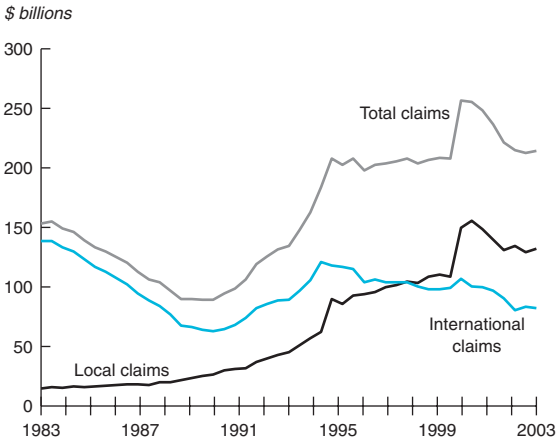
Note: Figures derived from BIS consolidated banking statistics. International claims include both cross-border claims and local claims denominated in foreign currencies. Changes in coverage and the reporting practices of reporting countries have occurred over the period. Figures have been adjusted to the World Bank's current coverage of developing countries. The comparison of stocks in different periods is affected by changes in the valuation of lending denominated in currencies other than the U.S. dollar.
Sources: Bank for International Settlements and World Bank staff calculations.

Figure 2.18 Foreign lending of Japanese banks to developing countries, 1983–2003



Source: Bank for International Settlements.

Figure 2.19 Foreign lending of U.S. banks to developing countries, 1983–2003



Source: Bank for International Settlements.

Important structural changes also have occurred in the regional pattern of borrowing. These have both affected and been affected by the willingness of banks in different regions to lend to developing countries. International claims on East Asia and the Pacific, for example, declined from $233 billion in 1997 to $152 billion in 2003 as Asian borrowers sought to "deleverage" and reduce their exposure to international lending. Japanese bank lending in Asia fell by 72 percent between June 1997 and September 2003; it now accounts for just 17 percent of international claims on the region, compared with 40 percent in 1997.

More recently there have been signs of an incipient revival in bank lending to Asia, including signs that Japanese banks are again willing to participate in international syndicated loans in the region.

International claims on Latin American countries expanded between 1997 and 2000, but since have fallen back, at least partly in response to the crises in Argentina and Brazil. It is noteworthy that much of the expansion and subsequent contraction in lending to Latin America was on the part of European banks, with Spanish banks particularly prominent. American and Japanese banks have reduced their exposure to Latin America since 1997.

Another striking development is the extent to which international bank lending to "emerging

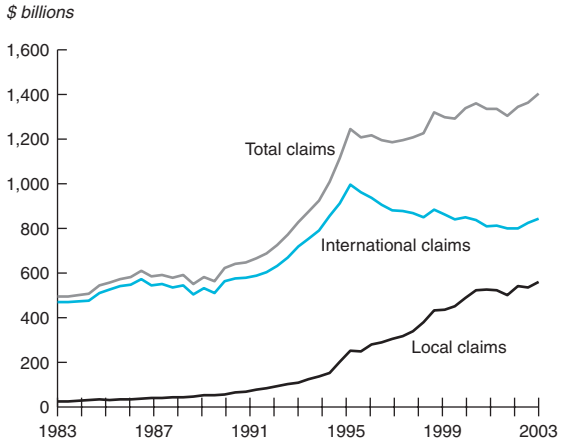
Europe" has increased, rising from $119 billion in 1997 to $222 billion in September 2003. This increase is entirely accounted for by European lenders. One important factor behind the increase in intra-European lending is the marked improvement in the creditworthiness of many of the countries in the region, as reflected in credit rating upgrades.

Lending to the Middle East and North Africa, South Asia, and Sub-Saharan Africa and has edged up since 1997, principally as a result of greater lending by European banks. Japanese banks have reduced their lending to South Asia and to the Middle East and North Africa, but increased lending slightly to Sub-Saharan Africa.

Global expansion of banks and growth of local-currency claims

While the cross-border lending of banks to developing countries has stagnated or contracted in recent years, many banks have significantly stepped up their local operations in developing countries, often through the acquisition of local banks (figure 2.20). Increased awareness of the risks of currency mismatches for both borrowers and lenders gave additional impetus to this process. According to BIS figures, local claims in local currency accounted for 39.4 percent of total foreign claims of international banks on developing countries in September 2003, compared with just 14 percent in 1995 (box 2.5). Local lending has largely been matched by an increase in local deposits (figure 2.21).

Figure 2.20 Lending of BIS-reporting banks to developing countries, 1983–2003



Source: Bank for International Settlements.

Alongside a process of domestic consolidation in Spanish banking, which saw the formation of

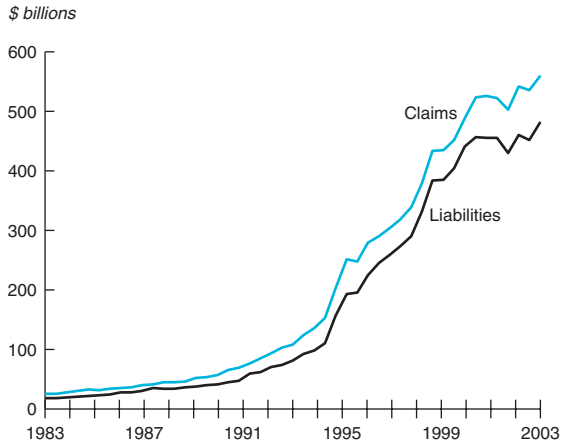
Box 2.5 The impact of Argentine "pesification" on BIS banking statistics

In addition to the debtor-sourced data used in this publication, many observers use the Bank for International Settlements's (BIS) series on bank assets and liabilities to monitor developments in international bank lending. The BIS "consolidated" series is used in this publication to monitor changes in the nationality of lender, maturity, and sectoral composition of lending, and it is one source of data for estimating flows on short-term debt. However, there is a major divergence between this series and the alternative "locational series" in the change in the stock of claims on Argentina in the first quarter of 2002. The locational series has an exchange-rate adjusted outflow of $3.3 billion, compared with a stock change of $22.5 billion ("international claims") or $25.5 billion ("foreign claims") in the consolidated series.

The reason is that the consolidated series includes locally booked foreign-currency claims on residents within its definition of international claims. In Argentina, these claims were affected by the "pesification" process, as dollar claims were converted into pesos at a rate of one to one in January 2002. As a result, they were reclassified as "local claims in local currencies," which are included in the BIS's definition of "foreign claims" but not in "international claims." Perhaps more important, the depreciation of the peso against the dollar then reduced the dollar value of those claims to a fraction of their former value. At the same time, some banks wrote off a significant proportion of their exposure to Argentina after the government default and the abandonment of the currency board. These changes in the debt stock are all essentially "valuation changes," which do not imply an outward flow of resources to the lenders. (See the BIS consolidated statistics for July 2002.)

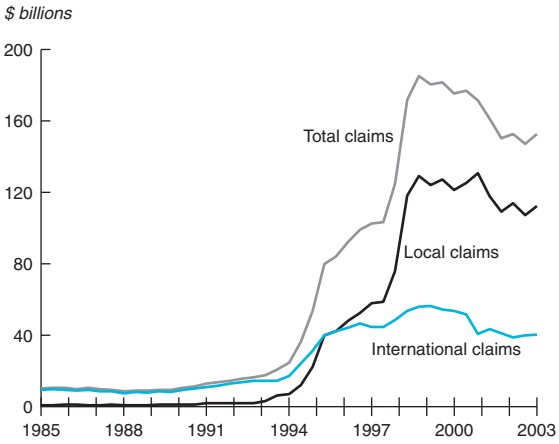
Source: Bank for International Settlements.

Figure 2.21 Local-currency claims and liabilities in developing countries, 1983–2003



Note: Local-currency claims and liabilities of local affiliates of BIS-reporting banks.
Source: Bank for International Settlements.

Figure 2.22 Spanish banks' foreign and local currency lending to developing countries, 1985–2003



Source: Bank for International Settlements.

two dominant banking groups—Banco Santander Central Hispano and Banco Bilbao Vizcaya Argentaria (BBVA)—the country's banks have followed a distinctive strategy of looking to Latin America to expand outside their domestic market, primarily through a series of acquisitions. As a result, the local-currency claims of local affiliates of Spanish-headquartered banks increased from just $1.7 billion in 1994 to a peak of $130 billion in the first quarter of 2002 (figure 2.22). However, events in Argentina have caused at least some banks to reexamine their strategy. In January 2003, BBVA sold its Brazilian bank to Bradesco, although it maintains a presence in eight other Latin American countries and recently took full control of BBVA Bancomer (box 2.6). Partly in consequence, local-currency claims have fallen from their peak.

Deregulation and the challenges created by banking crises have played an important role in

Box 2.6 Will experience in Argentina reverse the shift toward local operations?

Seeking to capitalize on their risk management and technological expertise, international banks have significantly expanded their local operations in developing countries, often at the expense of traditional cross-border lending. However, the heavy losses of foreign banks in Argentina, where dollar assets and liabilities were converted into pesos at unfavorably asymmetric rates, and where banks were pressured to hold government bonds, have brought this strategy into question.

To date, however, the effect appears muted. Local-currency claims of local operations of foreign banks continued to expand to $560 billion in June 2003, from $524 billion at the end of 2001 and just $226 billion at the end of 1997.

There have been no large-scale disinvestments from Latin America, although a few banks have sold or scaled back their Latin American operations. Local-currency claims on Latin America have fallen back to $250 billion from their peak of $286 billion at the end of 2001. Local-currency claims of BIS-reporting banks on Brazil fell from $66.1 billion in the third quarter of 2001 to $51.4 billion in mid-2003. Even after adjusting for the effect of changes in the exchange rate, this amounts to a 16 percent contraction in local-currency claims in Brazil, partly reflecting the disinvestment of BBVA. In Argentina itself, local-currency claims fell to $13.4 billion in June 2003, from $20.1 billion in September 2001.

the entry of international banks into the local markets of developing countries. The difficulties of the Mexican financial system in the aftermath of the 1994–95 tequila crisis brought a significant increase in foreign ownership in the Mexican banking system, assisted by a relaxation of restrictions on foreign involvement. Mexico's largest banks were among those acquired, with mergers between Bancomer and BBVA and between Serfin and Santander. The process culminated in the Citigroup-Banamex merger of 2001. Canadian banks, encouraged by the North American Free Trade Agreement, also made acquisitions of Mexican financial institutions.

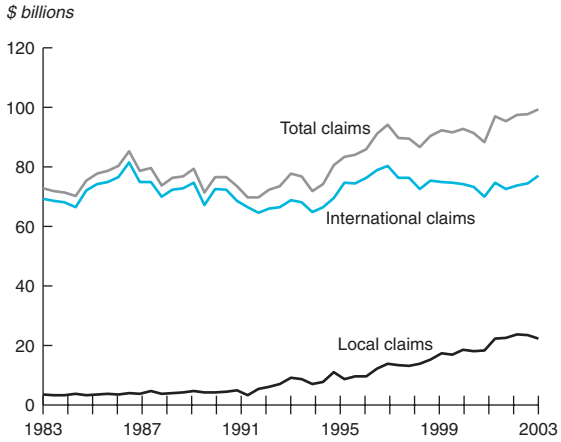
In the mid-1990s, the Brazilian authorities used their powers to license foreign operations to help resolve the difficulties that some Brazilian banks encountered as very high rates of inflation—from which they had profited—were brought under control. Foreign banks were also important players in the privatization of banks owned by the states, notably through Banco Santander's acquisition of Banespa, the state bank of Sao Paulo.

Second-tier banks from some European countries, including Austria, Belgium, Germany, and Italy, have sought to expand in Central and Eastern Europe ahead of the enlargement of the European Union in 2004. This process has been aided by the privatization of state-owned banks in several countries. Some 93.9 percent of local currency claims of local affiliates of BIS-reporting banks in Eastern Europe are now attributable to banks headquartered in Europe. Examples include the German HVB and its affiliate, Bank Austria; KBC from Belgium; and San Paolo-IMI from Italy. A leading Polish bank, Bank Handlowy w Warszawie, with assets of $7.25 billion, was acquired by Citibank in 2001, but otherwise the direct involvement of U.S. banks in Eastern Europe is relatively limited.

Bank lending to Africa has not been exempt from the general trend toward greater direct local involvement, with local currency claims reaching $22 billion in 2003, compared with just $5 billion in 1992 (figure 2.23). Most of that amount is accounted for by banks based in Britain (Standard Chartered), France (BNP Paribas), and the United States (Citibank).

Japanese banks have not built up a significant local presence in developing countries. Local-currency local claims of Japanese banks amounted to just $10 billion in 2003, almost entirely in Asia.

Figure 2.23 International bank lending to Africa, 1983–2003



Source: Bank for International Settlements.

Progress in reforming the international financial architecture

The official community, developing countries, and market participants are continuing their efforts to reduce the severity and frequency of financial crises, particularly those likely to be accompanied by contagion. In 2003, covenants and guidelines intended to improve the sustainability and management of developing-country debt made significant progress.

Collective action clauses

The most notable of developments was the swift transition from debate to implementation of collective action clauses (CACs) under New York law. The use of CACs in bonds governed by U.K. and Japanese law has been a longstanding practice (box 2.7) . However, bonds issued under New York law, which account for a large share of developing-country bonds, previously included only majority enforcement provisions (one of the features of CACs) and not majority restructuring provisions, which were adopted by developing countries in 2003. The inclusion of the latter provisions, which were being discussed as an option alongside IMF's sovereign debt restructuring mechanism, is intended to contribute to orderly and rapid workouts of distressed sovereign debt. These provisions limit the ability of minority bondholders to disrupt or slow down debt restructuring proceedings by enforcing their claims through litigation. They also bind all investors holding debt covered by CACs

Box 2.7 Collective action clauses

Collective action clauses (CACs) enable a qualified majority of bondholders to make decisions that become binding on all holders of a particular bond issue, thereby encouraging a more orderly and prompt restructuring of distressed bond debt. CACs could also help governments avoid the large macroeconomic costs they might incur if they were unable to restructure unsustainable debts in an orderly and predictable way. There are two important features of CACs:

The majority restructuring provision. This provision enables a qualified super-majority of bondholders to bind all bondholders within the same issue to the financial terms of a restructuring agreement, either before or after a default. Thresholds that have been used for amending payment terms have ranged from 66-2/3 percent to 85 percent of either the outstanding principal or of the claims of bondholders present at a duly convened meeting. Majority restructuring provisions have long been found in bonds governed by English, Japanese, and Luxembourg law, whereas bonds governed by New York law did not include them until very recently.

The majority enforcement provision. This provision is designed to limit the ability of a minority of bondholders to disrupt the restructuring process by enforcing their claims after a default but before a restructuring agreement. Two such provisions can be found in bonds governed by U.K. and New York law: (a) an affirmative vote of a minimum percentage of bondholders (typically representing 25 percent of the outstanding principal) is required to accelerate claims after a default; and (b) a simple or qualified majority can reverse such an acceleration after the default on the originally scheduled payments has been cured. An even more effective type of majority enforcement provision can be found in trust deeds governed by English law, according to which the right to initiate legal proceedings on behalf of all bondholders is conferred upon the trustee subject to certain limitations. However, it is up to issuers and investors to decide whether the use of trust deeds is cost-effective.

In addition, the G-10 Working Group (set up at the recommendation of the G-10 ministers and governors in 2002) made specific recommendations that would help in designing CACs. These were (a) a disenfranchisement provision, which would exclude, for quorum and voting purposes, bonds owned or controlled, directly or indirectly, by the issuer or its public sector instrumentalities; (b) an engagement provision, which would promote dialogue between the sovereign and the bondholders; and (c) transparency provisions, which would require the sovereign to provide certain information to bondholders over the life of the bond, and additional information following an event of default. These recommendations could be incorporated immediately into sovereign bonds governed by English, French, and New York law and in bonds governed by Japanese law with some modifications.

Source: IMF and World Bank, *Guidelines for Public Debt Management.*

to the terms of the restructuring agreed by a super-majority of bondholders.

In 2003, several developing-country sovereign borrowers included CACs in their internationally issued bonds, which were rapidly accepted in international capital markets. The practice was led by Mexico, with a bond issue in February 2003. Although the country was not the first sovereign to adopt such a clause, it was the first to employ it along the lines recommended by the G-10 countries. Mexico's transaction drew much public interest, as it came to the markets at a time when the official response to improvements in sovereign debt restructuring procedures was a central topic of discussion in both official and private circles. Following Mexico, Brazil, which had been shut out of international bond markets since early 2002, was able to return with a global bond that included a CAC. Thereafter, the use of CACs caught on swiftly, becoming the norm in sovereign bond issues. Borrowers with varied credit risks, such as Belize, Guatemala, the Democratic People's Republic of Korea, and South Africa, all issued bonds with CACs in 2003.

The covenants used in CACs have differed (table 2.8). Of particular interest has been the percentage of investors required to amend the terms of a bond issue—that is, to carry out collective action. The debate on this topic continues between the official and private sectors. Mexico's 12-year, $1 billion global bond issue employed as a threshold a 75 percent super-majority of investors. The covenants used by Brazil in its $1 billion, 10-year global bond were more stringent (perhaps because Brazil's debt, unlike Mexico's, is not rated as investment grade). The terms of Brazil's bond were

Table 2.8 Covenants of bond issues with CACs

Country	Size (*$mn*)	Coupon (%)	Term (*Yr/m*)	CAC majority	Issue Spread (*bp*)	Bench-mark spread	Rating (*Moody's*)
Belize	100	9.750	12	85	662	—	Ba3
Brazil	1,000	10.000	3.08	85	n/a	902	B2
Mexico	1,000	6.625	12	75	313	323	Baa2
R. B. de Venezuela	700	10.750	10	85	819	1,270	Caa1
South Africa	1,409	5.250	10	—	142	166	Baa2

Note: — = not available.
Sources: Dealogic Bondware and Moody's Investor Service.

closer to those preferred by creditors represented by the Emerging Market Creditors Association, including an 85 percent super-majority. Other sovereigns, such as Belize and Venezuela, also used the 85 percent threshold.

Direct comparison of the price impact of including CACs in bonds is limited by the availability of adequate pricing benchmarks particular to each sovereign, as well as differences in bond-market conditions over time. However, market participants have indicated that the inclusion of such clauses has had almost no effect on the pricing of bonds. Instead, almost all bond issues reportedly received strong investor interest.

The use of CACs provides a useful tool in the event a sovereign is forced to restructure its debt. However, progress still must be made on issues not covered by CACs, especially in relation to the aggregation of debt. Generally, the use of CACs in a particular bond binds creditors to procedures and covenants related to that issue alone. They do not provide for aggregation of claims by creditors of other bonds and cannot facilitate collective action by a super-majority of investors across different bond issues or types of creditors. Thus, it will take considerable time to bring all outstanding bond debt under the realm of CACs. One provision may partially address the issue of aggregation: if two or more bonds are restructured, a majority of all bondholders may opt in favor of aggregated voting. Undue influence by governments on debt restructuring may be prevented by the disenfranchisement provisions of CACs, which would prevent bonds owned or controlled by government entities to be counted or voted.

Additionally, efforts must continue to bring CACs up to par with the provisions envisaged originally by the G-10 countries and financial industry associations. The majority amendment provision, which allows restructuring with a super-majority of creditors, and the collective enforcement provision, which allows restructuring to be accelerated following a default by a minimum percentage of bondholders, are already operational. However, the engagement provision, which spells out procedures for communication between debtor and creditors, and the information provision, which specifies the information that borrowers must provide throughout the life of the bond and in the event of a default, still require further progression.

Code of conduct

Efforts to strengthen the international financial architecture also include discussions among developed and developing countries, international financial institutions, and various capital market participants aimed at formulating a code of conduct to be voluntarily followed by private and official creditors, as well as sovereign borrowers, in situations in which debt sustainability is in question, thus enhancing the stability of the international financing environment. First proposed at the G-20 ministerial meeting in October 2002, these efforts were endorsed by the G-7 finance ministers and central bank governors in February 2003. So far discussions have produced a consensus that the code should be voluntary and flexible, and that it should balance the interests of debtors and creditors. A balance remains to be achieved concerning other features of the code, including its scope.

Standards and codes

Increased recognition and monitoring of standards and codes has been an important part of the institutional response to the shortcomings revealed by the emerging market crises of the late 1990s. Increased scrutiny by the official sector of adherence to standards and codes increases awareness of risks and is also likely encouraging greater adherence to the standards. Private investors and creditors also seem to be increasingly aware of these issues and of how particular countries perform in relation to these codes, using the information to improve risk management.

The IMF and the World Bank have recognized 12 areas and associated standards as useful for the operational work of the Fund and the World Bank, and which they are monitoring compliance

with. These comprise accounting, auditing, anti-money laundering and countering the financing of terrorism, banking supervision, corporate governance, data dissemination, fiscal transparency, insolvency and creditor rights, insurance supervision, monetary and financial policy transparency, payments systems, and securities regulation. Reports summarizing countries' observance of these standards are used to help sharpen IMF and World Bank policy discussions with national authorities, and by the private sector (including by rating agencies) for risk assessment.

Basel II

The proposed new Basel Capital Accord (Basel II) is likely to exert a strong influence on the behavior of internationally active banks—and hence on their lending to developing countries. The revision is designed to enhance the safety and soundness of the banking industry worldwide by closely aligning regulatory capital with banks' credit, market, and operational risks. The new accord replaces and in many ways improves the original Basel accord, which had a crude system of weighting assets according to risk categories. That system has long been inconsistent with the increasingly sophisticated risk-management practices of major banks. The Basel Committee on Banking Supervision (BCBS) plans to finalize the revised accord by mid-2004 and to implement it by the end of 2006 in BCBS member countries.

Basel II is based on three "pillars":

- *Minimum capital requirements,* with a sensitive weighting of the riskiness of different assets in calculating the denominator of this ratio.
- A strengthened role for *supervisory review,* as a result of which a bank may be required to hold additional capital.
- Greater *public disclosure* to enable other financial institutions to exercise stronger "market discipline."

Under the first pillar no changes in the minimum capital ratio are planned. Banks will be able to adopt one of three options for calculating risk-weighted assets:

- The "standardized" approach, where the risk weights for sovereign, interbank, and corporate exposures are differentiated according to external credit ratings. For sovereign exposures, credit assessments developed by Organisation for Economic Co-operation and Development (OECD) export credit agencies may also be used.
- Two "internal-ratings-based" (IRB) approaches—under which banks are permitted to use their own credit-risk models to determine risk weights, subject to demanding validation requirements.

The revised accord incorporates some incentives to move to the IRB approaches so as to encourage the use of advanced risk-management techniques. It also extends the coverage of minimum capital requirements to cover operational risk—the risk of losses from inadequate or failed internal processes, people, and systems, or from external events. And it recognizes a wider range of "credit risk mitigants" such as collateral, guarantees, and credit derivatives.

In October 2003, members of the BCBS reached a compromise on issues that had sharply divided bank regulators in the United States and Europe and threatened to unravel the proposed revision of the accord after four years of work. The standardized approach will continue to be calibrated to cover "unexpected losses" and "expected losses." But for those banks implementing the advanced approaches, using their own internal risk models, minimum capital requirements will now cover only unexpected losses. In the latter case, the adequacy of provisions for losses will be taken into account through modifications to the definition of capital.

Work has begun in a number of countries on draft rules to integrate Basel capital standards with national capital regimes. In early 2003, U.S. regulators indicated that they would require only the largest 10 U.S. banks to comply with the new accord, with perhaps another 10 large regional banks also likely to choose to do so. However, these banks currently together account for some 99 percent of the cross-border lending of U.S. banks.

Although the accord is a clear improvement over its predecessor, there are some drawbacks. The new accord is substantially more complex than its predecessor and will involve significant compliance costs for financial institutions. Some also fear that implementation of the accord may further discourage bank lending to developing countries. In

particular, a number of critics believe that the proposed accord pays insufficient attention to the benefits of diversification and thus may overstate the risk of lending to developing countries.

The accord may also accelerate the process of disintermediation, encouraging an increasing proportion of lending to originate from financial institutions not subject to the regulatory requirements of the accord. Relatively lightly regulated institutions, such as insurance companies and pension funds, are bearing an increasing proportion of the risk of lending to emerging markets through bond holdings and the sale of credit derivatives.

There is also a risk that implementation of the new accord will amplify the procyclicality of bank lending. That is, lending is likely to be reduced further at times when activity is turning down, since assessments of risk are influenced by the cyclical position. In principle, external credit ratings are intended to apply "through the cycle," but in practice the evidence suggests that initial ratings and rating changes are sensitive to the state of the business cycle (Amato and Furfine 2003).[1] This is also likely to apply to internal models, which typically have a relatively short time horizon.

It is not clear that the accord will fully achieve its central aim of establishing a level playing field for internationally active banks. Differences between the standardized and IRB approaches mean that banks adopting one approach or the other will be advantaged or disadvantaged in certain circumstances (box 2.8). Inconsistent implementation of Pillar II is another area that may lead banks based in different countries to face different regulatory burdens. Under Pillar II, individual country supervisors may require a bank to hold additional capital, beyond that required by the standard ratio, on the basis of supervisory review. The quality and intensity of supervisory review will likely vary from country to country, and banks will be more likely to be subject to additional capital requirements in some countries than in others.

The original accord became a global standard and had been adopted in more than 100 countries

Box 2.8 How Basel II affects developing-country risk weights

Key differences in the risk weightings of the existing international banking accord and Basel II include:

- For all but the most highly rated OECD debtors, the risk weight of lending to banks and sovereign borrowers will increase.
- For corporate exposures, the risk weighting for highly rated borrowers will be lower, and that for lower-rated borrowers somewhat higher, than at present.
- Under the standardized approach, lending to OECD banks below the highest rating category would generally attract a higher risk weighting than at present.
- Lending to highly rated non-OECD banks will typically attract a lower risk weighting than at present. But those in the very lowest rating category will have a higher weighting. For short-term lending to banks, the weighting will not change for lending to highly rated banks, but it will increase for middle- and lower-rated banks.
- The risk-weighting curve to be used in the basic internal-ratings-based approach implies substantially higher risk weightings for the lowest rating categories than does the standardized approach. As a result, the differences between the two approaches provide a regulatory incentive for sophisticated banks using their own internal models to concentrate on less risky lending and for those banks using the standardized approach to lend to riskier borrowers.
- For project finance loans, banks using the advanced internal-ratings-based approach and having sufficient data to validate may now simply use weightings that apply to corporate borrowing.

A simple comparison of the existing risk weights with those proposed under the accord inevitably overstates the likely change in bank incentives and behavior, however. Most banks already hold an additional cushion of capital beyond the minimum regulatory requirement. As a result, the existing minimum regulatory capital requirements are typically not "binding." Moreover, banks' own internal capital budgeting procedures may already reflect their assessment of the risks inherent in lending, rather than simply the regulatory requirements.

by the mid-1990s. The new framework is intended to be suitable not only within the G-10 countries represented on the BCBS, but also as an option that countries around the world might apply to their banking systems. Many developing countries are likely to implement the accord in some form, although not necessarily by the end-2006 date targeted for implementation by BCBS members.

Most analyses suggest that implementing the Basel accord in developing-country banking systems would require substantial increases in regulatory capital. A particular concern for the implementation of the standardized approach in emerging-market countries is that relatively few companies have external credit ratings. As a result, the new accord is likely to result in relatively undifferentiated risk weights for developing-country banks. This is likely to result in incentives for foreign banks (which are able to use the more advanced and risk-sensitive systems) to focus on less risky borrowers, while domestic bank lending concentrates on low borrowers of lower quality, with potential risks for the health of the domestic banking system.

Equator Principles and the Extractive Industries Transparency Initiative

In 2003, major international banks,[2] collectively accounting for more than 70 percent of the worldwide project loan market, adopted the Equator Principles, a voluntary set of guidelines to be applied to their project finance activities, based on the environmental and social guidelines and safeguard policies of the International Finance Corporation.

In December 2003 the World Bank Group announced its formal endorsement of the Extractive Industries Transparency Initiative and pledged to work with developing nations and companies on ways to publish revenues accruing from oil, gas, and mining sectors.

Prospects for private debt flows

Strong debt flows are likely to continue into 2004, driven by buoyant liquidity conditions and the global economic recovery. There were substantial inflows from retail, high-net-worth, and European institutional investors in late 2003. The demand for external finance will likely be influenced positively by the stronger growth—particularly in investment—foreseen for the developing countries. Adjustments to earlier changes in the desired stock of borrowing and lending—for example, in Asia—seem to have largely run their course and will no longer depress demand significantly. Moreover, a number of countries that have had limited market access so far—in some cases because they are recovering from financial crises—are gradually recovering market access.

The possibility that the large and rapid decline in spreads on emerging-market debt has run ahead of the underlying improvement in credit quality nevertheless raises the prospect of some correction in spreads. Investors are therefore unlikely to be able to match the very strong returns that they achieved over the past year—and they may even struggle to achieve positive returns on emerging-market debt this year. The handling of the restructuring of Argentina's defaulted debt also could influence the attitude of investors to emerging market debt.

Several developing countries face elections in the near future. It will be important for governments in developing countries to maintain prudent macroeconomic policies and persevere with needed reforms to foster sustainable growth, to consolidate the improvement in credit quality, and to maintain the confidence of investors and creditors, particularly in the face of political pressures.

Higher interest rates in the advanced economies may dampen flows as they provide more attractive alternatives for investors and raise borrowing costs for developing countries. And if the resolution of imbalances in the advanced economies eventually requires abrupt adjustments in the international financial markets, lending to developing countries may be adversely affected. The concentration of lending among a relatively small number of banks and major institutional investors raises the risk that strategic changes by a single institution could have a noticeable impact on overall flows.

Notes

1. This may reflect the influence of market discipline, with higher capital required for access to critical markets, such as the swaps market.

2. ABN Amro, Barclays, CIBC, Citigroup, Credit Suisse Group, Credit Lyonnais, Dexia, Dresdner Bank, HSBC, HVB Group, ING, Mediocredito Centrale, Mizuho Corporate Bank, Rabobank, Royal Bank of Canada, Royal Bank of Scotland, WestLB, and Westpac.

References

Amato, J., and C. Furfine. 2003. "Are Credit Ratings Procyclical?" BIS Working Paper 129. Bank for International Settlements.

International Monetary Fund. 2003. "Public Debt in Emerging Markets: Is It Too High?" *World Economic Outlook* (September).

McGuire, P. 2003. "The International Banking Market." *Quarterly Review: International Banking and Financial Market Developments* (September).

Packer, F., and C. Suthiphongchai. 2003. "Sovereign Credit Default Swaps." *Quarterly Review: International Banking and Financial Market Developments* (December). http://www.bis.org/publ/quarterly.htm.

Annex: Commercial Debt Restructuring

THIS ANNEX PROVIDES A TABULATION of commercial debt restructuring activities of developing countries since the 1980s. It does not include restructuring undertaken voluntarily for the purpose of liability management by sovereigns, such as exchanging previously existing debt with issuance of new fixed income securities for cost effectiveness, among other benefits. However, it does include debt buybacks by countries, undertaken to preempt formal restructuring of debt or reduce debt hangovers, and which were also aided by official financing.

In 2003, there was one debt-restructuring operation undertaken through a debt swap, and two countries remained in process to restructure their previously defaulted debt. In May, Uruguay completed its debt exchange operation, swapping about $5.4 billion of debt. The eligible debt included $3.8 billion of external debt, $1.6 billion in domestic debt, and $256 million of Samurai bonds (denominated in yen). This operation aimed at extending maturity without any reduction in principal or interest. All investors were offered extensions on maturity, as well as the opportunity to swap into new benchmark bonds. Following the largest sovereign default in history, Argentina formally proposed its debt-restructuring plan in 2003. The government's proposal envisages three new bonds, with maturities ranging from 8 years to 42 years, and carrying interest rates as low as 0.5 percent to 5 percent. In addition, it is offering to pay no interest arrears that have been accumulated since the default. However, as of February 2004, formal negotiations with creditors had not commenced. Serbia and Montenegro was in negotiations to restructure about $2.7 billion of its debt owed to the London Club of commercial creditors. The country was at an advanced stage of the restructuring procedure as of February 2004.

The International Development Association (IDA) created a Debt Reduction Facility in 1989 to help low-income countries manage their commercial debt burdens. Since its inception, the facility completed 22 operations for 21 countries. In 2003, there was only one IDA-sponsored debt buyback operation, and four in progress. In August 2003 Cameroon completed a debt buyback operation to retire $266 million of principal, equivalent to 79 percent of eligible principal debt, and about $530 million in interest arrears. The buyback price for the operation was set at 14.5 cents per dollar of principal. The operation was funded by the IDA Debt Reduction Facility and the governments of France, Norway, and Cameroon. Tanzania's second buyback operation, scheduled for April 2004, would extinguish about $20 million of principal and $18 million of associated interest. In addition, three operations for Mozambique, Madagascar, and Nicaragua are being prepared. These operations would extinguish about $680 million in eligible debt (including interest arrears).

Notes on how to use these tables
The dates shown are those of agreements, not when the original payments due were missed. Deferment refers to short-term rollover of current maturities. Rescheduling refers to consolidation of debt into new long-term obligations; may include arrears as well as future maturities; interest and short-term debt included only if indicated in country notes. New money refers to loans arranged for budgetary or balance of payments support in conjunction with debt rescheduling, usually in proportion to each creditor bank's exposure; sometimes referred to as concerted lending. Short-term credit maintenance refers to understanding by banks to maintain the size of existing trade or other short-term credit facilities, arranged in conjunction with debt rescheduling. The figures for Brady deals include face value of buybacks and of all debt exchanges. The Brady deals were also known as officially supported debt and debt service reduction agreements.

Albania
Bank debt restructurings
July 1995 Restructuring of $501 million due to commercial banks. Of the total, $371 million bought back for $96.5 million funded by grants from International Development Association (IDA) Debt Reduction Facility (DRF) and other donor countries, and $130 million was converted into long-term bonds.

Algeria
Bank debt restructurings
Feb. 1992 1991–93 Financing Facility, designed to refinance liabilities due between October 1991 and March 1993. Tranche A covered debts with a maturity of two years or more and was repayable in eight years including three years' grace bearing interest at London interbank offered rate (LIBOR) + 1-1/2 percent. Tranche B covered debts with a maturity of more than 360 days and less than two years, and was repayable in five years including three years' grace.
June 1995 Rescheduling of $3.2 billion in maturities starting March 1994.

Argentina
Bank debt restructurings
Jan. 1983 Bridge loan ($1.3 billion).
Aug. 1983 New money loan ($0.5 billion).
Aug. 1985 Rescheduling agreement of maturities in January 1982–January 1986 ($9.8 billion); new long-term money ($3.6 billion); maintenance of short-term credit lines ($3.1 billion).
Aug. 1987 Revised restructuring agreement covering amounts under 1983 and 1985 agreements and loans falling due subsequent to those arrangements ($24.3 billion); new long-term money ($1.3 billion); maintenance of short-term credit lines ($3.5 billion).
Brady deal
April 1993 Outstanding stock of $19.3 billion exchanged for either (i) 30-year bonds yielding a market interest rate (LIBOR + 13/16 percent) at a 35 percent discount, or (ii) 30-year par front-loaded interest reduction bonds—FLIRBs (first-year interest rate 4 percent, rising to 6 percent in year seven and remaining there until maturity). Both bonds were collateralized for principal and contained rolling 12-month interest guarantees. Agreement also included $9.3 billion of past-due interest; $0.7 billion was paid in cash at closing; $400 million was written off; the remainder was exchanged for bonds (17-year maturity), repayable in rising installments and yielding LIBOR + 13/16 percent.
Bond market defaults and restructurings
Jan. 2002 Announcement of a moratorium on public foreign debt in December 2001. In January 2002, formalization of default on $95 billion of foreign currency bonds and default on $2.2 billion of local currency bonds. The local currency bonds were exchanged for new debt, which carried covenants less favorable than the original debt. Bonds maturing before 2010 were extended by three years, and the coupon was reduced to 7 percent or less. As of January 2003, the foreign currency bonds were still to be restructured. Stand-by credit facility ($2.98 billion) by the IMF for transitional financial support until August 2003.

Bolivia
Bank debt restructurings
Dec. 1980 Deferment of $200 million of maturities (including short-term debt) in August 1980–March 1981.
April 1981 Rescheduling of $411 million of maturities (including debt deferred in 1980) in April 1981–April 1983.
July 1988 Commercial bank debt retired through a buyback ($272 million) and a local currency bond exchange ($72 million). This was a rolling program and applied only to previously deferred loans.
May 1993 Buyback of $170 million commercial bank debt, funded by grants from IDA DRF and other donor countries.
Brady deal
July 1992 (i) Cash buyback at 84 percent discount; (ii) Collateralized interest-free 30-year bullet-maturity par bonds; (iii) short-term discount bonds (84 percent) convertible on maturity into local currency assets at a 1:1.5 ratio, exchangeable into investments for special projects. Past-due interest canceled under all options. Value recovery clause was based on price of tin.

Bosnia and Herzegovina

Bank debt restructurings

Dec. 1997 London Club Agreement to restructure $1.3 billion of principal and past-due interest owed to commercial banks. Past-due interest of $700 million was written off. Eligible principal of $600 million was exchanged for $400 million of uncollateralized discount bonds. 37.5 percent of the new bonds carried a 20-year maturity, including seven years' grace and stepped-up interest rates rising from 2.0 percent in years 1–4 to LIBOR + 13/16 in years 11–20. Servicing on 62.5 percent of the new bonds was linked to economic performance. The country was not required to make principal or interest payments for the first 10 years. After that the country was required to make debt service payments if per capita income exceeded $2,800 for two consecutive years. Per capita income in 1997 was estimated at $1,079.

Brazil

Bank debt restructurings

Feb. 1983 Rescheduling agreement of $4.8 billion of maturities in January 1983–January 1984; new long-term money ($4.2 billion); maintenance of short-term credit lines ($15.7 billion).

Jan. 1984 Rescheduling agreement of $5.9 billion of maturities in January 1984–January 1985; new long-term money ($6.5 billion); maintenance of short-term credit lines ($15.1 billion).

July 1986 Deferment of $9.6 billion and rescheduling agreement of $6.6 billion of maturities in January 1985–January 1986; maintenance of short-term credit lines ($14.7 billion).

Nov. 1988 Rescheduling agreement of $61.5 billion of maturities in January 1987–January 1994; new long-term money ($5.2 billion); maintenance of short-term credit lines ($14.8 billion). Also included a broad package of creditor options.

July 1992 Clearance of interest arrears as of December 31, 1990. Cash payment during 1992: $863 million. When term sheet concluded for long-term debt, the balance was to be converted into 10-year bonds (three years' grace), bearing market interest rates.

Brady deal

April 1994 Four components of debt were restructured totaling $48 billion: (i) debt to foreign banks under the 1988 multiyear deposit facility agreement—MDFA ($32.5); (ii) debt to Brazilian banks under the MDFA; (iii) debt resulting from the 1988 new money facilities ($8.1 billion); and (iv) interest arrears accruing from 1991–94 ($6.0 billion). The first category of debt was restructured following a six-choice menu: (i) discount bonds, 35 percent discount, 30-year bullet maturity yielding LIBOR + 13/16 percent with principal collateral and a 12-month rolling interest guarantee ($11.2 billion); (ii) par bonds with a reduced fixed-rate interest (yielding 4 percent in the first year and gradually rising to 6 percent in year seven), 30-year bullet maturity, also with principal collateral and a 12-month rolling interest guarantee ($10.5 billion); (iii) FLIRBs ($1.7 billion), with interest rising from a fixed rate of 4 percent in year one to 6 percent in years five and six and then reverting to LIBOR + 13/16 percent from year seven to maturity, 15 years' maturity including 9 years' grace, 12-month rolling interest guarantee; (iv) C-bonds, par-reduced interest rate bonds with capitalization of interest ($7.1), with repayment terms of 20 years' maturity including 10 years' grace, interest beginning at 4 percent and the applicable rates in the first 6 years being capitalized, no collateral; (v) conversion bonds ($1.9 billion) combined with new money bonds in a 1:5.5 ratio, interest is LIBOR + 7/8 percent, terms are 18 years' maturity including 10 years' grace for the conversion bonds and 15 years including 7 years' grace for the new money bonds, no collateral; (vi) interest reduction loan with capitalization, maturity of 20 years including 10 years' grace, interest rising from 4 percent in year one to 5 percent in year six to LIBOR + 13/16 from year seven to maturity.

Bulgaria

Brady deal

July 1994 Creditors agreed to restructure $8.3 billion in public external debt, including about $2.1 billion in PDI. The menu for the original debt included: (i) buyback at 0.25 cent per U.S. dollar ($0.8 billion); (ii) discount bond, 50 percent discount on face value (30 years' bullet maturity, market rate, $3.7 billion); the discount bonds were collateralized for principal; (iii) FLIRBs. 18 years' maturity, 8 years' grace interest beginning at 2 percent, rising to 3 percent in the seventh year and thereafter LIBOR + 13/16 ($1.7 billion). The FLIRBs have one year's interest rolling interest guarantee. Interest arrears were cleared with a cash payment of about 3 percent, a buyback ($0.2 billion), a write-off of $0.2 billion, and the issuance of PDI par bonds ($1.6 billion) with a 17-year maturity, including 7 years' grace and a yield of LIBOR +13/16 percent.

Cameroon

Bank debt restructurings

Aug. 2003 Buyback of $796 million (including interest arrears) of commercial bank debt under the IDA DRF at 14.5 cents per U.S. dollar, financed by IDA DRF and other donor countries.

Chile

Bank debt restructurings

July 1983 Rescheduling agreement of $2.1 billion of maturities in January 1983–January 1985; new long-term money ($1.3 billion); maintenance of short-term credit lines ($1.7 billion).

Jan. 1984 Consolidation of short-term debt of $1.2 billion.

June 1984 Provision of new long-term money ($0.8 billion).

Nov. 1984 Short-term debt rolled over to June 30, 1985.

Nov. 1985 Short-term trade credit rolled over to 1990. Rescheduling agreement of $3.9 billion of maturities in January 1985–January 1988; new long-term money ($1 billion); maintenance of short-term credit lines ($1.7 billion).

June 1987 Rescheduling agreement of $9.7 billion of maturities in January 1988–January 1992; maintenance of short-term credit lines ($1.7 billion).

Aug. 1988 Interest spread reduced to 13/16 percent. Also cash buybacks ($439 million).

Dec. 1990 Rescheduling agreement of $4.2 billion of maturities in January 1991–January 1995, including previously rescheduled debt; new long-term money ($0.3 billion). New money bonds not tied to existing banks' exposure.

Congo, Republic of

Bank debt restructurings

Oct. 1986 Agreement in principle, but never concluded, to restructure 1986–88 maturities, repayable in nine years including three years' grace, bearing interest at LIBOR + 2-7/8 percent. Approximately $200 million of debt would have been restructured. In addition there was a new money provision of $60 million.

Costa Rica

Bank debt restructurings

Sept. 1983 Rescheduling agreement of $0.7 billion of maturities (including principal arrears) in January 1983–January 1985; new long-term money ($0.2 billion); maintenance of short-term credit lines ($0.2 billion).

May 1985 Rescheduling agreement of $0.5 billion of maturities, including deferment of revolving credit ($2 million) due in January 1985–January 1987; new long-term money ($75 million).

Brady deal

May 1990 Cash buyback at 84 percent discount ($992 million), debt-for-bond-exchange ($579 million), and write-off of $29 million of past-due interest.

Côte d'Ivoire

Bank debt restructurings

Mar. 1985 Rescheduling agreement of $0.5 billion of maturities in December 1983–January 1985; new long-term money ($0.1 billion).

Nov. 1986 Multiyear rescheduling agreement (MYRA) of $0.9 billion of maturities in January 1986–January 1990.

April 1988 Agreement designed to replace the MYRA. Included new money to refinance interest. Interest on the new money portion was LIBOR + 1-1/2 percent. Agreement was not put into effect because interest arrears were not cleared, and current interest payments were suspended in April 1988.

Brady deal

May 1997 Agreement for restructuring $6.5 billion of principal and past-due interest. For eligible principal of $2.3 billion, creditors agreed to (i) exchange $159 million for discount bonds (50 percent discount) subject to stepped-up interest rising from 2.5 percent in years 1–2 to LIBOR + 13/16 in years 11–30; (ii) exchange $1.4 billion for FLIRBs with a maturity of 20 years, including 10 years' grace, and stepped-up interest rising from 2.0 percent in years 1–7 to LIBOR + 13/16 in years 14–20; (iii) buy back $0.7 billion at 24 cents per dollar. Principal was collateralized with 30-year U.S. Treasury zero-coupon bonds for the discount bonds, but not for the FLIRBs. A six-month rolling interest guarantee was required for the FLIRBs, but not for the discount bonds. For past-due interest of $4.2 billion, $30 million was settled in cash at closing, $0.9 billion was exchanged for bonds with a 20-year maturity (half a year of grace period) repayable on a graduated amortization schedule, and $3.3 billion was written off.

Cuba

Bank debt restructurings

Dec. 1983 Rescheduling agreement of $0.1 billion of maturities in September 1982–December 1984; maintenance of short-term credit lines ($0.5 billion).

Dec. 1984 Rescheduling agreement of $0.1 billion of maturities in January 1984–December 1985; maintenance of short-term credit lines ($0.5 billion).

July 1985 Rescheduling agreement of $0.1 billion of maturities in January 1985–December 1986; maintenance of short-term credit lines ($0.5 billion).

Dominican Republic

Bank debt restructurings

Dec. 1983 Rescheduling agreement of $0.5 billion of maturities in December 1982–December 1983 (including short-term debt).

Feb. 1986 MYRA of $0.8 billion of maturities in January 1985–December 2000 (including arrears as of December 31, 1984).

Brady deal

Aug. 1994 Agreement covering principal and interest past due ($1.2 billion). The agreement had a menu consisting of (i) buybacks ($.4 billion); (ii) discount exchange bonds ($.5 billion) at 35 percent discount, to be repaid in 30 years, bullet maturity, interest rate LIBOR + 13/16 percent; (iii) past-due interest bonds ($171 million) bearing interest at LIBOR + 13/16 percent, with 3 years' grace and 15 years' maturity. The accord also included a write-off of $112 million of past-due interest, and $52 million paid in cash at closing.

Ecuador

Bank debt restructurings

Oct. 1983 Rescheduling agreement of $2.8 billion of maturities in November 1982–December 1983; new long-term money ($0.4 billion); maintenance of short-term credit lines ($0.7 billion).

Dec. 1985 MYRA of $4.2 billion of maturities in January 1985–January 2000. New long-term money ($0.2 billion); maintenance of short-term credit lines ($0.7 billion).

Nov. 1987 Replaces the MYRA.

Brady deal

Feb. 1995 Agreement restructuring $7.8 billion of principal and past-due interest. For principal, creditors agreed to exchange $2.6 billion for discount bonds (45 percent discount) yielding LIBOR + 13/16 percent and $1.9 billion for par reduced-interest-rate bonds. Both bonds had a 30-year bullet maturity and were collateralized for principal and had a 12-month rolling interest guarantee. The interest rate on the par bonds was 3 percent for the first year, rising to 5 percent in year 11. For past-due interest, $75 billion was to be settled in cash at closing, $2.3 billion was exchanged for bonds with a 20-year maturity (no grace period) repayable on a graduated amortization schedule, $191 million was exchanged for interest equalization bonds, and $582 million was written off.

Bond market defaults and restructurings

Aug. 2000 Agreement to exchange about $5.9 billion in defaulted Brady bonds and eurobonds for $3.9 billion in new 12- and 30-year global bonds. The new 12-year issue was priced to yield 12 percent, and the new 30-year issue carried the multi-coupon with the initial coupon rate of 4 percent. This operation resulted in a 40 percent reduction in principal for the bondholders.

Ethiopia

Bank debt restructurings

Jan. 1996 Debt buyback at 8 cents per U.S. dollar of $226 million owed to commercial banks. Funding for the operation provided by the IDA DRF.

Gabon

Bank debt restructurings

Dec. 1987 Rescheduling agreement of $27 million of maturities in September 1986–December 1987.
Dec. 1991 Rescheduling agreement of $75 million of maturities in January 1989–December 1992.
May 1994 Rescheduling of $187 million of maturities. Principal due through 1994 on debt contracted prior to September 20, 1986 (debt covered by the 1991 agreement, which had not been implemented) was rescheduled. Terms: 10-year maturity including 2-1/2 years' grace. Interest: LIBOR + 7/8 percent. Arrears of interest and arrears of post cut-off maturities as of July 1, 1994, were to be repaid between 1994 and 1996.
April 2002 Default on $30 million of bank loans, which had been restructured in 1994.

Gambia, The

Bank debt restructurings

Feb. 1988 Rescheduling of debt outstanding as of December 18, 1986; new long-term money ($19 million).

Guinea

Bank debt restructurings

April 1988 Rescheduling of short-term debt of $28 million.
Dec. 1998 Buyback of $130 million under the IDA DRF at 13 cents per U.S. dollar, financed by IDA DRF and other donor countries.

Guyana

Bank debt restructurings

Aug. 1982 One-year deferment of $14 million of maturities in March 1982–April 1983.
June 1983 Extension of $12 million due in July 1983–December 1983, previously deferred in 1982.
July 1984 Extension of $11 million due in August 1984–August 1985, previously deferred.
July 1985 Extension of $15 million due in August 1985–December 1986, previously deferred.
July 1988 Deferment of $8 million.
Nov. 1992 Buyback of $69 million under the IDA DRF at 14 cents per U.S. dollar.
Dec. 1999 Buyback of $55.9 million under the IDA DRF at 9 cents per U.S. dollar, financed by IDA DRF and the Switzerland government.

Honduras

Bank debt restructurings

June 1987 Rescheduling agreement of $248 million of maturities due April 1987–December 1989. As two previous agreements (in 1983 and 1984) were not implemented, this agreement incorporated 1981–85 maturities as well, although it too was not signed.
Aug. 1989 Bilateral rescheduling of $101 million, including interest arrears, due to two commercial banks.
Aug. 2001 Buyback of $13 million under the IDA DRF. The buyback price was set at 18 cents per dollar of the principal amount. The IDA and the governments of the Netherlands, Norway, and Switzerland provided funding for the operation.

Indonesia

Bank debt restructurings

June 1998 Agreement on a framework for restructuring $80 billion of the Indonesian private debt. The interbank loans were extended into new government-guaranteed loans with maturities of one to four years, at interest rates of 2.75, 3, 3.25, and 3.5 percent over LIBOR. The corporate debts were to be rescheduled over eight years, including a three-year grace period for repayment of principal. Over the eight-year rescheduling period, the real interest rate was set to be 5.5 percent, but it would decline to 5 percent for debtors who agree to repay in five years. There was also an agreement to pay off trade financing arrears to maintain trade financing from foreign creditor banks.
Sept. 2002 Completion of restructuring of $1.5 billion in syndicated bank credits, as required under the agreement with Paris Club.

Iran, Islamic Republic of

Bank debt restructurings

Mar. 1993 Rescheduling of $2.8 billion of debt outstanding as of March 1993.
Dec. 1994 Rescheduling of $10.9 billion of debt outstanding as of December 1994.

Jamaica

Bank debt restructurings

April 1981 Rescheduling of $126 million of maturities in April 1979–April 1981.
June 1981 Rescheduling of $89 million of maturities in July 1981–March 1983; new long-term money ($89 million).
June 1984 Rescheduling of $164 million of maturities in July 1983–March 1985.
Sept. 1985 Rescheduling of $359 million of maturities in April 1985–March 1987.

May 1987 Rescheduling of $366 million of maturities in January 1987–March 1990; included reduced spreads on earlier rescheduling.
June 1990 Rescheduling of $315 million of maturities in January 1990–December 1991. Also, reduced spreads on earlier rescheduling.

Jordan
Bank debt restructurings
Sept. 1989 Rescheduling agreement in principal of $580 million of maturities in January 1989–June 1991.
Nov. 1989 Provision of new long-term money ($50 million); short-term credit ($50 million) to meet obligations due between January 1989–June 1990.
Brady deal
Dec. 1993 Agreement restructuring $736 million of principal and $153 million of past-due interest. For restructured principal, a small amount was repurchased at 39 cents per U.S. dollar, $243 million was exchanged for discount bonds (35 percent discount) and $493 million was exchanged for par fixed interest bonds. Both bonds had a 30-year bullet maturity with principal collateral and a six-month rolling interest guarantee. The discount bonds yielded LIBOR + 13/16 percent interest; the yields on par bonds began at 4 percent in the first year, rising to 6 percent in year seven. Regarding past-due interest, $29 million was paid at closing, $91 million was exchanged for non-collateralized bonds with a 12-year maturity including 3 years' grace and yielding LIBOR + 13/16 percent, and $33 million was written off. Up-front costs totaled $147 million, all of which was provided from Jordan's own resources.

Liberia
Bank debt restructurings
Dec. 1982 Rescheduling of $29 million of maturities in July 1981–June 1982.
June 1983 Consolidation of $26 million of oil facility debt.

Mauritania
Bank debt restructurings
Aug. 1996 Debt buyback of $53.0 million, at a 90 percent discount, owed to commercial banks. Funding for the operation provided by the IDA DRF.

Madagascar
Bank debt restructurings
Nov. 1981 Arrears ($155 million) on overdrafts consolidated into long-term debt.
Oct. 1984 Restructuring of entire stock of debt ($379 million), including arrears.
June 1987 Modification of the terms of the October 1984 restructuring agreement.
May 1990 Rescheduling agreement in principal of $49 million of maturities in April 1990–August 1995.
Jan. 2002 Default on $200 million in local currency debt, in addition to continuing default on foreign currency commercial bank loans.

Malawi
Bank debt restructurings
Mar. 1983 Rescheduling of $59 million of maturities in September 1982–August 1984.
Oct. 1988 Rescheduling of balances as of August 21, 1987 ($36 million).

Mexico
Bank debt restructurings
Aug. 1983 Rescheduling of $23.3 billion of maturities in April 1982–August 1984; new long-term money ($5 billion).
April 1984 New long-term money ($3.8 billion).
Mar. 1985 MYRA of $28 billion, including previously rescheduled debt, maturing in January 1987–December 1991.
Aug. 1985 MYRA of $20.3 billion of maturities (not previously rescheduled) in January 1985–December 1990.
Oct. 1985 Deferment of first payment ($0.9 billion) under the March 1985 agreement.
Mar. 1987 Modification of terms of earlier agreements covering $44.2 billion of maturities; new long-term money ($7.4 billion).
Aug. 1987 Rescheduling of $9.7 billion of private sector debt maturing in January 1988–December 1991.
Mar. 1988 Exchange of debt for 20-year zero-coupon collateralized bonds ($556 million).
Brady deal
Mar. 1990 Agreement restructuring $48.2 billion of debt. In addition to new money of $1 billion, the agreement provided for the exchange of $20.5 billion of debt for bonds at a 35 percent discount, an exchange of $22.4 billion of debt at par for reduced interest rate bonds, and conversion bonds totaling $5.3 billion. The latter were not collateralized and had a tenor of 15 years' maturity, including 7 years' grace, and an interest rate of LIBOR + 13/16. The total base also included $693 million not committed to any option.

Moldova
Bond market defaults and restructurings
June 2002 Second default on $75 million foreign currency bond (privately placed) originally issued in 1997. Outstanding amount of the bond reduced to $40 million after the initial default. This time around the maturity of the bond, due in June 2002, was extended until 2009.

Morocco
Bank debt restructurings
Feb. 1986 Agreement in principle (initiated August 1983) rescheduling $531 million maturing in September 1983–December 1984; short-term credit maintenance ($610 million).

Sept. 1987 Rescheduling of $2.4 billion of maturities in January 1985–December 1988.
Brady deal
June 1990 Rescheduling of $3.2 billion of maturities outstanding as of December 1989. Phase one of this agreement restructured debt; phase two was a Brady deal that would take effect if Morocco had signed an EFF (extended fund facility) agreement with the IMF by December 31, 1991.

Mozambique
Bank debt restructurings
May 1987 Rescheduling of outstanding stock of debt ($253 million), including interest arrears.
Dec. 1991 Buyback of $124 million of outstanding commercial bank debt at a 90 percent discount, funded by grants from the IDA DRF and from France, the Netherlands, Switzerland, and Sweden.

Nicaragua
Bank debt restructurings
Dec. 1980 Rescheduling of government debt ($582 million), all maturities, including arrears.
Dec. 1981 Rescheduling of nationalized bank debt ($192 million), all maturities, including arrears.
Mar. 1982 Rescheduling of debts of non-financial enterprises ($100 million), all maturities, including arrears.
Feb. 1984 Deferment of service on rescheduled debt ($145 million) due between July 1983–June 1984.
Dec. 1995 Buyback of $1.1 billion of outstanding commercial bank debt at 8 cents per U.S. dollar.

Niger
Bank debt restructurings
Mar. 1984 Rescheduling of $29 million of maturities in October 1983–March 1986.
April 1986 Rescheduling of $36 million of maturities in October 1985–December 1988.
Mar. 1991 Buyback of all commercial bank debt at 82 percent discount ($107 million). Resources provided by grants from the DRF for IDA-only countries ($10 million), Switzerland ($3 million), and France ($10 million).

Nigeria
Bank debt restructurings
Nov. 1987 Rescheduling of $4.7 billion of maturities, including short-term debt, due between April 1986–December 1987.
Mar. 1989 Rescheduling of $5.7 billion of short-term debt, including arrears on line of credit.
Brady deal
Jan. 1992 Agreement rescheduling $5.3 billion of debt. The terms provided for a cash-back at 60 percent discount on $3.3 billion, and debt exchanges on $2 billion for collateralized 30-year bullet maturity par bonds with reduced interest rates: 5.5 percent for the first three years, 6.25 percent thereafter. Creditor selections: 62 percent for the buyback; 38 percent for the debt-reduction bond. A third option, new money combined with conversion bonds, was not selected by participating creditor banks.

Panama
Bank debt restructurings
Sept. 1983 Provision of new long-term money ($278 million); short-term credit ($217 million).
Oct. 1985 Rescheduling of $578 million in maturities in January 1985–December 1986; new long-term money ($60 million); maintenance of short-term credit lines ($190 million).
Brady deal
May 1996 Creditors agreed to restructuring of $3.9 billion in public external debt, including $2.0 billion in past-due interest. The menu for the principal included: (i) discount bonds at a 45 percent discount of face value (30 years' bullet maturity, market rate, $87.8 million); (ii) par bonds with reduced interest rates and a 30-year bullet repayment ($268.0 million); and (iii) FLIRBs for $1,612.2 million with a tenor of 18 years' maturity including 5 years' grace period. The discount and the par bonds are collateralized with respect to the principal by U.S. Treasury zero-coupon bonds, and with respect to interest in the form of a 9-month rolling interest rate guarantee in the first year rising to 12 months in two to three years. The FLIRBs do not require guarantee for the capital, but include a six-month rolling interest guarantee. PDI settlement included progress payments of $30 million, a payment at closing of $100 million, a write-off of $590.4 million arising from the recalculation of penalty interest at a lower interest rate, and PDI par bonds of $1,247.6 million with 20 years' maturity, including 7 years' grace, and interest rate of LIBOR + 13/16 percent. Neither principal nor interest was guaranteed. Moreover, Panama could capitalize for the first six years, the difference was positive between LIBOR + 13/16 and 4.0 percent per year.

Peru
Bank debt restructurings
Jan. 1980 Rescheduling of $364 million of maturities in January 1980–December 1980.
July 1983 Rescheduling of $432 million of maturities in March 1983–February 1984; new long-term money ($650 million); maintenance of short-term credit lines ($2 billion).
Brady deal
Nov. 1996 Creditors agreed to restructuring of $8 billion in public external debt, including $3.8 billion in PDI. The menu for the principal included (i) discount bonds at a 45 percent discount of face value (30 years' bullet maturity, market rate, $947 million); (ii) par bonds with reduced interest rates and a 30-year bullet repayment ($189 million); (iii) FLIRBs for $1,779 million with a tenor of 20 years' maturity including 8 years' grace period; and (iv) a buyback of $1,266 million at 38 cents per U.S. dollar. The discount and the par bonds were collateralized with respect to the principal by U.S. Treasury zero-coupon bonds, and with respect to interest in the form of a six-month rolling interest rate guarantee secured by cash or permitted investments. The FLIRBs did not require guarantee for the capital, but included a six-month rolling interest guarantee. PDI settlement included progress payments

of $83 million, a payment at closing of $225 million, a buyback of $1,217 million at 38 cents per U.S. dollar, and PDI par bonds of $2,284 million with 20 years' maturity, including 10 years' grace, and interest rate of LIBOR + 13/16 percent. Neither principal nor interest was guaranteed. Moreover, Peru could capitalize for the first six years, the difference was positive between LIBOR + 13/16 and 4.0 percent per year.

Philippines

Bank debt restructurings

Jan. 1986 Rescheduling of $5.9 billion in maturities in October 1983–December 1986; new long-term money ($925 million); maintenance of short-term credit lines ($2,974 million).

Dec. 1987 Rescheduling of $9 billion in maturities in January 1987–December 1992; maintenance of short-term credit lines ($2,965 million).

Brady deal

Jan. 1990 Agreement provided for $1.3 billion of buybacks at a 50 percent discount.

Dec. 1992 Following implementation of a cash buyback of $1.3 billion on May 14, 1992, banks selected debt exchanges from three options: (i) front-loaded interest-reduction par bonds yielding LIBOR + 13/16 percent from year seven to maturity (15 years for series A and 15-1/2 year for series B, both including 7 years' grace); (ii) collateralized step-down/step-up interest reduction bonds yielding 6.5 percent from year six to maturity (25-year bullet maturity for series A and 25-1/2 year for series B); and (iii) new money combined with conversion bonds in a 1:4 ratio, with both bonds attaining 17-1/2 (series A) or 17-year (series B) maturity, including 5 years' grace and yielding LIBOR + 13/16 percent. Interest payments on both interest-reduction bonds covered by a rolling 14-month guarantee. Creditor choices (total, $4.4 billion, 96 percent total eligible debt): buybacks, $1.3 billion (27.5 percent): option (a), $0.8 billion (46.3 percent); option (b), $1.9 billion (41.1 percent); option (c), $0.5 billion, (11.7 percent).

Poland

Bank debt restructurings

April 1982 Rescheduling of $1.9 billion of maturities in March 1981–December 1981.

Nov. 1982 Rescheduling of $2.2 billion of maturities in January 1982–December 1982.

Nov. 1983 Rescheduling of $1.3 billion of maturities in January 1983–December 1983.

July 1984 Rescheduling of $1.5 billion of maturities, including some short-term trade credits, due in January 1984–December 1987.

Sept. 1986 Rescheduling of $1.9 billion of maturities, including debt rescheduled in 1982, due in January 1986–December 1987.

July 1988 Multiyear rescheduling agreement of $8.3 billion of maturities due in January 1988–December 1993; maintenance of short-term credit lines ($1 billion). Also improved the terms of earlier agreements.

June 1989 Agreement in principal to defer principal due May 1989–December 1990 ($206 million) until December 1991; and in October, the interest due in the fourth quarter of 1989, $145 million, was deferred until the second quarter of 1990.

Brady deal

Oct. 1994 Creditors restructured $14.4 billion. Three categories of debt were affected: (i) long-term debt covered by the 1988 restructuring agreement ($8.9 billion); (ii) debt due under the Revolving Short-Term Arrangement—RSTA—($1.2 billion); (iii) past-due interest not otherwise restructured ($4.3 billion). The first category was subject to a menu approach: $2.1 billion of long-term debt was repurchased at 41 cents per U.S. dollar, and $0.3 billion of RSTA debt was repurchased at 38 cents per U.S. dollar. For the remaining long-term, creditors chose between (i) discount bonds—45 percent discount ($5.4 billion); (ii) par reduced fixed interest bonds ($0.9 billion); (iii) conversion bonds combined with new money bonds equal to 35 percent of the amount converted ($0.4 billion). The discount bonds and par bonds had 30-year bullet maturities and featured collateralization of principal only. Interest on the discount bonds was LIBOR + 13/16 percent. Interest on the par bonds was 2.75 percent for the first year, rising to 5 percent for year 21. The conversion bonds had a 25-year maturity, including 20-year grace. Their yield in year one was 4.5 percent, rising to 7.5 percent in year 11. The new money bonds had a 15-year maturity, including 10-year grace and yield LIBOR + 13/16 percent. The new money and conversion bonds are not collateralized. The RSTA debt not repurchased ($0.9 billion) was exchanged for 30-year bullet maturity fixed interest bonds, with similar (but slightly different) step-down/step-up arrangements as the par bonds, starting at 2.75 percent in year one and gradually rising to 5 percent in year 21. For past-due interest, $0.8 billion was repurchased with related long-term and RSTA principal. A portion was to be settled with cash payments at closing ($63 million). A portion was written off ($0.8 billion), and the remainder ($2.7 billion), was converted into fixed-interest rate bonds yielding 3.25 percent in year one, rising to 7 percent in year nine. Maturity was 20 years, including 7 years' grace. Amortization was graduated.

Romania

Bank debt restructurings

Dec. 1982 Rescheduling of $1.6 billion of maturities in January 1982–December 1982.

June 1983 Rescheduling of $0.6 billion of maturities in January 1983–December 1983.

Sept. 1986 Rescheduling of $0.8 billion in previously rescheduled debt maturing in January 1986–December 1987.

Sept. 1987 Agreement in principal to reschedule $0.8 billion of maturities in January 1986–December 1987.

Russian Federation

Bank debt restructurings

Dec. 1991 Deferment of principal due in December 1991–March 1992 on pre-1991 debt. The deferment was extended for each consecutive quarter until the end of 1993.

July 1993 Rescheduling of the stock of FSU debt contracted prior to January 1, 1991 ($24 billion), to be repaid with 15-year maturity including 5 years' grace. In the fourth quarter of 1993, $500 million was to be paid on interest accruing during 1993. At the end of 1993, all remaining unpaid interest (estimated at $3 billion) was then to be consolidated and repaid at a 10-year maturity, including 5 years' grace. The 1993 interest payments were not made; the agreement was not implemented, mainly because

Russia refused to accept bankers' requirement that sovereign immunity be waived. However, an understanding was reached on October 5, 1994, that the banks would drop their insistence on a waiver of sovereign immunity and that the Vneshekonombank (or another public entity) would guarantee the debts.

Nov. 1995 Agreement in principle to comprehensively reschedule $33 billion in debt outstanding as of November 15, 1995. Heads of terms were signed for rescheduling debt of the former USSR in the amount of $25.5 billion of principal outstanding and $7.5 billion in accrued interest due. The eligible principal was to be repaid over 25 years, with 7 years of grace, beginning December 15, 1995, in 37 semi-annual payments on a graduated schedule at LIBOR + 13/16 percent per year. It was further agreed that an interest note for $6 billion would be issued with a 20-year maturity and 7 years' grace from December 15, 1995, that would be the same interest rate, listed on the Luxembourg Stock Exchange. The remaining $1.5 billion in interest arrears was paid over 1995–96. By September 1996, the minimum subscribership by commercial banks of $20 billion in outstanding principal was reached which triggered the Russian agreement to the rescheduling package.

Nov. 1998 Outline of an agreement to restructure $13.5 billion of defaulted Treasury bills (GKOs and OFZs). Under the restructuring plan, 10 percent of the defaulted bills was to be redeemed in cash rubles, and 20 percent of the debt was to be exchanged for three-year zero-coupon bonds. The remaining 70 percent of the debt was to be restructured into four-year and five-year variable coupon bonds.

Feb. 2000 Agreement to restructure $31.8 billion Soviet-era debts owe to the London Club of commercial banks. The London Club's creditors agreed to write off $11.6 billion of the principal and a 7-year grace period for principal repayments, and swapping the rest of its defaulted debts (PRINs [principal notes] and IANs [interest arrears notes]) for a new 30-year eurobonds. The interest rate on a new eurobond was set at 2.25 percent for the first six months, 2.5 percent for the second six months, and 5 percent for years two and seven—yielding 7.5 percent a year.

São Tomé and Principe

Bank debt restructurings

Aug. 1994 Buyback under the IDA DRF at 10 cents per U.S. dollar. $10.1 million of principal was extinguished (87 percent of eligible debt).

Senegal

Bank debt restructurings

Feb. 1984 Rescheduling of $96 million of maturities in May 1981–June 1984.

May 1985 Rescheduling of $20 million of maturities in July 1984–June 1986.

Jan. 1989 Rescheduling of $37 million.

Dec. 1996 Debt buyback at 8 cents per U.S. dollar of $80.0 million owed to commercial banks. Funding for the operation provided by the IDA DRF.

Sierra Leone

Bank debt restructurings

Jan. 1984 Rescheduling of principal arrears ($25 million) outstanding as of December 31, 1983.

Aug. 1995 Buyback, at 13 cents on average per U.S. dollar, of $235 million due to commercial banks funded by grants from IDA DRF and other donor countries.

South Africa

Bank debt restructurings

Sept. 1985 Deferment of $13.6 billion maturing in August 1985–Decemebr 1985.

Mar. 1986 Rescheduling of $650 million of maturities in August 1985–June 1987.

Mar. 1987 Rescheduling of $4.5 billion of maturities in July 1987–June 1990.

Oct. 1989 Rescheduling of $7.5 billion of maturities in October 1989–December 1993.

Sept. 1993 Rescheduling of $5 billion, including interest arrears.

Sudan

Bank debt restructurings

Nov. 1981 Rescheduling of $593 million of maturities due in January 1980–March 1982, including principal arrears and some short-term debt.

Mar. 1982 Rescheduling of $3 million of interest arrears and modification of 1981 agreement.

April 1983 Rescheduling of $702 million of interest arrears and modification of 1981 agreement.

Oct. 1985 Rescheduling of $1,037 million (including interest arrears).

Suriname

Bank debt restructurings

Dec. 2001 Clearing of $36 million in principal arrears owed to commercial banks.

Tanzania

Bank debt restructurings

April 2001 Buyback of $76.6 million of eligible principal debt and about $79.2 million of associated interest under the IDA DRF. The buyback price was set at 12 cents per dollar of the principal amount with a 5 percent of foreign exchange risk margin. The IDA and the governments of Germany and Switzerland provided funding for the operation.

Togo
Bank debt restructurings
Mar. 1980 Rescheduling of $69 million of debts owed to French banks, including arrears of principal. Interest rates varied by currency.
Oct. 1983 Rescheduling of $84 million of debts owed to all commercial bank debt, including previously rescheduled debt.
May 1988 Rescheduling of $48 million restructuring in 1983.
Dec. 1997 Debt buyback at 12.5 cents per dollar of $46.1 million owed to commercial banks. Funding for the operation was provided by the IDA DRF.

Trinidad and Tobago
Bank debt restructurings
Dec. 1989 Rescheduling of $473 million of maturities in September 1988–August 1992.

Turkey
Bank debt restructurings
Mar. 1982 Improvement on the terms of the August 1979 agreement, affecting $2.3 billion of debt.

Uganda
Bank debt restructurings
Feb. 1993 Buyback of $153 million commercial bank debt funded by grants from the IDA DRF and other donor countries.

Ukraine
Bond market defaults and restructurings
July 1999 Agreement to restructure a 10-month $163 million eurobond (including principal and interest). Instead of making the $163 million repayment due in June 1999, Ukraine was to repay 20 percent of bond in cash and swap the remaining 80 percent into a D-mark-denominated eurobond with a maturity of 3 years and coupon yield of 16 percent.
Feb. 2000 Agreement to restructure $2.7 billion of the short-term debt obligations. No debt forgiveness or reduction in principal was required from bondholders, and all accrued interest on existing eligible bonds was to be paid in full and in cash; all accepting investors were to be offered a new seven-year eurobond, denominated in either euros or U.S. dollars, at an interest rate of 10 percent for euro-denominated bonds and 11 percent for dollar-denominated bonds.
Mar. 2001 About $21.5 million of the external debt was exchanged for a six-year eurobond, denominated in either euros at an interest rate of 10 percent or U.S. dollars at an interest rate of 11 percent. Bonds eligible for the exchange were deutsche mark 16 percent eurobond due in February 2001, euro 10 percent amortizing notes due in March 2007, U.S. dollar 11 percent amortizing notes due in March 2007, and U.S. dollar 11 percent amortizing notes due in March 2007.

Uruguay
Bank debt restructurings
July 1983 Rescheduling of $555 million of maturities in January 1983–December 1984; new long-term money ($240 million).
July 1986 Multiyear rescheduling agreement of $1.7 billion of maturities due in January 1985–December 1989.
Mar. 1988 Rescheduling of $1.5 billion of maturities in January 1990–December 1991, including improvement of terms of the July 1986 agreement.
Brady deal
Feb. 1991 The agreement provided for cash buyback at a 44 percent discount ($628 million), collateralized debt reduction bonds ($535 million), and new money ($89 million) combined with debt conversion notes ($447 million). The repayment terms were 30-year bullet maturity and 6.75 percent fixed interest for the interest reduction bonds, 16-year maturity including 7 years' grace with LIBOR + 7/8 percent interest for the conversion notes, and 15-year maturity including 7 years' grace with LIBOR + 1 percent interest for the new money notes.
Bond market defaults and restructurings
May 2003 Swapping of about $5.4 billion of the public debt. The exchange operation created 15 maturity extension bonds and 3 new U.S. dollar–denominated benchmark bonds. The new international bonds included Collective Action Clauses. Overall participation was about 93 percent of eligible bonds.

República Bolivariana de Venezuela
Bank debt restructurings
Feb. 1986 Multiyear rescheduling agreement of $21 billion of maturities due in January 1983–December 1989.
Nov. 1987 Reduction of spread and extension of maturities on the 1986 agreement. New long-term money ($100 million).
Sept. 1988 Interest spread reduced on February 1986 agreement, affecting $20.3 billion in debt.
Dec. 1988 Exchange of debt for bonds outside the framework of the main negotiations.
Brady deal
Dec. 1990 Agreement featured buybacks in the form of 91-day collateralized short-term notes ($1,411 million), exchange for bonds at 30 percent discount ($1,810 million), exchange at par for reduced fixed-rate interest bonds ($7,457 million), exchange for bonds at par with temporary step-down interest rates ($3,027 million), and new money combined with debt conversion bonds ($6,022 million).

Vietnam
Brady deal
Dec. 1997 Agreement restructuring $310.9 million of principal and $486.2 million of past-due interest. For restructured principal, $20.4 million was repurchased at 44 cents per U.S. dollar, $51.6 million was exchanged for discount bonds (50 percent discount), and $238.9 million was exchanged for par fixed-interest bonds. Both bonds had 30-year maturity, but the discount

bond was repayable in a bullet payment on year 30 while the par bond had a step-up amortization schedule beginning on year 15. Also, 50 percent of the face value due of the par bond was due at maturity. The discount bond was subject to an interest rate of LIBOR + 13/16 while the par bond was subject to step-up interest rates rising from 3 percent in years 1 and 2 to 5.5 percent in years 21–30. One hundred percent of the discount bonds and 50 percent of the par bonds were guaranteed by U.S. Treasury zero-coupon bonds, and the discount bonds had a six-month rolling interest guarantee. Regarding past-due interest, $15 million was paid at closing, $294.8 million was exchanged for non-collateralized bonds with a 18-year maturity including 7 years' grace and step-up interest rates, $21.8 million was repurchased at 44 cents per dollar, and $154.6 million was written off.

Yemen, Republic of

Bank debt restructurings

June 2001 Buyback of $362 million of principal and $245 million of associated interest under the IDA DRF. The buyback price was set at 2.94 cents per dollar of the principal amount. The IDA and the governments of the Netherlands, Norway, and Switzerland provided funding for the operation.

Yugoslavia, Federal Republic of

Bank debt restructurings

Oct. 1983 Rescheduling of $1.3 billion of maturities, including an one-year rollover of short-term bonds, due in January 1983–December 1983; new long-term money ($600 million); maintenance of short-term credit lines ($800 million).
May 1984 Rescheduling of $1.3 billion of maturities due in January 1984–March 1985.
Dec. 1985 Multiyear rescheduling agreement of $4 billion of maturities in January 1985–December 1988.
Sept. 1988 Rescheduling of $7 billion of maturities due in January 1988–December 1989.

Zaire

Bank debt restructurings

April 1980 Rescheduling of $402 million of debt outstanding as of end-1979, including arrears.
Jan. 1983 Deferment of principal due in January 1983–December 1983 ($58 million), rescheduled under the April 1980 agreement.
June 1984 Deferment of principal due in January 1984–April 1985 ($64 million), rescheduled under the April 1980 agreement.
May 1985 Deferment of principal due in May 1985–April 1986 ($61 million), rescheduled under the April 1980 agreement.
May 1986 Deferment of principal due in May 1986–April 1987 ($65 million), rescheduled under the April 1980 agreement.
May 1987 Deferment of principal due in May 1987–April 1988 ($61 million), rescheduled under the April 1980 agreement.
June 1989 Deferment of principal to finance monthly payments on outstanding claims, mainly interest on arrears.

Zambia

Bank debt restructurings

Dec. 1984 Rescheduling of $74 million of maturities, including arrears as of February 28, 1983.

3

Shifting Forms of Equity Finance for Developing Countries

FOREIGN DIRECT INVESTMENT (FDI) and portfolio equity together make up the largest component of capital flows to developing countries. After registering a second consecutive year of decline—to $149.5 billion in 2003 from $152 billion in 2002 and $179.4 billion in 2001—equity flows are expected to recover significantly in 2004–05, buoyed by the growing global economy. The decline was due entirely to FDI, which dropped to $135.2 billion in 2003 from $147.1 billion in 2002 and $175 billion in 2001. In contrast, net portfolio equity flows increased sharply, to $14.3 billion in 2003 from $4.9 billion in 2002 and $4.4 billion in 2001.

The first part of this chapter is devoted to a discussion of FDI trends; the second, to portfolio equity flows. In the first half, we show that the decline in FDI was largely confined to middle-income countries and, geographically, to Latin America and the Caribbean, which attracted the lion's share of direct investment in the 1990s, especially in the services sector. In other regions, and especially in low-income countries, FDI continued to be resilient despite global economic uncertainties.[1]

The decline in FDI in Latin America and the Caribbean is rooted in changes in the sectoral pattern of FDI since the late 1990s. Unlike manufacturing or natural resource–based FDI, service-sector FDI is largely location bound; it generates local currency earnings that are vulnerable to devaluation risk. In banking and infrastructure, FDI is vulnerable to regulatory risks. And investment in banks can reverse quickly, because financial assets can be disposed of rapidly if an international bank decides to reduce exposure in a developing country. Compounding the effects of these changes, currency devaluation in Argentina and Brazil (and in other countries) hurt service-sector FDI in the region.

Both North-South and South-South FDI were weak in 2003. Direct investors reduced their FDI exposure in developing countries by calling back intercompany loans and increasing repatriated earnings. In some cases they also disinvested outright by selling equity holdings. Nevertheless, the equity component of FDI generally remained more resilient than intercompany debt and reinvested earnings.

The revival of the global economy is expected to spur recovery in FDI flows—including service-sector FDI. Nevertheless, direct investors hurt in recent crises are likely to remain cautious, and the demand for political risk insurance will remain high.

The second part of this chapter is devoted to portfolio equity—the smallest component of capital flows to developing countries. In contrast to the decline in FDI, portfolio equity flows to developing countries recovered sharply in 2003. After languishing for much of the period since the Asian crisis, emerging-market stocks climbed more than 50 percent in 2003, helped by low interest rates, stable exchange rates, and incipient recovery in many emerging-market economies. But stock exchanges in Latin America and the Caribbean and in Europe and Central Asia continue to suffer from delisting, as companies migrate to major global stock exchanges in industrial countries.

Portfolio equity flows to developing countries surged in the early 1990s but began falling after 1995; as noted, they remained modest after the Asian crisis. FDI, meanwhile, exhibited an opposing trend: mergers and acquisitions (M&A) were few in the early 1990s but more frequent after 1995. These opposing trends are due in part to the wave of privatization in the early 1990s. After the first round of

privatization, shares of privatized enterprises, especially in the utilities and energy sectors, were purchased by multinational companies. Thus, portfolio flows collapsed as M&A-related flows began to rise.

The modesty of portfolio equity flows since the Asian crisis may be attributed to underdeveloped stock markets, their high volatility, the subordinate status of equity compared to debt, and "home bias" in industrial countries. Increased scrutiny of capital-market institutions following recent corporate accounting scandals and improper trading practices in some U.S. mutual funds is likely to dampen investor enthusiasm for emerging-market equity, as it may focus attention on corporate governance and investment climate in the developing countries.

Trends in FDI flows in 2003

FDI flows to developing countries fell in 2003 for the second consecutive year. Net FDI flows are estimated to have been $135 billion in 2003, a decline of 9 percent from 2002 and 26 percent from the peak level reached in 1999 (table 3.1). As a proportion of developing countries' GDP, FDI continued to decline—from 2.3 percent in 2002 to about 1.9 percent in 2003 (figure 3.1). This decline is a marked contrast to the sharp improvement in portfolio equity and debt flows in 2003—and it is taking place at a time when global FDI is rising. Global FDI flows rose 6 percent in 2003 to an estimated $690 billion, mostly because of the substantial surge in flows to the United States (figure 3.2).[2] As a result, developing countries' share in global FDI dropped to 19.6 percent in 2003 from 22.6 percent in 2002.

The downturn in FDI flows to developing countries reflects a sharp decline in flows to a few

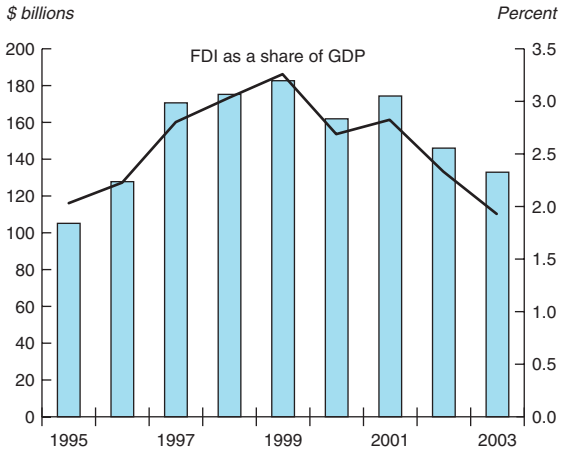
Table 3.1 Net FDI inflows to developing countries, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Total	171	176	182	162	175	147	135
East Asia and Pacific	62	58	50	44	48	55	57
Europe and Central Asia	23	26	28	29	32	33	26
Latin America and the Caribbean	67	74	88	77	70	45	37
Middle East and North Africa	6	7	3	2	6	3	2
South Asia	5	4	3	3	5	4	5
Sub-Saharan Africa	8	7	9	6	14	8	9
Memo items:							
Middle-income countries	152	162	171	156	164	134	121
Low-income countries	19	14	11	6	11	13	14
Least developed countries	3	4	6	4	6	5	6

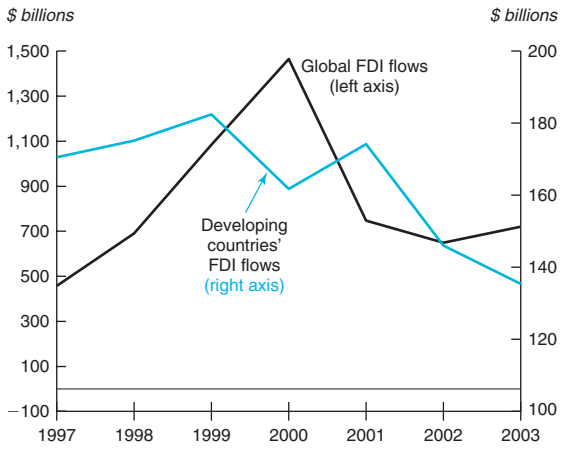
Note: e = estimate. Numbers may not add up due to rounding.
Sources: World Bank, *GDF,* various years, and World Bank staff estimates for 2003.

Figure 3.1 Net inward FDI flows to developing countries, 1995–2003



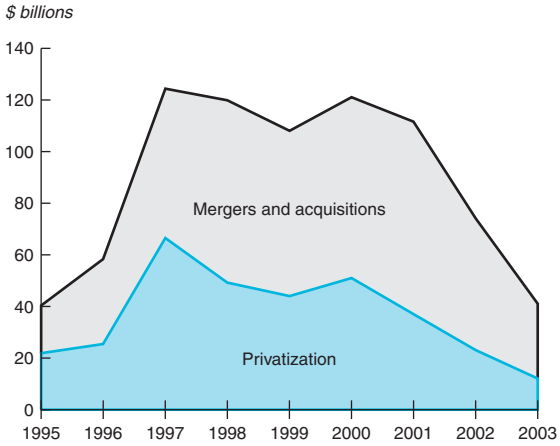
Sources: World Bank, *GDF*, various years; World Bank, *WDI*, various years; and World Bank staff estimates for 2003.

Figure 3.2 FDI inflows to the world and developing countries, 1997–2003



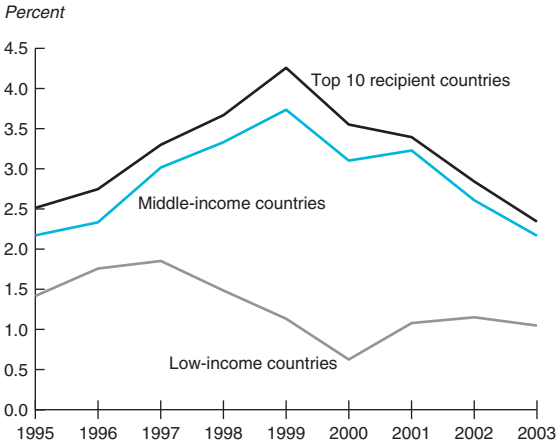
Sources: World Bank, *GDF*, various years; IMF; UNCTAD; and World Bank staff estimates for 2003.

Figure 3.3 Privatization and M&A in developing countries, 1995–2003



Sources: World Bank, *GDF*, various years; World Bank, *WDI*, various years; UNCTAD, *World Investment Report*, various years; and World Bank staff estimates for 2003.

Figure 3.4 FDI as share of GDP in developing countries, 1995–2003



Sources: World Bank, *GDF*, various years; World Bank, *WDI*, various years; UNCTAD, *World Investment Report*, various years; and World Bank staff estimates for 2003.

middle-income countries, where privatization and cross-border M&A slowed further following financial crises in 2000 and 2001, especially in the service sector (figure 3.3). In contrast, FDI to low-income countries remained stable. It also appears that the Iraq conflict and the epidemic of severe acute respiratory syndrome (SARS) had limited impact on FDI in 2003.

The concentration of FDI flows continued to dissipate in 2003 (as it has since 2001) despite the continuing rise in the share of FDI accounted for by China. The top 10 developing-country recipients of FDI are (in descending order) China, Brazil, Mexico, Argentina, Poland, the Czech Republic, Chile, the República Bolivariana de Venezuela, Thailand, and India.[3] These 10 accounted for about 69 percent of total FDI flows to developing countries in 2003, down sharply from the peak of 78 percent in 2000. FDI as a share of GDP in the top 10 recipients also fell to 2.4 percent in 2003 from 2.8 percent in 2002, but it was still higher than the average for developing countries (figure 3.4). A decline in the concentration of FDI largely reflects changes in some of the large FDI recipients. Four of the top 10 recipient countries—Argentina, Brazil, the Czech Republic, and Mexico—experienced a decline in FDI flows of 12 percent or more from the previous year. In contrast, the Russian Federation attracted more FDI—it emerged as the top FDI recipient in Europe and Central Asia but still was not one of the top 10 recipients worldwide.

FDI flows to low-income countries are estimated to have been $14 billion in 2003, equivalent to about 1.1 percent of their GDP, up slightly from $13 billion in 2002. The rise can be attributed largely to the strong performance of India. As a result, the share of the low-income countries in FDI flows to developing countries rose to about 11 percent in 2003. Among low-income countries, FDI in the least developed countries (47 countries as defined by the United Nations[4]) held steady in 2003 at an estimated $5.5 billion. Three countries[5] that attract FDI in petroleum and minerals accounted for much of the rise in FDI flows to this group.

Changes in the regional pattern of FDI

The regional composition of FDI has changed in recent years. For the third consecutive year, Latin America and the Caribbean accounted for much of the fall in FDI flows to the developing world. The region's share in FDI to developing countries fell to one-third during 2001–03 from 43 percent in 1997–99 (figure 3.5). Much of the decline in 2003 can be ascribed to a significant drop in Brazil (box 3.1) and, to a lesser extent, Argentina. The persistent slump in privatization and cross-border M&A limited FDI in the region, which received *no* privatization-related FDI flows in 2003, a significant slowing from the pace seen in 1998–2000,

Box 3.1 The sharp decline in direct investment in Brazil

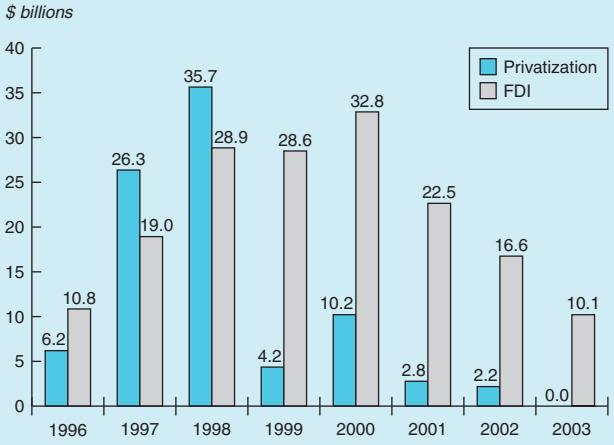
Brazil has experienced a sharp decline in FDI inflows over the past few years. After peaking at $33 billion in 2000, FDI dropped to $17 billion in 2002 and to $10 billion in 2003. The decline is even more dramatic if the contribution of debt conversion to FDI is excluded (figure at left). Although other countries in Latin America have also experienced the decline, the downturn is particularly marked for Brazil.

Several factors have accounted for the decline in FDI flows to Brazil. The winding down of large-scale privatization has been a significant factor. Privatization peaked during 1997–2000 as the bulk of the telecommunication and energy companies were sold by the government (figure at right), but an energy crisis in 2001 and elections in 2002 sharply slowed privatization activities. Between 2001 and 2003, privatization proceeds plummeted to $2 billion from an annual average of $19 billion during 1997–2000. Weak economic growth has also affected FDI inflows to Brazil. The growth rate of the Brazilian economy slowed to 1.2 percent between 2001 and 2003, from an average annual rate of more than 4 percent during 1993–97.

The source of M&A transactions shifted from multinational companies to local investors.[a] Local investors have driven M&A deals in recent years, with local companies buying up the operations of multinationals. In 2003, M&A transactions involving domestic buyers totaled $3.2 billion, about two-thirds of total M&A volumes in Brazil.[b] For instance, the Brazilian operation of Spanish bank BBVA was purchased in February by Banco Bradesco, the second largest Brazilian bank, for $789 million. This shift has resulted in a sharp drop in M&A-related foreign investments. Diminished multinationals' involvement with M&A was in part caused by Brazil's sluggish economic growth, with the global economic slowdown and corporate credit retrenchments contributing as well.

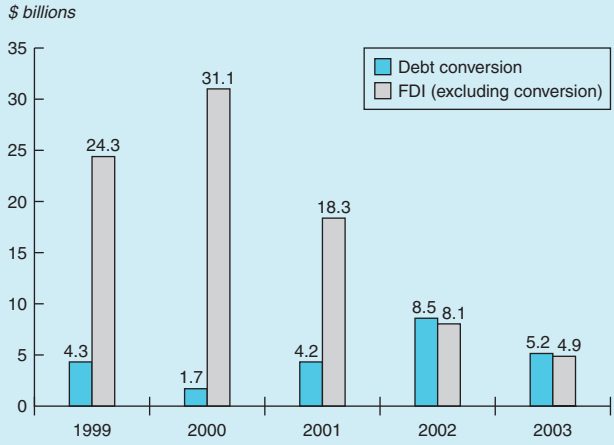
a. See Latin Finance (2003).
b. Through mid-October.

FDI and privatization inflows to Brazil, 1996–2003



Source: Central Bank of Brazil.

Brazil's FDI and debt conversion, 1999–2003



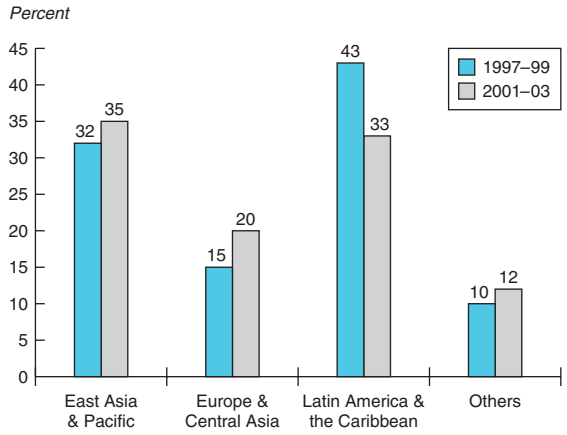
Source: Central Bank of Brazil.

when the annual average of privatization flows exceeded $30 billion. But the main reason behind the slowdown in FDI appears to be the vulnerability to financial crisis of service-sector FDI (more on this in the next section).

In contrast to the decline in Latin America and the Caribbean, FDI flows into East Asia and the Pacific remained strong at around $57 billion in 2003. As a result, the East Asia region's share of FDI to the developing world rose slightly from 38 percent in 2002 to 42 percent in 2003. FDI to China continued to surge in spite of the SARS epidemic in early 2003.[6] China's share in regional FDI rose further, to about 94 percent in 2003 from 90 percent a year earlier.

FDI flows into Europe and Central Asia fell sharply in 2003 to an estimated $26 billion—although compared to 1997–99 the region's share

Figure 3.5 Regional shares in FDI



Source: World Bank staff estimates.

in total FDI to developing countries increased during 2001–03. There was a sharp surge in FDI to the Russian Federation and a steady increase in greenfield investments. Few major privatization deals were completed, however, reflecting the end of the privatization boom for some countries in the region. Flows to the first four EU accession countries (the Czech Republic, Hungary, Poland, and the Slovak Republic) dropped, mostly due to the unsustainably high flows that were helped by asset sales in the Czech Republic and the Slovak Republic in 2002.

The surge in flows to South Asia was led mostly by a significant rise in FDI to India.[7] India's share of FDI flows to the region rose further to about 80 percent in 2003 from 72 percent a year earlier. The continued easing of foreign investment restrictions in the automobile, private banking, power, and telecommunications sectors contributed to the increase. In Pakistan, FDI flows in 2003 remained at about the level of 2002. The bulk of FDI flows to the country was concentrated in a few preferred sectors such as oil and gas exploration and financial services.

Sub-Saharan Africa experienced a slight increase in FDI, receiving an estimated $9 billion in 2003, but FDI flows relative to GDP fell to 2.2 percent from 2.5 percent in 2002. Much of the rise was due to the continued surge in FDI flows to the oil sector. Three major oil-exporting countries—Angola, Nigeria, and Sudan—received about half of the FDI flows to the region in 2003. FDI flows to the Middle East and North Africa amounted to an estimated $2 billion in 2003, down by about 24 percent from a year earlier. The region received the lowest level of FDI of all regions, accounting for only 1.5 percent of total FDI flows to developing countries.

A decline in South-South FDI

Even though most foreign investment still originates in developed countries,[8] developing countries have become active investors in other developing countries. In 2001 developing countries' direct investments in other developing countries (known as South-South FDI) were estimated at $41 billion, 28 percent of total FDI inflows to 30 developing countries and a significant decline from $49 billion in 2000 (table 3.2).[9] FDI outflows from developing countries are notoriously underreported (World Bank 2003); as reported, they declined nearly by half, led by outflows from Brazil, Chile, and South Africa.[10] In contrast, Chinese firms—mostly state-owned—invested nearly $7 billion abroad in 2001 in natural resources and services. The Chinese government also is encouraging Chinese firms to invest in other Asian countries. Of late, restrictions on outward investments have been relaxed, partly to ease the pressure of rising international reserves on China's fixed currency regime (UNCTAD 2003a). The Russian Federation

Table 3.2 Estimates of South-South FDI flows to 30 developing countries, 1995–2001

$ billions

	1995	1996	1997	1998	1999	2000	2001p
From all countries (1)	92.5	111	145.1	145.1	155.2	141.8	146.8
From high-income OECD countries (2)	50.7	58.6	69.9	71.6	89.9	83.3	83.5
From other than high-income OECD countries (1)−(2)	41.8	52.5	75.2	73.5	65.3	58.5	63.3
From high-income non-OECD countries (3)	26.5	27.1	19.2	20.2	18.5	9.9	22.5
South-South FDI (1)−(2)−(3)	15.3	25.3	56	53.2	46.9	48.6	40.8
Share of total (percent)	*16.5*	*22.8*	*38.6*	*36.7*	*30.2*	*34.3*	*27.8*

Note: p = projection. The South-South estimates are based on 30 developing countries that account for more than 85 percent of total FDI flows to developing countries.
Source: Aykut and Ratha 2003.

is the other major source of South-South FDI; Russian FDI is concentrated in the natural resources and transportation sectors of the countries of the former Soviet Union (UNCTAD 2003b).

The shifting composition of FDI toward services

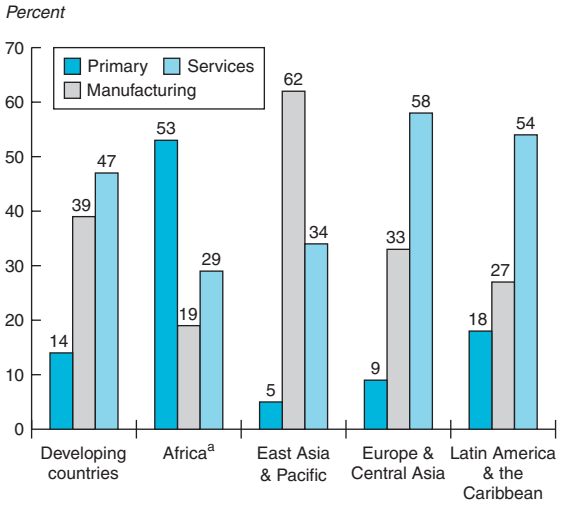
FDI flows in services rose during the second half of the 1990s to overtake FDI in manufacturing. By 2002 services accounted for nearly half of the FDI stock in developing countries (figure 3.6). As conventionally defined, the service sector includes electricity, gas, water, transport, communication, construction, wholesale and retail trade and repairs, hotels and restaurants, transport, storage and communications, finance and insurance, real estate, renting, business services, public administration, defense, education, health, social services, social and personal service activities, and recreational, cultural, and sporting activities. Unlike the primary and manufacturing sectors, where output is tradable, services are mostly nontradable and require close proximity between producers and consumers. That is, they are "location-bound."[11] This characteristic makes FDI in services especially vulnerable to currency and regulatory risks; it played an important role in the decline of FDI over the last two consecutive years.

Countries have made considerable progress in their investment and trade policies, opening up the service sector to foreign participation and provoking a significant shift toward services in the composition of FDI. That shift came in tandem with significant developments in the service sector during the 1990s, which boosted its share of world GDP to almost 70 percent in 2002 from 60 percent in 1990. Among the changes that expanded the share of services in global economic activity were income growth in developing countries, technological progress, developments in the financial sector, and changes in investment and trade policy.

Income growth. The sectoral composition of FDI mirrors that of GDP in most developing and developed countries (table 3.3). As the demand for services rose with income level, FDI grew to meet demand. In Africa, however, service-sector FDI has lagged behind the sector's share in GDP.

Technological progress in the 1990s helped increase services FDI in two ways. First, advances in transportation and communication technology made it easier for companies to manage and control geographically dispersed production networks and supply chains. Advanced global production networks raised the demand for business-related services such as distribution networks, transport,

Figure 3.6 Sectoral composition of FDI stock in developing countries in 2002



Note: Estimated by accumulating available FDI flows by sector. Sectoral FDI data for countries in South Asia are not available. Data taken from country sources. Data definitions may vary according to the country's classification system.
a. FDI flows to Africa were approximated by the outflows of the continent's major investors, including France, the Netherlands, the United Kingdom, and the United States.
Sources: World Bank staff calculations based on data collected from the U.N. Economic Commission for Latin America and the Caribbean based on country sources for Latin American countries; National Bureau of Statistics of China, various years; ASEAN for other Asian countries; and OECD, UNCTAD, and country sources for East Europe and Central Asia.

Table 3.3 Average share of services in FDI flows and in GDP

Percent

	FDI	GDP
Services share in:		
East Asia and Pacific	32	37
Europe and Central Asia	58	55
Latin America and the Caribbean	55	62
Africa	29	52
Memo item:		
High-income OECD	69	70

Note: Data cover Argentina, Bolivia, Brazil, Bulgaria, Chile, China, Colombia, Costa Rica, the Czech Republic, Ecuador, Estonia, Honduras, Hungary, Indonesia, Kazakhstan, Lao PDR, Malaysia, Mexico, Nicaragua, Paraguay, Peru, the Philippines, Poland, the Russian Federation, the Slovak Republic, Thailand, Trinidad and Tobago, Turkey, the República Bolivariana de Venezuela, and Vietnam.
Sources: See figure 3.6.

Box 3.2 FDI for call centers

FDI can flow from business decisions to outsource services. A good example is FDI in information technology (IT) and business process services in India. During 1996–2002, India—with its low-cost, English-speaking, and IT-savvy labor force—attracted almost $1 billion in FDI, some of which went into setting up call centers. In recent years, similar outsourcing by U.S. companies has also benefited Latin America, where the attractiveness of such operations lies in low labor cost, improved telecommunication infrastructure, the same time zone, and, in some cases, a language advantage for companies that serve Spanish-speaking customers. Call centers have significant job-creation impact in developing countries. By the same token, they are attracting opposition from labor unions in developed countries.

storage and communications, and financial services. Firms that provide those services followed their multinational clients into overseas markets by creating or acquiring subsidiaries (Esperanca 1992; Roberts 2001). Second, advances in telecommunication increased the tradability of some services, as many multinational companies began to outsource business to low-wage countries (World Bank 1994; World Bank 2002b; box 3.2).

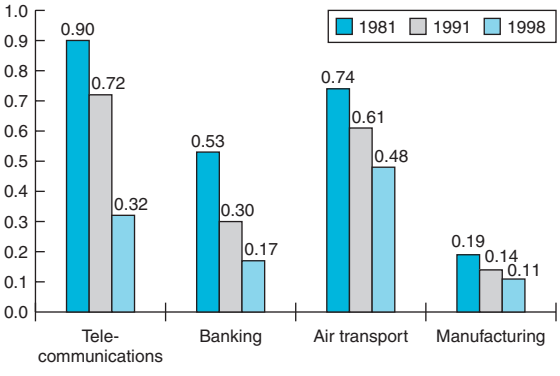
Progress in the financial sector. Several developments in the late 1980s and early 1990s encouraged multinational companies in banking and finance to move into developing countries. A change in U.S. law to permit mergers between U.S. commercial and investment banks was one such development. Improved instruments for securitization and hedging helped banks better manage their international risk exposure. And technological progress brought automated teller machines, direct funds transfer at points of sale, and remote banking on a real-time basis; it also helped improve both the efficiency and the scope of financial services (United Nations 2003).

Changes in investment and trade policy. The composition of FDI is influenced by restrictions on ownership, entry, and performance.[12] In the 1980s developing countries with abundant natural resources but insufficient capital and technology encouraged FDI in the primary sector (UNCTAD 1998). Other developing countries, especially in Asia, tried to attract export-oriented FDI through free-trade zones and export-performance requirements (UNCTAD 2002). During the last decade, impediments, including restrictions on forms of investment and the degree of foreign ownership, have been gradually eased through unilateral liberalization policies, bilateral and regional investment agreements, and commitments under the World Trade Organization and the General Agreement on Trade in Services.[13]

In developed and developing countries alike, services have been liberalized more slowly than manufactures (figure 3.7). Government policies with respect to FDI in services have been influenced by considerations of national security and independence, consumer protection, and ensuring the provision of public goods.[14] In some areas, foreign participation is constitutionally prohibited or limited, as in the case of the transmission, distribution, and supply of electricity in Mexico. Because of the monopolistic structure of many service markets, designing the necessary regulatory systems has been difficult and costly (World Bank 2001).

Infrastructure and the financial sector attracted almost 15 percent of total FDI flows to developing countries between 1990 and 2002—more than $215 billion. Almost 70 percent of that amount went to Latin America, primarily in large privatization and M&A deals. Privatization and

Figure 3.7 Indexes of restrictions on FDI in selected sectors of advanced economies



Note: The indicator is calculated based on limits on foreign ownership, restrictions on foreign personnel and operational freedom, and screening requirements in OECD countries. It ranges from 0 (least restrictive) to 1 (most restrictive).
Source: Golub 2003.

liberalization of infrastructure services, detailed in chapter 6, began in most developing countries in the early 1990s, as governments sought to attract capital and technology and to improve quality and cost-efficiency. The 1990s also saw considerable progress in capital-account liberalization and financial-market reforms in most developing countries. Countries in Latin America, Eastern Europe, and elsewhere removed barriers to entry and other impediments for foreign banks as part of the process of liberalizing their financial markets.[15] In Asia such changes were especially rapid after the financial crisis of 1997–98.

FDI in wholesale and retail trade also picked up during the last decade as developing countries liberalized their import regimes and eliminated price controls and restrictions on foreign participation. Highly populated areas with increasing purchasing power have become attractive destinations for firms operating in mature markets.

In some cases, ownership restrictions had unexpected effects on sectoral FDI flows. In China, for example, more than 10 percent of all FDI received during 1997–2002 went into real estate. One reason is that foreigners are prohibited from owning land, all of which belongs to the state or the collectives. Foreign investors may obtain land-use rights only by buying B-shares in China's real estate companies or by providing finance to joint ventures with local partners (Tse 2001; Zhang 1999). Because of the restrictions, the real estate expenses of foreign individuals and companies in China are counted as FDI.

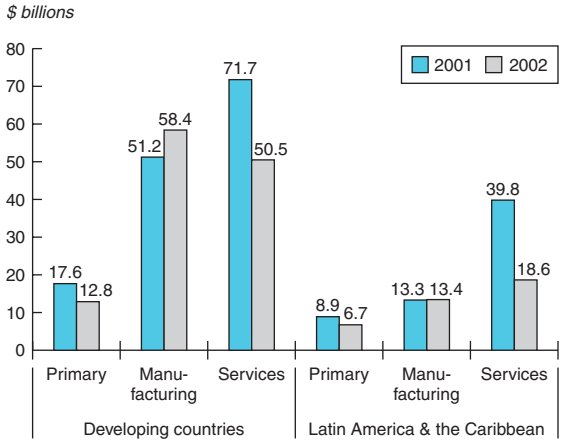
Recent declines in FDI flows to the service sector

Just as the rise in FDI flows in the late 1990s was driven by investments in services, its decline over the past two years has been due largely to developments in the service sector—primarily in Latin America and the Caribbean. FDI flows to the region's service sector fell by 53 percent in 2002 (figure 3.8). The decline was especially sharp in infrastructure (37 percent) and financial services (65 percent). Although precise sectoral data are not available, anecdotal evidence suggests that the trend in the service sector continued in 2003.

In addition to the winding down of privatization, service-sector FDI in Latin America was affected by deterioration of the investment climate in the region. First, starting with Argentina and Brazil, almost all currencies in the region suffered depreciation. Lower local-currency earnings from direct investments in the service sector severely affected foreign firms, which had financed their expansion using foreign-currency debt. More important, the policy changes in Argentina following the almost 200 percent devaluation of the peso between 2001 and 2002 prompted many direct investors in banking and infrastructure to revisit their business strategies toward the region (IMF–World Bank 2003). Following the crisis, the Argentine government enforced an asymmetric conversion of U.S. dollar–based assets and liabilities into pesos (pesification) and a mandatory rescheduling of term deposits. In addition, the government converted U.S. dollar–denominated contracts of private and public utilities into pesos at an exchange rate of 1 peso per U.S. dollar, while not allowing public utility rates to rise. Following these policies, most foreign companies cut back financial support to their affiliates in the country, postponed new investments, repatriated profits, and paid back intercompany loans. Some companies tried to find new strategic partners, while a few others sold off their assets.[16]

In contrast to the service sector, FDI in the primary and manufacturing sectors did not decline as much following the devaluation in Argentina and Brazil. Indeed, many auto companies *increased* FDI in these countries as they reoriented their sales toward exports (United Nations 2003). Even in the service sector, investment in the software industry

Figure 3.8 The recent decline in FDI in the Latin American service sector



Sources: See figure 3.6.

picked up in Argentina to take advantage of lower costs following the currency devaluation.

Because it relies primarily on domestic demand, FDI in services is highly sensitive to changes in the investment climate (for example, regulatory environment or the exchange rate), whereas the primary and manufacturing sectors have the benefit of exporting to international markets. According to data for 1999–2002, countries with a better investment climate attracted not only more FDI, but also more FDI in services. For example, the share of services FDI in total FDI was 61 percent in countries with a better-than-average investment climate, compared to 34 percent in countries with a below-average investment climate (table 3.4). According to a recent IMF–World Bank survey (2003), companies concerned about the recent deterioration of investment climate in some developing countries plan to rely more on local-currency borrowing as a way of hedging against exchange-rate fluctuations.[17] To hedge against regulatory risks, many companies are trying to obtain international arbitrage agreements or political risk insurance (box 3.3).

Table 3.4 FDI in services, by investment climate in selected economies

Percent

Investment climate	Services FDI as share of total FDI	Services FDI as share of GDP	Total FDI as share of GDP
High	61	3.9	6.4
Average	42	1.5	3.6
Low	34	0.6	1.6

Note: All averages are weighted averages for 1999–2002. Where available, ratings from the 2000 Country Policy and Institutional Assessment are used to measure the investment climate in 30 developing countries in Asia, Eastern Europe, and Latin America.
Source: World Bank staff calculations.

Box 3.3 Political risk insurance

Recent financial crises in several developing countries once again have underscored the importance of political risk insurance (PRI) for foreign direct investment. The demand for political risk insurance in countries such as Indonesia and Philippines increased significantly following the Asian crisis (Wagner 2002). Demand for PRI also has similarly risen recently in several Latin American countries following the Argentine crisis (IMF–World Bank 2003).

Political risk insurance typically covers risks of expropriation, currency inconvertibility, war and civil disturbance, and breach of contract. Private insurers account for 50 to 60 percent of the market. The rest is divided among national export agencies and the Multilateral Investment Guarantee Agency (MIGA), which has a small but growing share of the PRI market (4–6 percent). In addition to insurance, export credit agencies provide government-backed loans and guarantees to corporations from their home countries that seek to do business in developing countries. MIGA, on the other hand, does not provide loans but supports investments from its member countries in developing countries belonging to MIGA.

Major private insurers include Lloyd's of London, AIG, and Sovereign. Major national agencies (in terms of premium generation) include OPIC in the United States, NEXI in Japan, EDC in Canada, COFACE in France, and HERMES in Germany.

The advantages that public agencies offer include long periods of coverage (up to 20 years), wide country coverage, and stable premia and capacity. Multilateral agencies such as MIGA may sometimes use their good offices to mediate disputes between host-country governments and foreign direct investors. Also, private PRI insurers usually do not offer coverage in high-risk countries without the involvement of public insurers. On the other hand, the processing time in public agencies can be quite long.

The key advantage of private insurers is their underwriting flexibility. Many underwriting criteria (such as nationality of the insured, development impact of the investment, and status of investment) used in government-sponsored insurance programs do not apply to commercial market placements. Instead, private insurers may tailor expropriation coverage to clients' needs, covering license restrictions and sanctions, forced withdrawal orders by the home government, forced divestiture, and implementation of domestic content or other trade restrictions not normally insurable under government-sponsored programs.

Private providers of PRI collect an annual premium ranging from 0.25 to 3 percent. Coverage for currency inconvertibility is usually the most expensive. The cost structure of public issuers varies with the type and location of the project, as well as its duration and sector. National agencies are often preferred where available, indicating that their prices are competitive.

Over the past few years, capacity of private PRI providers seems to have diminished following several catastrophic events worldwide.

The composition of FDI financing

Even if direct investors seek to maximize returns over the long run, they may change their exposure to a country in the short run by altering the composition of their investment (box 3.4). In Asia, multinational companies adjusted their investments following the financial crises of 1997–98. International banks and infrastructure companies recently reduced their exposure to Argentina and Brazil by calling back intercompany loans and increasing repatriated earnings. In some cases they divested by selling out their equity holdings. Nevertheless, by and large, equity proved more resilient than intercompany debt and reinvested earnings (figure 3.9).[18]

An examination of the composition of FDI in terms of equity, reinvested earnings, and intercompany debt reveals that in 1990–2002, more than two-thirds of FDI flows to developing countries came in the form of equity capital; the rest was almost equally divided into reinvested earnings and intercompany loans (figure 3.10). The proportions differ, however, across sectors and regions;

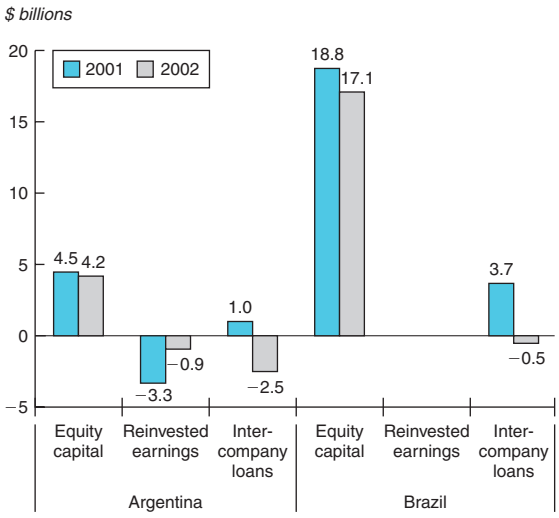
Box 3.4 Components of FDI

According to the International Monetary Fund's *Balance of Payments Manual* (1993) and the Organisation for Economic Co-operation and Development's *Benchmark Definition of Foreign Direct Investment* (1999), FDI comprises equity investment, reinvested earnings (earnings not distributed as dividends and earnings of branches not remitted to the direct investor), and intercompany debt transactions. Intercompany debt transactions include the borrowing and lending of funds, including debt securities and trade credits, between parent and subsidiaries and among subsidiaries. Unfortunately, many countries do not compile the data according to the official guidelines, and there has been significant underreporting of FDI in developing countries (World Bank 2003).[a] Some countries report only total equity capital and reinvested earnings without further breakdown.

For 32 developing countries that report data, equity capital contributed more than two-thirds of FDI flows to developing countries, and reinvested earnings and intercompany loans contributed about 15 percent each during 1995–2002. Reinvested earnings are most likely underestimated in some large recipient countries such as Brazil and India, however. In fact, according to U.S. data, almost 45 percent of U.S. investments in developing countries are in the form of reinvested earnings.

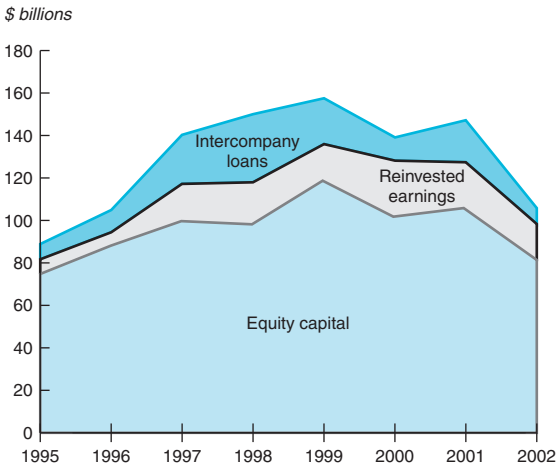
a. Countries compile the FDI composition data through annual surveys (Falzoni 2000). In the IMF's balance-of-payments database, out of 140 developing countries in 2000, the number that reported equity capital, reinvested earnings, and intercompany loans were 97, 62, and 71, respectively.

Figure 3.9 Repatriated earnings and called intercompany loans in Argentina and Brazil



Source: IMF Balance of Payments Statistics Database.

Figure 3.10 Composition of FDI flows in developing countries, 1995–2002



Source: IMF Balance of Payments Statistics Database.

Table 3.5 Composition of FDI by region, 1995–2002

Percent

Region	Equity capital	Reinvested earnings	Intercompany loans
All	71	15	14
East Asia and Pacific	65	25	10
Europe and Central Asia	65	12	23
Latin America and the Caribbean	75	11	14
Middle East and North Africa	69	2	29
Sub-Saharan Africa	74	10	16

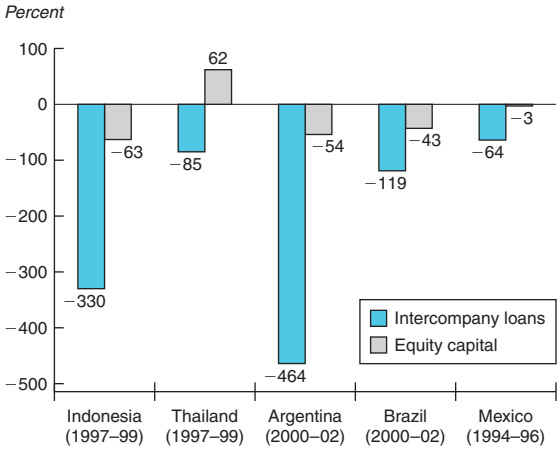
Note: All averages are weighted averages for 1995–2002. FDI composition data for countries in South Asia are not available.
Source: IMF Balance of Payments Statistics Database.

intercompany loans, for example, were notably higher in the extractive sector.

The composition of FDI varies among different regions (table 3.5). Equity capital flows dominated other components of FDI in Latin America because most of these flows came in through M&A activity. On the other hand, in East Asia and the Pacific, where data are skewed toward China, reinvested earnings were significant. In regions where extractive industries receive a considerable amount of FDI, the share of intercompany loans is higher.

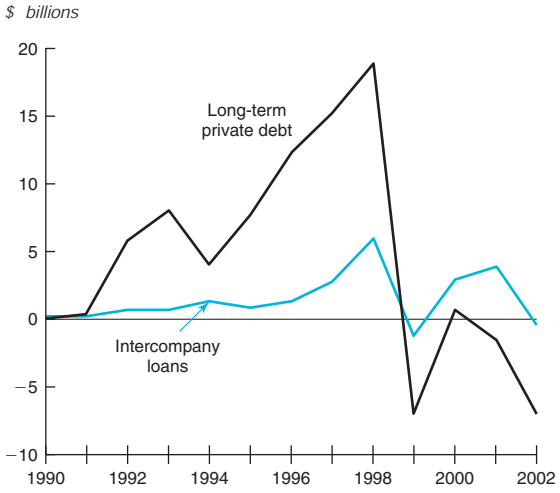
The resilience of FDI can be traced to its equity component, which reflects the long-term strategic behavior of foreign direct investors. In contrast to the relatively stable equity component, intercompany loans and reinvested earnings were often used in 1990–2002 as a means to adjust FDI exposure; they were nearly as volatile as debt flows.[19] During a crisis in a host country, repaying loans or repatriating earnings is often easier than winding down direct equity. Also, a direct equity holding usually reflects a long-term strategic commitment and may not change immediately following a crisis—although it may change if the crisis is prolonged. This can be seen from the experience of some countries that recently faced financial crises, where the decline in intercompany loans following the crisis was significantly larger than the decline in the equity component of FDI (figure 3.11). In the case of Thailand, intercompany loans fell 85 percent between 1997 and 1999, but the equity component of FDI actually rose 62 percent during the same period. Data on retained earnings are hard to obtain, but available data suggest that in Latin America, excluding Mexico, intercompany loans fell to −$1.3 billion in 2002 (that is, loans were repaid) from $7 billion in 2001, a decline of nearly 118 percent. In contrast,

Figure 3.11 Decline of intercompany loans versus equity component of FDI during financial crises



Source: IMF Balance of Payments Statistics Database.

Figure 3.12 Intercompany loans and private debt flows in Brazil, 1990–2002



Note: Long-term private debt includes nonguaranteed debt only
Sources: IMF Balance of Payments Statistics Database and World Bank 2003.

equity capital fell only 20 percent and retained earnings by half.

Indeed, the intercompany loans component of FDI may be subject to the same degree of volatility as international debt flows. For example, in Brazil a fairly strong correlation between the intercompany loan component of FDI and international debt flows (bonds and bank loans) has been observed in recent years (figure 3.12). Also, in Indonesia, the

negative trend in FDI flows is ascribable largely to intercompany loans, as their repayment has been more than enough to offset the inflow of new equity capital.

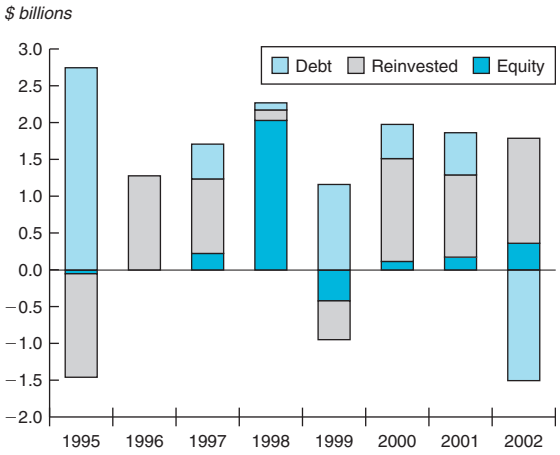
Factors affecting the composition of FDI

The composition of FDI depends on a range of source- and host-country factors, including tax costs, ownership control, investment regulation, and macroeconomic environment. Global tax costs, which depend on the tax rates and regulations in both host and home countries, are a major factor. In most high-income OECD countries,[20] companies are permitted to defer their tax liabilities on foreign-source income until that income is remitted from overseas as dividends. Multinational companies usually reinvest a major part of their earnings to benefit from this deferral option (box 3.5). This type of deferral is not allowed for interest earned on intercompany loans. In that case, however, subsidiaries reap the tax benefit, since debt service is tax deductible in the host country. Simple tax considerations make it more attractive to use intercompany debt to expand in high-income-tax countries and using equity in low-tax countries (Desai and others 2003b; Gurbert 1998). Because there are significant differences among countries and companies, each company seeks the composition of FDI that will result in the lowest tax liability under tax laws and regulations in the host and home countries.

Local ownership requirements (or restrictions on foreign ownership) encourage intercompany loans while limiting the equity component of FDI. This is especially true in extractive industries, where countries are often reluctant to allow foreign investors to own assets. In oil-exporting countries, almost half of FDI during 1995–2002 came in the form of an intercompany loan—only 38 percent was equity capital. This finding is further supported by U.S. data, which show that equity capital accounted for only a small share of U.S. investments in OPEC (Organization of Petroleum Exporting Countries) countries (figure 3.13).

The composition of FDI also depends on the host country's regulatory and business environment. First, as a means to remit cash, debt is more flexible than equity, since dividend payments are often subject to regulatory controls. Some governments control dividend repatriation by controlling currency convertibility (especially when dividends

Figure 3.13 U.S. reinvested earnings and income in OPEC mining sector, 1995–2002



Note: Equity and intercompany debt flows data for 1996 were not disclosed by the source for reasons of confidentiality.
Source: Bureau of Economic Analysis, U.S. Department of Commerce.

are repatriated in excess of earnings). Regulatory controls may also lead to higher repatriation of earnings, as multinationals tend to remit whatever they can each year or charge higher transfer prices in order to circumvent capital controls in a country (Desai and others 2003b). Intercompany loans may also substitute for costly external borrowing when local capital markets are underdeveloped (Desai and others 2003a).

Accounting conventions, too, have an effect on the composition of FDI. For example, payment of debt does not reduce the capital stock of the affiliate, whereas dividend payment does.

Another factor influencing FDI composition is the host country's macroeconomic condition, particularly exchange-rate volatility. As discussed earlier, during a crisis, parent companies often reduce their exposure to the crisis country by receiving payments on loans from subsidiaries. Crises can affect companies' dividend repatriation strategies as well. Companies usually expect steady dividend flows from their subsidiaries, implying that reinvested earnings fluctuate with the company's income. Following a crisis, however, companies may increase their dividend repatriation significantly.[21] For example, after the Asian crisis, in 1999, U.S. companies in affected countries repatriated all their earnings. Thus, their reinvested earnings became negative (figure 3.14). In Latin America,

Box 3.5 Factors affecting dividend repatriation

Three sets of factors affect the dividend behavior of multinational companies: corporate governance, tax implications, and host-country factors. There is a vast amount of literature on the sensitivity of the optimal dividend-payout ratio (the ratio of dividends to earnings) to corporate governance and international tax rates. Studies that cast these issues in an international macroeconomic context, however, are limited.

Corporate governance: The literature on corporate governance implies that dividends tend to persist from one year to the next. Two lines of reasoning are followed to identify the optimal dividend. First, in an environment where managers know more than others do about the firm's profitability and prospects (asymmetric information), the dividend reveals that information to the market (Miller and Rock 1985; John and Williams 1985). Several studies show that a positive change in dividends is usually associated with positive stock returns (Healy and Palepu 1988; Asquith and Mullins 1983; Aharony and Swary 1980). Because of this, Lintner (1956) argues that managers try to smooth out the dividend payments because they fear that cuts will send negative signals. In fact, Fama and Babiak (1968) find empirical support for dividend smoothing. There is a foreign bias, however, in the link between the dividend and stock returns. Investors do not value the foreign operations of multinational companies as highly as the domestic (Christophe and Pfeiffer 2002; Denis and others 2001). In addition, Christophe (2002) shows that investors often penalize a negative change in dividends from foreign operations more harshly than domestic operations, partly because investors believe that foreign operations have higher sunk costs.

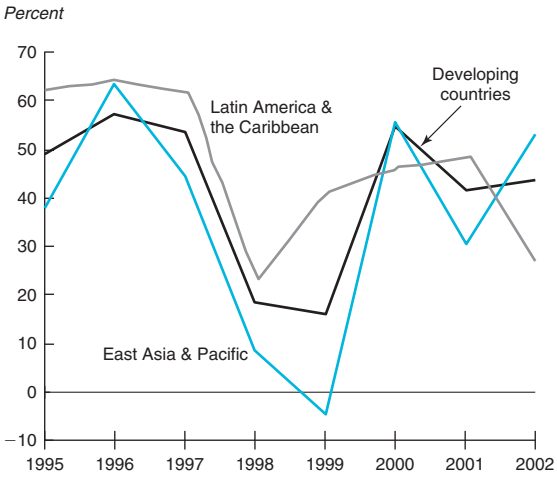
A second line of reasoning regards disciplining managers, who have incentives to cause firms to grow beyond an optimal size (agency conflict) so as to gain power over increased resources (Jensen 1986) and to increase compensation, which is usually associated with the size of firms (Murphy 1985). When subsidiaries are partially owned or the host country has a weak judicial system, U.S. firms tend to repatriate more as control becomes more problematic (Desai and others 2003c). A steady dividend payment implicitly determines the proportion of FDI earnings to be reinvested and therefore underlines the sensitivity of reinvested earnings to income fluctuations.

Repatriation tax: A vast literature—mainly using data on U.S. multinational firms—demonstrates that dividend payments are sensitive to repatriation taxes. Desai and others (2002) show that U.S. repatriation taxes reduced aggregate dividends by more than 13 percent between 1982 and 1997. In most high-income OECD countries, companies are permitted to defer their tax liabilities on foreign-source income until that income is remitted as dividends from overseas. In addition, some countries also permit companies to claim tax credits for taxes paid to the foreign governments. Multinational companies have developed various strategies to reduce their global tax costs. In essence, they tend to reinvest their earnings to benefit from the deferral option. Then, they use this capital either in affiliates' operations or in their global operations by transferring it through various financial channels (Altshuler and Grubert 2003). Because of a large account deficit and a slowdown in FDI inflows last year, the U.S. Congress is now considering a temporary break on repatriation taxes (the Homeland Investment Act). If the act passes, it is expected to bring back significant amounts of capital as dividends. U.S. reinvested earnings abroad are estimated at $500 billion dollars for the companies making up the S&P 500 (mostly manufacturing and pharmaceutical companies). According to a J.P. Morgan survey (2003), the Homeland Investment Act could bring back earnings, in the form of dividends, ranging from $265 billion to $375 billion.

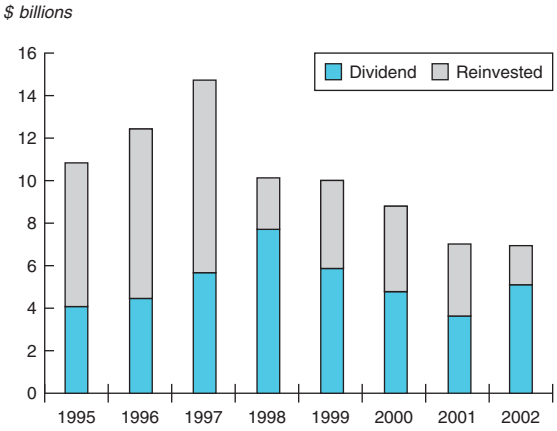
Host-country factors: The literature on host-country factors affecting the repatriation of dividends is very limited. In a recent study, Lehmann and Mody (2004) show that payout ratios can be sensitive to host-country factors such as political risk, tax rates, and country growth rates, although reactions vary with the nationality of the investors. Their analysis of the data from Germany, the United Kingdom, and the United States indicates that U.K. firms have the highest payout ratio of the three countries, and the ratio declines as a country becomes politically safer. Also, the U.K. payout ratio increases with higher growth and higher income. In contrast, German and U.S. investors are less likely to change their payout ratios with political risk, tending instead to view growth as an opportunity to retain earnings for further investment in the host country. In addition, higher host-country tax rates raise payout ratios for Germany and the United Kingdom, but not for U.S. investors.

Figure 3.14 U.S. reinvested earnings and income in selected regions, 1995–2002

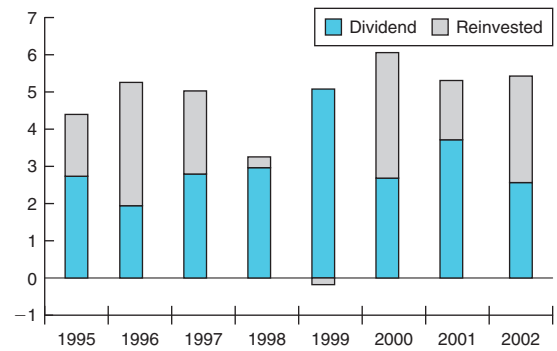
Proportion of FDI earnings reinvested by U.S. firms, by region, 1995–2002



Distribution of U.S. earnings in Latin America and the Caribbean



Distribution of U.S. earnings in East Asia and the Pacific



Source: Bureau of Economic Analysis, U.S. Department of Commerce.

starting in 2001, U.S. companies again increased their dividend flows, although their income stayed almost the same (figure 3.14, lower panel). In fact, for the last two years all multinationals in Argentina repatriated dividends drastically in excess of their earnings, leading to nearly $2 billion in repatriation of capital from the country.

Trends in portfolio equity flows to developing countries

Portfolio equity flows are distinct from FDI flows in that they are motivated not by a long-term interest in controlling the destination firm but by financial returns.[22] FDI investors are multinational companies, whereas the main investors in emerging-market equity are large mutual funds and privately held hedge funds. Portfolio equity investment takes place when investors purchase shares of a company through an international public offering (IPO), or buy American or global depositary receipts (ADRs or GDRs).[23] To a lesser extent, venture capital investments and convertible bonds that give investors an option to convert to equity at a later date are used as vehicles for portfolio equity flows.[24]

Net portfolio equity flows to developing countries—comprising gross flows through IPOs, ADRs, and GDRs, and net purchases of stocks in the secondary market—rose sharply in 2003 to an estimated $14.3 billion from $4.9 billion in 2002 (table 3.6 and figure 3.15). The top 20 countries received $16.1 billion of portfolio equity flows in 2003, compared to $7.1 billion in 2002. The surge in flows in 2003 was driven largely by a dramatic increase in flows to India (and, to a lesser extent, China). This increase was offset partly by an outflow of nearly $2 billion from Ukraine for the second year in row.[25]

The significant expansion in 2003 was commensurate with the rise of more than 50 percent in emerging-market stock indexes from their depressed 2002 levels (figure 3.16). A general recovery in the emerging-market economies, therefore, stimulated portfolio equity flows—helped by low interest rates worldwide. Portfolio equity flows to Argentina, Brazil, South Africa, and Turkey also were helped by the stabilization of exchange rates, following recent devaluation. Investor sentiment toward emerging-market equity remains cautious,

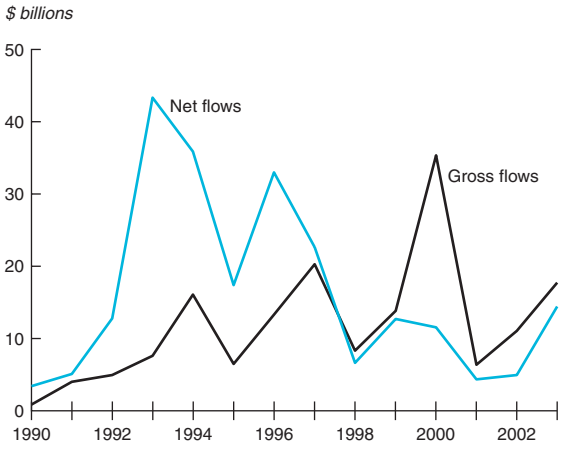
Table 3.6 Net inward portfolio equity flows to developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	17.3	32.9	22.6	6.6	12.6	12.6	4.4	4.9	14.3
Top 20 countries[a]	15.8	31.4	20.7	5.2	12.1	12.2	4.6	7.1	16.1
East Asia and Pacific	6.3	9.7	−3.9	−3.4	2.3	4.8	1.0	3.5	4.8
China	0.4	1.9	5.7	0.8	0.6	6.9	0.8	2.2	3.0
Europe and Central Asia	1.7	4.3	4.0	4.0	2.0	1.2	0.3	−0.4	0.7
Top 5 countries	0.5	3.5	2.9	2.5	1.4	0.8	0.3	1.6	2.4
Latin America and the Caribbean	4.8	12.2	13.3	−2.2	−3.6	−0.5	2.3	1.5	1.4
Brazil	2.8	5.8	5.1	−1.8	2.6	3.1	2.5	2.0	2.2
South Asia	1.6	4.1	2.9	−0.6	2.4	2.8	1.9	1.0	7.0
India	1.6	4.0	2.6	−0.6	2.3	2.8	2.0	1.0	7.0
Sub-Saharan Africa	3.0	2.5	5.6	8.7	9.0	4.1	−1.0	−0.4	0.5
South Africa	2.9	2.4	5.5	8.6	9.0	4.2	−1.0	−0.4	0.5
Middle East and North Africa	0.0	0.2	0.6	0.1	0.7	0.2	−0.1	−0.2	0.0

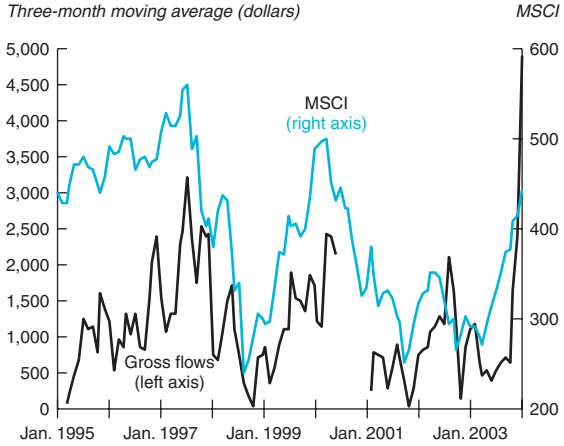
Note: e = estimate. Numbers may not add up due to rounding.
a. Argentina, Brazil, Chile, China, Colombia, the Arab Republic of Egypt, Hungary, India, Indonesia, Lithuania, Malaysia, Mexico, Morocco, Philippines, Poland, the Russian Federation, South Africa, Thailand, Turkey, and the República Bolivariana de Venezuela.
Source: World Bank data based on information from IMF Balance of Payment Statistics Database, national sources, and market sources.

Figure 3.15 Portfolio equity flows, 1990–2003



Sources: Dealogic Bondware, Morgan Stanley, and World Bank staff estimates.

Figure 3.16 Gross equity flows to developing countries and emerging-market stock prices



Note: The discontinuity in the gross flows data is intentional. Two huge deals involving China Mobile in 2000 are treated as outliers in this representation of the relationship between portfolio equity flows and stock prices.
Sources: Dealogic Bondware, Morgan Stanley, and World Bank staff estimates.

but less so than in recent years. Two major events—the Iraq war and the SARS outbreak in Asia—had little effect on flows.

Net portfolio equity flows to South Asia rose dramatically in 2003, mainly in response to optimism about growth in India. Flows to East Asia and the Pacific also rose sharply because of a sharp increase in activity to China—notably the China Life transaction, valued at more than $3 billion. Latin America and the Caribbean received about the same amount of portfolio equity in 2003 as last year. Flows appear to have increased in Argentina and Chile from negative levels last year, and to have remained unchanged in Brazil,[26] reflecting the effects of interest rate cuts, stabilization of the exchange rate, and incipient recovery in the economy. The stabilization in portfolio equity flows to Brazil also reflects a pause in the migration of local companies to international exchanges (see the following section). Net portfolio equity flows to Europe and Central Asia rose only modestly, due to a sharp fall in flows to the Russian Federation. The Yukos controversy in the last quarter of the

year raised concerns about government interference in the privatized entities, sapping international portfolio equity. Net portfolio equity flows to Sub-Saharan Africa benefited from a marked economic recovery in South Africa. The Middle East and North Africa continued to rely on debt financing.

Gross portfolio equity flows

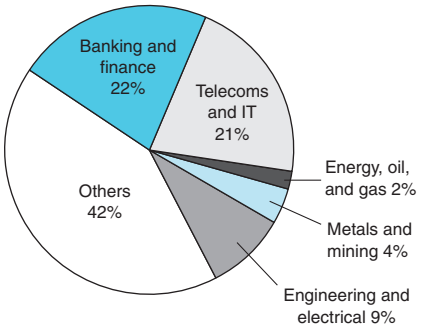
Gross international equity placements in developing countries rose to $19 billion in 2003 from $11 billion in 2002 (see figure 3.15). Thus, the increase in net flows described above seems to have occurred through both primary and secondary markets. Historically, gross equity flows and stock prices have been strongly correlated (see figure 3.16). The recent rise in stock prices in emerging markets implies, therefore, that gross flows may rise further in coming months. Indeed issuance activity increased sharply in December 2003, following buoyant stock market activity.

Firms in the service sector accounted for about half of the gross flows in 2003 (figure 3.17). Some of the top deals in terms of volume of issuance were by insurance companies and banks (see annex B). Firms in the telecommunications and information technology sectors also came to the market to benefit from the rise in the tech-dominated NASDAQ. Interestingly, U.S. dollar issues accounted for less than 15 percent of total issuance in 2003. Equity issuance in Hong Kong amounted to 34 percent of the total, as Chinese companies raised financing through the Hong Kong stock exchange (figure 3.18). Issues were denominated in several other currencies as well, indicating significant cross-listing of emerging-market firms in foreign stock exchanges.

Cross-listing and delisting of stocks

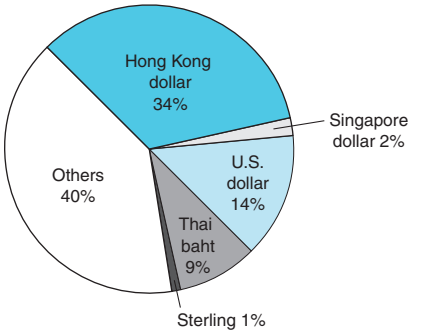
In any given year, it is common to find many instances of emerging-market firms listing in larger and better-regulated stock exchanges, either by cross-listing or delisting from smaller exchanges. Gaining access to a wider investor base—and cheaper capital—is one of the major incentives behind the practice. Another is low trading costs in exchanges that have efficient trading and clearing systems (Pulatkonak and Sofianos 1999). Because international stock exchanges have stringent requirements for reporting and for protection of minority shareholder rights, listing abroad gives

Figure 3.17 Sectoral composition of gross flows in 2003



Source: Dealogic Bondware.

Figure 3.18 Currency composition of gross flows in 2003

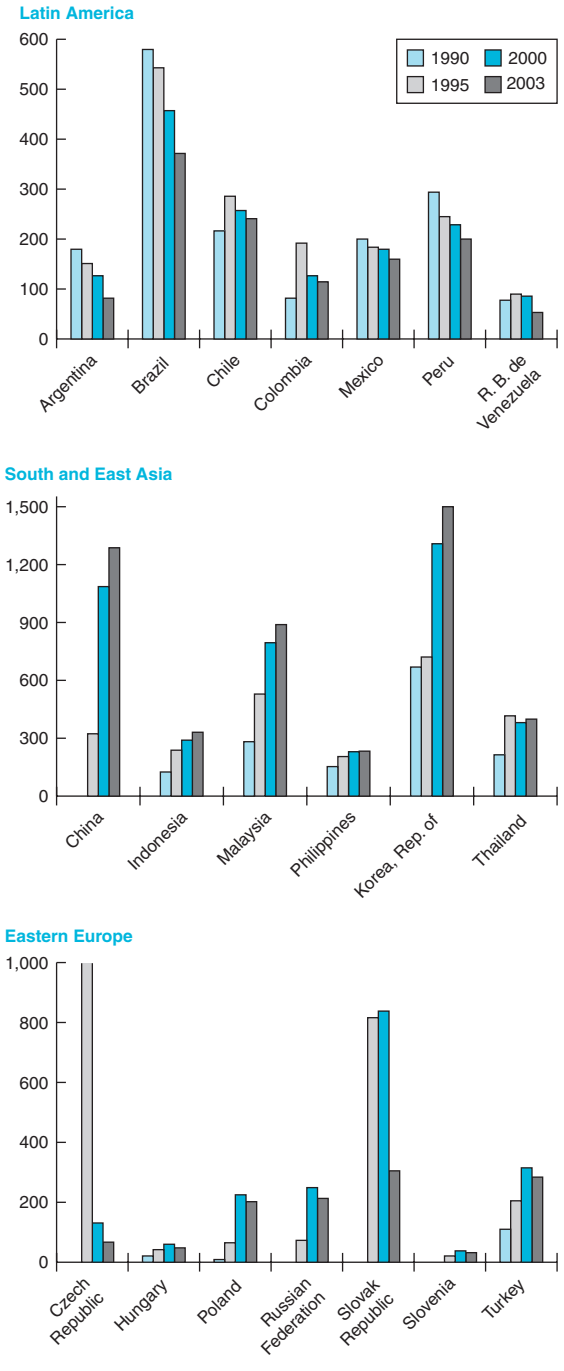


Source: Dealogic Bondware.

firms a mark of quality and hence greater access to international equity funds.

Whether a firm chooses to access the international market by issuing depositary rights, cross-listing in more than one exchange, or migrating to another exchange, the result is an increase in international portfolio equity flows to the country where the firm is domiciled. The effect on local equity flows may vary, however. Issuing ADRs or cross-listing may not affect local market flows, but migration to another exchange (which involves delisting from one's own exchange and listing elsewhere) decreases liquidity in the local market (Levine and Schmukler 2003). For example, in Brazil international flows were inversely related to local flows in the last four years. Local flows were negative during 2000–02 and turned positive in 2003, whereas international flows were positive but declined during this period. The decrease in liquidity may adversely

Figure 3.19 Number of listed stocks on selected developing-country exchanges, by region



Note: Figures are end-of-year values. For 2003, data are as of November. Data for 1990 for Hungary and Poland correspond to 1991. Data for 1995 for Russia, the Slovak Republic, and Slovenia correspond to 1996.
Source: Emerging Markets Database.

affect small firms' ability to raise funding in the domestic stock market. That can, in turn, reduce international equity flows to these firms.

An examination of historical stock listing data reveals an interesting pattern: stock delisting continued in Latin America and the Caribbean and Europe and Central Asia, but not in East Asia and the Pacific (figure 3.19). The reason appears to be the proximity of the first two to buoyant American and European stock markets, which performed well over the 1990s, attracting firms in nearby emerging markets.[27] Exchanges in Tokyo, however, and to a lesser extent, Hong Kong, the natural candidates for migration in Asia, have not done well in recent years (figure 3.20).[28]

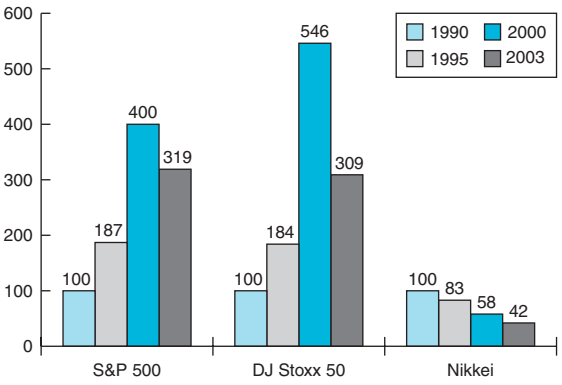
Another reason behind delisting in Europe and Central Asia (especially in the Czech Republic and the Slovak Republic) is the effect of voucher privatization in the early 1990s, which suddenly gave rise to a large number of firms—in excess of 1,000—being listed in the local stock exchanges. The stocks of most of these companies did not trade for years; by the mid-1990s, many companies delisted from the Prague and Bratislava stock exchanges.

Privatization and portfolio equity flows

Privatization, commonly associated with FDI flows, also has sizeable effects on portfolio equity flows. Indeed, privatization-related portfolio equity flows have always been large (figure 3.21). During 1990–96, gross equity issuance by public sector companies exceeded that of private firms.

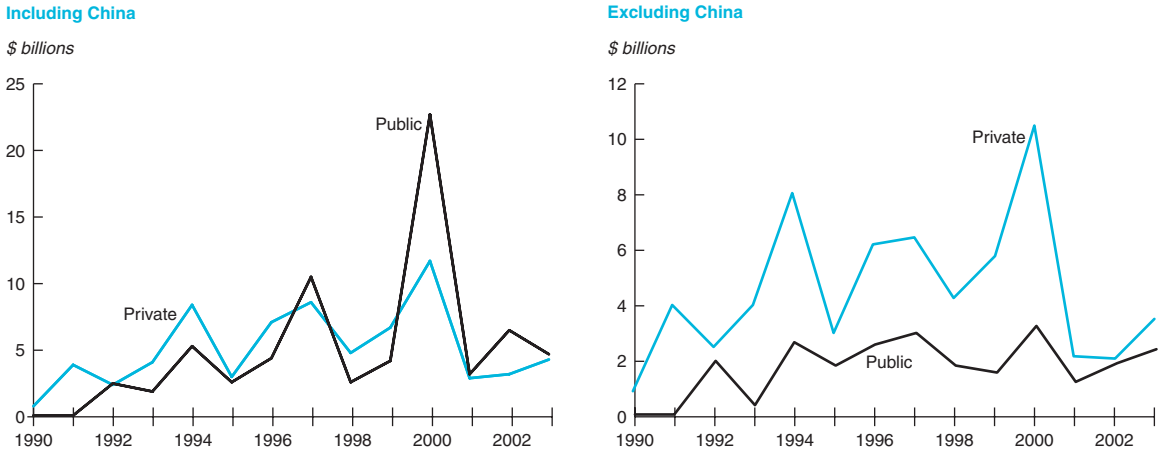
Figure 3.20 Stock market performance in the United States, Europe, and Japan

Indexed, 1990 = 100



Source: Bloomberg.

Figure 3.21 Equity issuance by public and private sector firms, 1990–2003

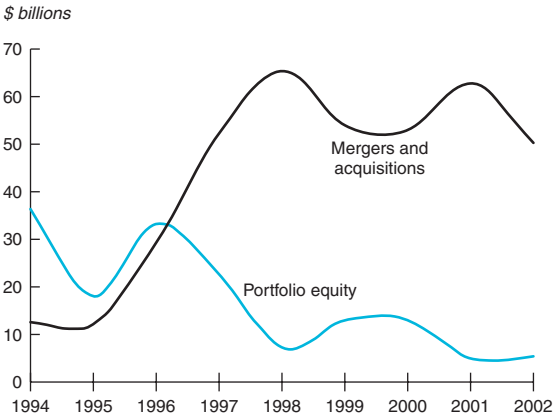


Source: Dealogic Bondware.

Even excluding China—where equity issuance is de facto privatization (or corporatization)—public sector issuance has been significant (figure 3.21, second panel).

After a dramatic surge in the early 1990s—from almost nothing in 1990 to $43 billion in 1993 (see figure 3.15)—portfolio equity flows collapsed after the Asian crisis and have remained modest ever since. Why they fell may have to do with the surge in privatization in the early 1990s—and with a statistical quirk. In the initial phases of privatization, public enterprises issued shares, some of which were bought by nonresident investors. Portfolio equity flows swelled as a result. As privatization deepened, however, and more shares were purchased by nonresidents, the 10-percent-ownership threshold that divides portfolio equity from FDI was crossed in many cases, resulting in reclassification of portfolio equity as FDI. In fact, the conversion of portfolio equity to FDI was not an accident—a large part of portfolio equity was purchased by multinational companies for the purpose of acquiring control over the privatized enterprises, especially those in the infrastructure sector. Thus, a dramatic increase in the M&A component of FDI coincided with a similarly dramatic drop in portfolio equity flows (figure 3.22).[29] An example of this phenomenon is the privatization of YPF (an oil company) in Argentina. Acquisition of existing stocks of YPF by Spain's Repsol increased FDI flows to Argentina but reduced portfolio equity flows (World Bank 2003).[30]

Figure 3.22 The rise in M&A and the decline in portfolio equity flows, 1994–2002



Sources: UNCTAD, World Bank data based on information from IMF Balance of Payment Statistics Database, national sources, and market sources.

Why portfolio equity flows are so much smaller than FDI and debt flows

The slowdown in privatization and the 10-percent-ownership rule (discussed above) are not the only reasons why portfolio equity flows to developing countries are smaller than flows of FDI and debt. Other reasons include underdeveloped stock markets (and weak corporate governance), macroeconomic volatility in developing countries, and "home bias" in developed countries. The post-Asian crisis divergence between FDI and

portfolio equity flows also owes something to the special resilience of FDI, which derives from the ability of direct investors (usually multinational corporations with established brand names) to withstand market risks through global production and marketing networks.

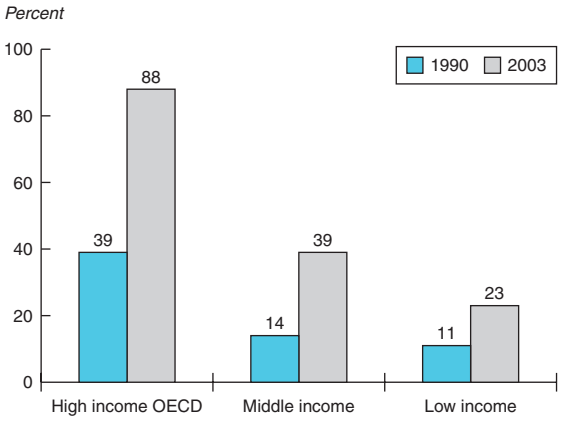
Underdeveloped stock markets

A major constraint to the growth of foreign equity investment is the small size of stock markets in developing countries. Market capitalization as a share of GDP in low-income countries is about one-sixth of that in high-income countries. Even in the middle-income countries, the share is only about one-third of that in industrial countries (figure 3.23). Stock exchanges in developing countries also tend to lag technologically behind developed markets. Technology plays a major role in the trading, clearance, and settlement processes; problems in those areas can discourage sophisticated investors. Institutions that supervise and support the operation of the stock exchange also tend to be weaker in developing countries. Recent scandals in the U.S. fund management industry and at the New York Stock Exchange have highlighted the vulnerability of institutions and regulations in the world's most sophisticated markets.[31] Developing-country institutions are even more vulnerable to such risks.[32] Regulations such as limits on foreign ownership[33] and restrictions on profit remittances[34] also impede the inflow of portfolio equity to developing countries.

Macroeconomic volatility

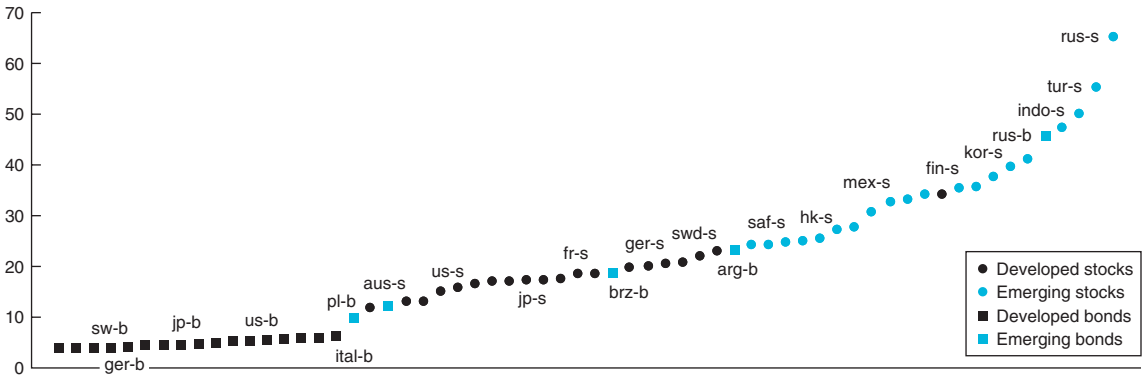
That developing countries are prone to macroeconomic shocks is a matter of concern for investors in portfolio equity. An analysis of volatility of annual returns since 1990 reveals emerging-market stocks as the most volatile asset class. During 1990–2003, the standard deviation of returns on emerging-market portfolio equity exceeded 24 percent annually, compared to a standard deviation of under 7 percent for developed-country bonds (figure 3.24). And emerging-market equity is more volatile than emerging-market bonds, reflecting in part the seniority of debt over equity in

Figure 3.23 Market capitalization as share of GDP



Sources: International Financial Corporation and Standard & Poor's.

Figure 3.24 Annualized volatility in developed- and developing-country stock and bond markets, 1990–2003



Note: Most assets from 1990; some emerging assets start at 1993.
Source: Wilmot and Mielczarski 2003.

bankruptcy—another reason why investors may prefer debt over equity.

Although emerging-market stocks are more volatile, their returns are not necessarily higher than those on developed-country stocks. Moreover, a strong correlation between returns from emerging-market and developed-country stocks has been observed recently, reducing the perceived benefits of portfolio diversification to the detriment of emerging-market equity (box 3.6).

High transaction costs also discourage investors in emerging-market equity. Fund management fees for investing in emerging-market equity may be as high as 1.9 percent for actively managed funds. Recent scandals in the U.S. fund management industry have focused attention on expense ratios of mutual funds, and investors are now looking for less costly and more transparent alternatives, such as exchange-traded funds (ETFs). ETFs on emerging-market equity are relatively scarce, but their popularity is increasing (box 3.7)

Box 3.6 Emerging-market stocks—a separate asset class?

Because emerging-market equity is more volatile than debt or developed-country assets, it is usually considered a separate asset class. Capital market reforms, however, and relaxation of foreign ownership restrictions have resulted in a greater integration of developed and emerging markets (Henry 2000; Bekaert, Harvey, and Lumsdaine 1999). As a result, the correlation between emerging- and developed-market stock returns has risen in recent years, indicating convergence toward a single asset class. Saunders and Walters (2002) show that the correlation was more significant in 1994–99 than in 1988–93. They argue that "gains from simple country-by-country diversification were unambiguously lower in the 1994–99 period over all risk-return ranges except the very lowest." Other studies argue that the risk-return characteristics of emerging-market indexes can be achieved in the U.S. market by, for example, holding portfolios of U.S. domestic stock, American depository receipts, closed-end country funds, and stocks of multinational corporations (Errunza, Hogan, and Hung 1999).

Home bias

The tendency of individuals in developed countries to hold too little emerging-market equity—a phenomenon known as home bias—constrains the growth of portfolio equity flows. In a world portfolio consisting of a U.S. fund invested in the S&P 500 and a Europe, Australia, and Far East fund (not including emerging markets), the optimal (minimum-variance) share of foreign equities is around 40 percent (Lewis 1999); but the observed share is only about 8 percent. Home bias is also evident in the practices of Japanese, German, British, and French investors (French and Poterba 1991). Some argue that home bias arises when the costs of international diversification exceed the benefits (Portes and Rey 2002). Such costs may arise from international taxes, barriers to trade, limits on foreign ownership, information costs, and market inefficiencies. The existence of home bias in and between industrial countries, however, implies that cross-border capital flows—and in particular, the level of capital flows to developing countries—will fail to reach their full potential, underscoring the need for developing countries to nurture their own domestic equity markets, as well as to undertake reforms to reduce the costs of international diversification as outlined above.

Prospects for 2004–2005

After two consecutive years of decline, FDI flows to developing countries are expected to recover in 2004 and 2005, to $152 billion and $165 billion (table 3.7). As global economic growth recovers (as discussed in chapter 1) and investor sentiment improves, FDI in developing countries—especially China, India, Mexico, Poland, and the Russian Federation—is expected to recover.[35] Service sector FDI also is expected to rise in all regions, but the recovery is expected to remain modest in Latin America.

FDI in East Asia and the Pacific is expected to rise to $65 billion in 2004 from $57 billion in 2003. Led by China, the region is once again expected to receive the highest share of FDI flows to developing countries. Although the manufacturing sector will remain the major sector in 2004, China's service

Box 3.7 The growing popularity of exchange-traded funds

Exchange-traded funds (ETFs) are index-based funds that are listed on an exchange and traded like shares. They have attracted increasing attention in the aftermath of scandals involving U.S. mutual funds in fall 2003. The first ETF, indexed to the S&P 500, began trading on the American Stock Exchange in January 1993. Since then, both the number and the assets of ETFs have grown exponentially (see figure at left). By the end of October 2003, the value of assets under management of 340 ETFs listed on 28 exchanges had reached $187 billion (see table). ETFs listed in U.S. exchanges dominate the market—some 117 U.S.-listed ETFs have $129 billion in assets under management. Almost half of ETFs track global indexes. Their exposure to emerging Asian markets is about 6 percent, and to Latin America, 2 percent. Although the most extensive markets for ETFs are in developed countries, India and South Africa recently launched their own ETFs (see table). ETFs also have evolved in terms of their underlying indexes. Now, four U.S. ETFs are indexed to fixed-income investments.

A major reason for the growth of ETFs is their low expense ratio—around 0.4 percent—in contrast to expense ratios of equity funds (see figure at right). Although subject to other implicit costs of trading stocks, including broker fees and bid-ask spreads, ETFs are cost-efficient compared to even passively managed mutual funds. Other reasons for their growing popularity are potential savings on capital gains tax, due to low trading of underlying stocks, and the flexibility of trading ETFs at intra-day prices instead of at end-of-the-day prices. Finally, ETFs have strict transparency guidelines.

Unlike mutual funds, ETFs also can be used for hedging portfolio risks. They can be sold short using borrowed shares, bought on margin using borrowed money, or bought through limit orders (that is, orders to buy or sell at a specific price).

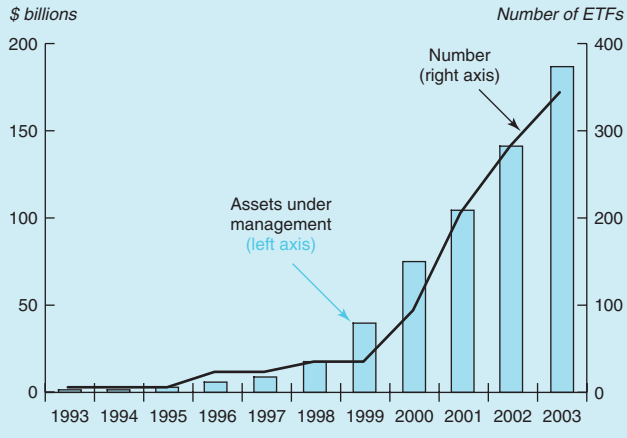
Global ETFs

On October 31, 2003

Country (number of managers)	Total listings	Assets under management ($ billions)	Average daily volume (million shares)	Average daily volume ($ billions)
U.S. (8)	117	129.4	147	8.20
Europe (14)	158	17.3	14	0.40
Japan (4)	18	27.8	5	0.10
Canada (2)	16	4.9	1	0.04
Korea, Republic of (4)	5	0.5	2	0.02
Australia (2)	4	0.6	1	0.01
South Africa (2)	4	0.7	. .	. .
Hong Kong (2)	4	4.3	6	0.01
India (3)	5	0.1	. .	. .
Israel (1)	2	0.5	. .	. .
Singapore (1)	6	0.2	. .	. .
Total (35)	340	186.7	183	8.7

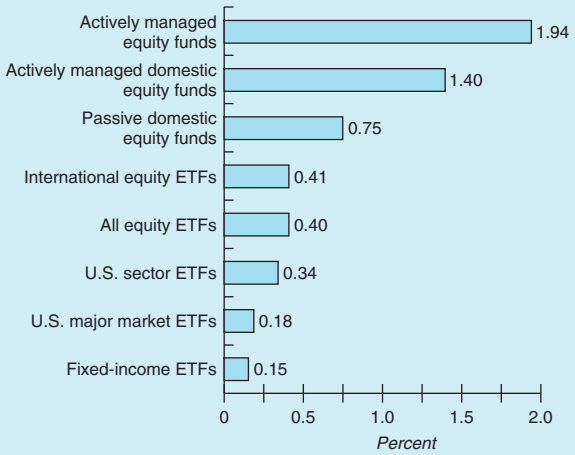
Note: . . = negligible.
Source: Morgan Stanley Research.

Assets managed by ETFs, 1993–2003



Source: Morgan Stanley Research, London.

Average expense ratios for mutual funds and ETFs



Source: Morningstar, Morgan Stanley 2003.

Table 3.7 Forecast for equity flows to developing countries, 2002–05

$ billions

	2002	2003	2004	2005
FDI (net)	147	135	152	165
East Asia and Pacific	55	57	65	74
Europe and Central Asia	33	26	31	32
Latin America and the Caribbean	45	37	38	40
Middle East and North Africa	3	2	2	2
South Asia	4	5	6	7
Sub-Saharan Africa	8	9	10	10
Portfolio equity (gross)	11	19	22	27

Note: FDI forecasts are based on an econometric model described in the methodological annex. The forecasts for portfolio equity flows are based on a vector autoregression (VAR) model. See World Bank (2002a), annex 2.1.
Source: World Bank staff estimates.

sector (especially finance, telecommunications, and utilities) is expected to receive larger amounts of FDI when it opens to foreign investment in 2005 to meet World Trade Organization (WTO) requirements. Malaysia, Thailand, and Vietnam also are expected to receive higher levels of FDI in the medium term. Thailand is expected to benefit from improved growth prospects and its accession to the WTO. And Malaysia's efforts to attract FDI by further liberalizing foreign ownership restrictions are expected to pay off. Although infrastructure and regulatory problems remain in Vietnam, increased economic integration among Association of South East Asian Nations (ASEAN) countries may draw significant flows into its mining and light manufacturing sectors (AT Kearney 2003). In contrast, security concerns are expected to keep Indonesia's FDI flows at modest levels.

The recovery in FDI in Eastern and Central Europe is expected to be led by the EU accession countries. The Czech Republic, Hungary, and Poland are expected to receive more FDI in services as their competitive cost structure encourages investors to set up headquarters and R&D facilities. Even though privatization activities are expected to be slow in these countries, FDI through M&A is expected to remain robust as domestic investors in privatized companies look for foreign partners to increase their capital (UNCTAD 2003b). Although heavy manufacturing companies may prefer countries with highly skilled labor and good infrastructure, such as the Czech Republic and Poland, light manufacturers may move to lower-cost accession countries such as Romania.

In contrast, the improvement in business sentiment in the Russian Federation in the first half of 2003 seems to have waned in the wake of the Yukos scandal, which raised concerns about the sustainability of the country's privatization program. Early in the year, Russia was ranked as the second most attractive investment location after China for first-time investors (AT Kearney 2003). Firm oil prices and growth recovery attracted FDI proposals in the energy sector. That interest is likely to continue in the medium-term, although investors are closely watching the developments following the Yukos controversy. Recent political and economic stability are expected to help FDI to Turkey, although its proximity to Iraq and recent security problems may limit new investments.

FDI flows to Latin America and the Caribbean are expected to improve modestly in 2004. Mexico is expected to receive larger flows in the next two years, in line with the recovery of growth in the United States. The country also shows some potential for privatization-related FDI flows. Latin America also is attracting FDI related to call centers being set up by multinational companies to serve Spanish-speaking customers in the United States. FDI flows to Argentina and Brazil, however, are expected to remain modest, because an increase in FDI in manufacturing (in response to weak currencies) may be offset by a continued disinvestment in infrastructure and banking. The República Bolivariana de Venezuela is expected to suffer a further decline in FDI flows because of its uncertain political environment.

FDI flows to South Asia are expected to rise in 2004–05. Policy reforms, especially ownership deregulation in financial services, are likely to attract FDI to India, already the largest recipient in the region. Low costs and an English-speaking population make the region, especially India, attractive for investments in services (such as call centers) and manufacturing. Compared to East Asian countries (especially China), however, the investment climate in India is still perceived as bureaucratic, with burdensome restrictions on ownership. Security remains a major concern in the rest of the region.

The prospect for FDI in Africa remains limited, reflecting modest growth potential, underdeveloped infrastructure, political risks, and low labor productivity. Nevertheless, firm oil prices and strategic considerations in some source countries

(including China) may increase FDI in the oil sector in Africa. South Africa will remain the preferred destination for FDI (IMF-World Bank 2003). Countries in North Africa and Middle East may attract new oil-related investments, but security problems remain a major issue.

Gross portfolio equity flows are expected to rise steadily from $19 billion in 2003 to $22 billion in 2004 and $27 billion in 2005 (see table 3.7)[36] Two major factors behind this outlook are rekindled growth and relaxation of foreign ownership restrictions in major emerging markets, particularly China and India. Portfolio equity flows to Brazil likewise are expected to increase significantly with the country's improved growth outlook, aided by reductions in interest rates. The surge in equity issuance in the last month of 2003 is likely to carry forward to the first two quarters of 2004. However, a risk to this outlook may arise from the recent scandals in the U.S. fund management industry, which may dampen investor enthusiasm for the relatively riskier emerging-market stocks.

Annex A FDI Forecasting Model

THE FORECASTS OF FDI FLOWS presented in this chapter are based on an econometric model that uses the following explanatory variables: three-year moving average of the GDP growth rate of the top seven industrial countries, the major suppliers of FDI; the difference between the GDP growth rate of developing countries (three-year moving average) and that of the G-7 countries as a proxy for investors' expectations about excess rates of return in the medium term from investments; the growth rate of exports of goods and services (lagged one year) to reflect a country's attractiveness to export-oriented, efficiency-seeking investors; the rating of *Institutional Investor* magazine as a proxy of the investment climate; the price of oil to capture oil-related foreign investment; the volatility of oil prices (represented by their one-year rolling standard deviation) as a proxy for global economic uncertainty; and the lagged dependent variable (FDI/GDP) representing the persistence of FDI flows over time. The model uses panel data for 1991–2002 for 30 developing countries that accounted for more than 80 percent of FDI flows to developing countries in 2002. Regression results are summarized in table 3A.1. Predictions of FDI/GDP for the 2004–05 period were obtained by forecasting growth rates of FDI as implied by the model and applying the obtained growth rates to estimated FDI figures for 2003. The model is the same as that used in last year's edition of *Global Development Finance* (World Bank 2003).

Table 3A.1 Regression results of FDI forecasting model

Explanatory variable	Coefficient
G7 growth rate (3-year moving average)	0.089
Growth rate − G7 growth rate (3-year moving averages)	0.018
Growth of exports of goods and services	0.006
Institutional Investor rating	0.018
Oil price	0.011
Volatility of oil price	−0.043
FDI as % GDP (lagged 1 year)	0.503
Unweighted adjusted R^2	0.557
Weighted adjusted R^2	0.582
Durbin Watson	2.002
Number of observations	353

Note: The dependent variable is FDI as a percentage of GDP. Coefficients computed using White heteroskedasticity-consistent standard errors are significant at 1 percent level.
Source: World Bank Staff.

Annex B Top 25 International Equity Deals in 2003

Rank	Issuer or group	Amount ($ mn)	Share type	Exchange	Issuer type	Sector	Currency
1	People's Insurance Co of China	802	IPO	Hong Kong	Public	Insurance	HK dollar
2	Telekomunikacja Polska SA-TPSA	561	Privatization, GDR	Warsaw, London	Public	Telecom/ communications	PZL
3	China National Foreign Trade Transportation (Sinotrans) Corp (Sinotrans Group)	540	Privatization	Hong Kong	Public	Transport & shipping	HK dollar
4	Telecom SA Ltd	502	IPO, privatization, ADR	Johannesburg, NY	Private	Telecom/ communications	SA Rand
5	Cemex SA de CV	497	ADR	NY	Private	Construction	US dollar
6	Krung Thai Bank pcl	397	Privatization	Thailand	Public	Banking and financial services	Thai Baht
7	Astro All Asia Networks pcl	348	IPO	Kuala Lumpur	Private	Media and publishing	M dollar
8	Weiqiao Textile Co Ltd	347	IPO	Hong Kong	Private	Textile and clothing	HK dollar
9	China Resources Power Holding Co Ltd	313	IPO	Hong Kong	Public	Energy/utility	HK dollar
10	Infosys Technologies Ltd	294	IPO	NSE (India), Nasdaq	Private	Computers/ software	US dollar
11	China Aviation Industry Corp I (AVIC I)	270	IPO	Hong Kong	Public	Aerospace	HK dollar
12	PT Bank Rakyat Indonesia (Persero)	262	IPO, privatization	Jakarta, Surabaya	Public	Banking and financial services	Indo Rupiah
13	Thai Airways International pcl	261	Privatization	Thailand	Public	Airline	Thai Baht
14	PT Bank Mandiri (Persero)	254	IPO, privatization	Jakarta, Surabaya	Public	Banking and financial services	Indo Rupiah
15	Mobile Telesystems OAO-MTS	205	Bought deal/ block trade	London	Private	Telecom/ communications	US dollar
16	Gold Fields Ltd	194	Accelerated book building	Johannesburg, NY	Private	Mining	SA Rand
17	PT Astra International	161	Rights	Jakarta, Surabaya	Private	Trading and dealing	Indo Rupiah
18	Steinhoff International Holdings Ltd	156	Institutional offering	Johannesburg, NY	Private	Retailing and consumer goods	SA Rand
19	Commerce Asset-Holding Bhd	154	Accelerated book building	Kuala Lumpur	Private	Banking and financial services	M dollar
20	PT Bank Danamon Indonesia Tbk	141	Privatization, Accelerated book building	Jakarta, Surabaya	Private	Banking and financial services	Indo Rupiah
21	Bank of Ayudhya pcl	134	Accelerated book building	Thailand	Private	Banking and financial services	Thai Baht
22	TPV Technology Ltd	134	Bought deal/block trade	Hong Kong, Singapore	Private	Electronics/ electricals	HK dollar
23	Beijing Capital Land Ltd	131	IPO, privatization	Hong Kong	Public	Real estate	HK dollar
24	Unibanco—Uniao de Bancos Brasileiros SA	128	GDR	Sao Paulo, NY	Private	Banking and financial services	BRE
25	Globe Telecom Holdings Ltd	127	Bought deal/block trade	Philippines	Private	Telecom/ communications	Peso

Source: Dealogic Bondware.

Notes

1. The year-to-year variation in FDI flows is modest in comparison to other flows.

2. The United States is expected to regain its position as the top destination of FDI in the world (excluding Luxembourg, where FDI flows are mostly pass-throughs).

3. Based on the average volume of FDI flows for 1999–2002. The top 10 in terms of FDI as a share of GDP are Equatorial Guinea, St. Kitts and Nevis, Angola, Chad, Lesotho, the Czech Republic, The Gambia, Grenada, Azerbaijan, and Kazakhstan.

4. Among the 47 least developed countries, 7 are classified as middle-income countries by the World Bank.

5. Including Angola, Nigeria, and Sudan.

6. China's monthly statistics show that FDI flows dropped in July and August by 19 percent and 28 percent year-on-year. The decline may indicate a residual impact of SARS (severe acute respiratory syndrome), but one cannot be sure, given that China's monthly FDI series tends to be volatile.

7. India has recently modified its FDI statistics methodology by including reinvested earnings and intercompany loans.

8. In 2001, North-South investments from Spain and the United Kingdom plunged by 40 percent. The United States and France were the two leading North-South investors in 2001, with $20 billion and $13 billion, respectively.

9. Estimates for the period have been adjusted to account for reclassification of South Korea as a high-income country.

10. FDI outflows from South Africa declined because of the unbundling of cross-shares of London-based Anglo American and South African De Beers (UNCTAD 2002).

11. Not all services are nontradable or require physical proximity. For example, some information-technology services (software programming, database and customer support) and business process services (call centers) are not location-bound and can be provided without proximity to customers. However, with exceptions in mind, services are conventionally portrayed as intangible, invisible, and perishable, requiring simultaneous production and consumption (World Bank 2001).

12. Performance requirements often specify local employment and local content levels (Davies and Ellis 2001).

13. Between 1990 and 2002 developing countries signed 1,380 bilateral investment agreements. During the same period, 113 developing countries became WTO members.

14. Some services are labor intensive, and governments are concerned that foreign participation may harm domestic skilled workers. In fact, 32 countries (mostly in Africa and Latin America) have included domestic labor requirements for FDI in their GATS (General Agreement on Trade in Services) schedules (Markusen and others 2000).

15. During the 1990s, most Latin American countries introduced a series of financial reforms to dismantle state controls over the sector and to stem barriers to entry of foreign banks. As a result, the share of foreign banks increased to 61 percent in 2001 from 13 percent in 1995 and 8 percent in 1990 (United Nations 2003). In Eastern and Central Europe, foreign firms were heavily involved in the privatization of banks, telecommunications companies, and utilities. Countries in Asia and Africa also have gradually reduced barriers against foreign firms, although more slowly than in Latin America and Eastern and Central Europe.

16. Banks that left Argentina following the crisis include Canada's Bank of Nova Scotia, France's Credit Agricole, the Italian financial group Intesa Bci, and Korea's Kookmin.

17. The Capital Markets Consultative Group Survey is a joint survey report by the IMF and the World Bank (IMF-World Bank 2003).

18. Brazil stopped compiling reinvested earnings data after 1998.

19. Coefficients of variation for reinvested earnings and intercompany loans are higher than that of equity capital in more than half of the countries in the sample; for almost 70 percent of those cases intercompany loans show the highest variation.

20. These countries include Canada, Denmark, France, Germany, Japan, Norway, the United Kingdom, and the United States (Desai and others 2002b).

21. Lehmann and Mody 2004 show that repatriation strategies of companies during a crisis in a host country may vary by investors' nations.

22. A 10-percent-ownership rule is applied in distinguishing FDI from portfolio equity.

23. Depositary receipts are issued by international banks. They represent stocks of an emerging-market company, for example, that are deposited with a local custodian. These dollar-denominated securities are traded in the same way as stocks.

24. During 1990–2003, of nearly 1,200 equity issuance deals that reported relevant data, 527 (or 44 percent) were IPOs, 378 (32 percent) ADRs and GDRs, and 290 (24 percent) privatization deals.

25. Ukraine experienced an outflow of portfolio equity of $1.98 billion in 2002. The outflow continued in 2003. In the first half of the year, there was an outflow of $736 million, higher than the $504 million recorded in the first half of 2002.

26. Total portfolio equity flows to Brazil in the first nine months of 2003 were up only slightly from 2002 ($1.4 billion versus $1.2 billion). Flows arising from international listings, which averaged $3.5 billion a year between 1997 and 2002, reached only $0.55 billion in the first nine months of 2003, compared with $2.44 billion in the corresponding period of 2002. In contrast, local listings turned positive after three consecutive years of decline.

27. Pulatkonak and Sofianos (1999) show that emerging-market firms' decisions to list in New York depend largely on the time-zone distance from the United States and the level of trading costs.

28. A sharp increase in listings on the Korean stock exchange occurred after 1997, presumably because some conglomerates split and listed on their own.

29. Claessens, Djankov, and Klingebiel (2000) discuss the role of privatization in the development of stock markets in transition economies.

30. The converse also may occur. That is, withdrawing FDI by selling off stocks may increase portfolio equity flows.

31. The latter half of 2003 brought charges of fraud and wrongdoing in the U.S. mutual fund industry (and more recently in foreign-exchange trading). The charges center on late trading, market timing, and high fund-management fees. Late trading is illegal because, by allowing trades after the markets have closed, it gives these traders (usually large mutual and hedge funds) the unfair advantage of reacting to late-breaking news. Market timing allowed some investors to trade before others to take advantage of differences between the price of a fund (set once a day) and those of the underlying securities, which change throughout the day. High-fund management fees came into focus when an investment bank's mutual fund paid higher brokerage fees to its own brokerage arm than to other brokers. These costs were borne by investors in the mutual fund.

32. Aggarwal and others (2003) find that strong shareholder rights, legal institutions, and accounting standards are associated with greater U.S. mutual fund investment in emerging-market equities. This is in line with La Porta and others (1997), who find that strong investor-protection laws and good accounting practices are key to capital-market development.

33. Claessens and Rhee (1994) found that legal barriers curtailing foreigners' access to emerging markets tended to raise the cost of capital of listed firms. This result was based on an analysis of 16 emerging markets for the period 1989–92. As a measure of the degree of foreigners' accessibility to emerging-market stocks, Claessens and Rhee used the investability index created by the Emerging Markets Data Base of the International Finance Corporation. Bekaert (1995), however, argues that formal ownership restrictions are often not binding or are circumvented.

34. Demirguc-Kunt and Huizinga (1995) discuss tax barriers to equity investments.

35. A recent AT Kearney survey (2003) of direct investors found that the top 10 destination countries for FDI include 6 emerging-market economies.

36. Note that we have used gross issuance of equity in generating model-based forecasts, because high-frequency data required for this purpose are not available for net flows. The trends in net and gross portfolio equity flows, however, are positively correlated, as can be seen in figure 3.15.

References

Aggarwal, Reena, Leora Klapper, and Peter D. Wysocki. 2003. "Portfolio Preferences of Foreign Institutional Investors." Policy Research Working Paper 3101, World Bank, Washington, D.C. July.

Aharony, Joseph, and Itzhak Swary. 1980. "Quarterly Dividend and Earnings Announcements and Stockholders Returns: An Empirical Analysis." *Journal of Finance* 35(March): 1–12.

Altshuler, Rosanne, and Harry Grubert. 2003. "Repatriation Taxes, Repatriation Strategies and Multinational Financial Policy." NBER Working Paper 8144, National Bureau of Economic Research, Cambridge, Mass.

Asquith, Paul, and David W. Mullins. 1983. "The Impact of Initiating Dividend Payments on Shareholders' Wealth." *Journal of Business* 56(1): 77–96.

AT Kearney. 2003. "FDI Confidence Index." AT Kearney, Inc., Alexandria, Virginia.

Aykut, Dilek, and Dilip Ratha. 2003. "South-South FDI Flows in the 1990s." Development Finance Group, World Bank, Washington, D.C. Processed.

Bekaert, G., C. Harvey, and R. L. Lumsdaine. 1999. "Dating the Integration of World Equity Markets." NBER Working Paper W6724, National Bureau of Economic Research, Cambridge, Mass. September.

Bekaert, Geert. 1995. "Market Integration and Investment Barriers in Emerging Equity Markets." *World Bank Economic Review* 9(1): 75–107.

Christophe, Stephen E. 2002. "The Value of U.S. MNC Earnings Changes from Foreign and Domestic Operations." *Journal of Business* 75(1): 67–94.

Christophe, Stephen, and Ray J. Pfeiffer, Jr. 2002. "The Valuation of MNC International Operations During the 1990s." *Review of Quantitative Finance and Accounting* 18(2): 119–38.

Claessens, Stijn, Simeon Djankov, and Daniela Klingebiel. 2000. "Stock Markets in Transition Economies." Financial Sector Discussion Paper 5. Social Science Research Network. http://ssrn.com/abstract=240703.

Claessens, Stijn and Moon-Whoan Rhee. 1994. "The Effects of Barriers on Equity Investment in Developing Countries." World Bank Policy Research Working Paper 1263. Washington, D.C. March.

Davies, Ronald B., and Christopher J. Ellis. 2001. "Competition in Taxes and Performance Requirements for - Foreign Direct Investment." Economics Department Working Papers 2001-4. University of Oregon, Eugene.

Demirguc-Kunt, Asli, and Harry Huizinga. 1995. "Barriers to Portfolio Investment in Emerging Stock Markets." *Journal of Development Economics* 47(August).

Denis, D., D. Denis, and K. Yost. 2001. "Global Diversification, Industrial Diversification, and Firm Value." Working paper, Krannert Graduate School of Management, Purdue University, West Lafayette, Ind.

Desai, Mihir A., C. Fritz Foley, and James R. Hines, Jr. 2002. "Repatriation Taxes and Dividend Distortions." *National Tax Journal* 54(4): 829–51.

———. 2003a. "A Multinational Perspective on Capital Structure Choice and Internal Capital Markets." NBER Working Paper 9715, National Bureau of Economic Research, Cambridge, Mass. May.

———. 2003b. "Chains of Ownership, Regional Tax Competition, and Foreign Direct Investment." In Heinz Herrmann and Robert Lipsey, eds., *Foreign Direct Investment in the Real and Financial Sector of Industrial Countries*. Berlin: Springer-Verlag.

———. 2003c. "Dividend Policy Inside the Multinational Firm." NBER Working Paper 8698. National Bureau of Economic Research, Cambridge, Mass.

Errunza, V., K. Hogan, and M.-W. Hung. 1999. "Can the Gains from International Diversification Be Achieved without Trading Abroad?" *Journal of Finance* 54: 2075–3007.

Esperanca, J. P. 1992. "International Strategies in the European Service Sector: A Comparative Study." In M. Casson, ed., *International Business and Global Integration: Empirical Studies*. London: Macmillan.

Falzoni, Anna. 2000. "Statistics on Foreign Direct Investment and Multinational Corporations: A Survey." Center for Economic Policy Research Working Paper, London. http://www.cepr.org/research/networks/fdimc/Papers/Data.pdf.

Fama, Eugene F., and Harvey Babiak. 1968. "Dividend Policy: An Empirical Analysis." *Journal of the American Statistical Association* 63(24): 1132–61.

French, Kenneth R., and James M. Poterba. 1991. "International Diversification and International Equity Markets." *American Economic Review* 81(2): 222–26.

Fuhr, Deborah A. 2003. "Exchange Traded Funds, Global Summary." Morgan Stanley Equity Research, Europe, January.

Golub, Stephen S. 2003. "Measure of Restrictions on Inward Foreign Direct Investment for OECD Countries." OECD Economics Department Working Paper 357. Organisation for Economic Co-operation and Development, Paris.

Gurbert, Harry. 1998. "Taxes and the Division of Foreign Operation Income Among Royalties, Interest, Dividends and Retained Earnings." *Journal of Public Economics* 68(2): 269–90.

Healy, Paul, and Krishna Palepu. 1988. "Earnings Information Conveyed by Dividend Initiations and Omissions." *Journal of Financial Economics* 21(2): 149–75.

Henry, P. B. 2000. "Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices." *Journal of Finance* 55: 529–46.

IMF (International Monetary Fund). 1993. *Balance of Payments Manual*. 5th ed. Washington, D.C.

IMF (International Monetary Fund) Balance of Payments Statistics Database (2003).

IMF-World Bank (International Monetary Fund and World Bank). 2003. *Foreign Direct Investment in Emerging Market Countries*. Washington, D.C.

Jensen, Michael J. 1986. "Agency Cost of Free Cash Flow, Corporate Finance, and Takeovers." *American Economic Review* 76(2): 323–39.

John, Kose, and Joseph Williams. 1985. "Dividends, Dilution, and Taxes: A Signaling Equilibrium." *Journal of Finance* 40: 1053–69.

J. P. Morgan Securities. 2003. "Introducing the Homeland Investment Act." Economic and Policy Research, New York.

La Porta, Rafael, Florencio Lopez de Silanes, Andrei Shleifer, and Robert W. Vishny. 1997. "Legal Determinants of External Finance." *Journal of Finance* 52(3): 1131–50.

Latin Finance. 2003. *Latin Finance 2003*. Miami: Latin Finance Publications.

Lehmann, Alexander and Ashoka Mody. 2004. "International Dividend Repatriations." IMF Working Paper 04-05, International Monetary Fund, Washington, D.C.

Levine, Ross, and Sergio Schmukler. 2003. "Migration, Spillovers, and Trade Diversion: The Impact of Internationalization on Domestic Stock Market Activity." NBER Working Paper 9614, National Bureau of Economic Research, Cambridge, Mass.

Lewis, Karen K. 1999. "Trying to Explain Home Bias in Equities and Consumption," *Journal of Economic Literature* (June): 571–608.

Lintner, John. 1956. "Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes." *American Economic Review* 46: 97–113.

Markusen, James, Thomas F. Rutherford, and David Tarr. 2000. "Foreign Direct Investment in Services and the Domestic Market for Expertise." NBER Working Paper 7700, National Bureau of Economic Research, Cambridge, Mass.

Miller, Merton, and Kevin Rock. 1985. "Dividend Policy under Asymmetric Information." *Journal of Finance* 40: 1031–51.

Morgan Stanley. 2003. "U.S.-Listed Index-Linked ETF Product Overview and Applications." Equity Research Report. New York.

Murphy, Kevin J. 1985. "Corporate Performance and Managerial Remuneration." *Journal of Accounting and Economics* 7: 11–42.

National Bureau of Statistics of China. Various years. *China Statistical Yearbook*. Beijing.

OECD (Organisation for Economic Co-operation and Development). *OECD Benchmark Definition of Foreign Direct Investment*. 3rd ed. Paris.

Portes, Richard, and Helene Rey. 2002. "The Determinants of Cross-Border Equity Transaction Flows." NBER Working Paper 7336, National Bureau of Economic Research, Cambridge, Mass. July.

Pulatkonak, M. and G. Sofianos. 1999. "The Distribution of Global Trading in NYSE-Listed Non-U.S. Stocks." NYSE Working Paper 99-03. New York.

Roberts, Joanne. 2001. "Challenges Facing Service Enterprises in a Global Knowledge-Based Economy: Lessons from the Business Services Sector." PREST Discussion Paper 01-03, University of Manchester, U.K. http://les.man.ac.uk/PREST/Publications/DP_PDFs/PRESTDP01-03.pdf.

Saunders, Anthony, and Ingo Walters. 2002. "Are Emerging Market Equities a Separate Asset Class?" *Journal of Portfolio Management* 28(3).

Tse, Raymond Y. C. 2001. "China's Real Estate Market and the Asian Financial Crisis." *Emerging Markets Quarterly* 4(4): 51–59.

UNCTAD. Various years. *World Investment Report*. New York.

———. 1998. *World Investment Report*. New York.

———. 2002. *World Investment Report*. New York.

———. 2003a. "China: An Emerging FDI Outward Investor." Research Note, New York. http://r0.unctad.org/en/subsites/dite/fdistats_files/pdfs/China_Researchnote.pdf.

———. 2003b. "Outward FDI from Central and Eastern European Countries." Research Note, New York.http://r0.unctad.org/en/subsites/dite/pdfs/CEE_outward_en.pdf.

United Nations. 2001. "Investment and Economic Reform in Latin America." Economic Commission for Latin America and the Caribbean, Santiago, Chile.

———. 2003. "Foreign Investment In Latin America and the Caribbean 2002." Economic Commission for Latin America and the Caribbean, Santiago, Chile.

Wagner, Daniel. 2002. "Political Risk Insurance in Asia: Who Purchases It, Where and Why." International Risk Management Institute, Dallas, Texas. http://www.IRMI.com/expert/articles/wagner009.asp

Wilmot, Jonathan, and Paul Midezarski. 2003. "Global Markets Outlook." Credit Suisse First Boston.

World Bank. Various years. *Global Development Finance*. Washington, D.C.

———. Various years. *World Development Indicators*. Washington, D.C.

———. 1994. *Global Economic Prospects 1995*. Washington, D.C.

———. 2001. *Global Economic Prospects 2002*. Washington, D.C.

———. 2002a. *Global Development Finance 2002*. Washington, D.C.

———. 2002b. *Global Economic Prospects 2003*. Washington, D.C.

———. 2003. *Global Development Finance 2003*. Washington, D.C.

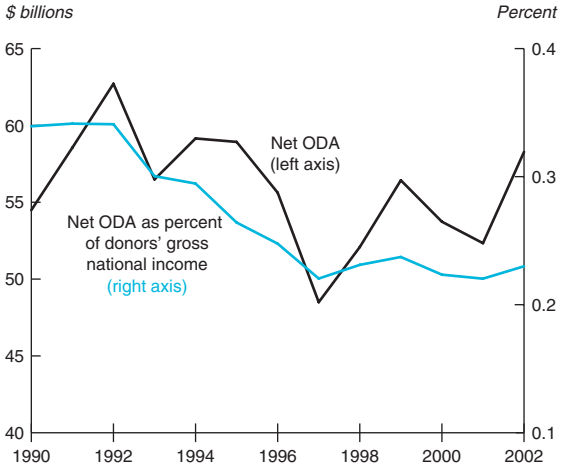
Zhang, Xiaoyang. 1999. "Real Estate Investment in China—Legal Review and Analysis of Foreign Investors' Participation." *Murdoch University Electronic Journal of Law* 6(2). http://www.murdoch.edu.au/elaw/issues/v6n2/zhang62_text.html.

4

The Changing Landscape for Official Flows

CHANGES IN GLOBAL POLITICS, efforts to reach the Millennium Development Goals, and the rise of civil society are altering the landscape for official flows in important ways. Aid flows rose in 2002 (figure 4.1), and in 2003 the United States announced an Emergency Plan for AIDS relief, while pledges by EU governments would raise official development assistance (ODA) to 0.44 percent of gross national income (GNI) by 2010, from 0.35 in 2002. Aid, however, currently remains low relative to historical levels—and well below levels required to meet the MDGs. Substantial increases in disbursements will be required over the next few years to meet the pledges for higher aid made at the 2002 Monterrey Conference. The failure of the international community to reach agreement on reducing agricultural subsidies and trade barriers at the World Trade Organization talks in Cancún in September 2003—reductions that would have generated much greater gains for developing countries than envisioned increases in aid—places even more pressure on finding additional sources of finance for the world's poorest countries. Coherent aid and trade policies are vital in promoting development. Moreover, recipient countries have improved their policies, raising their capacity to absorb and use aid effectively—strengthening the call for more aid.

Figure 4.1 Net official development assistance to developing countries, 1990–2002



Source: OECD Development Assistance Committee.

Recent international conflicts have reinforced the importance of considerations other than poverty reduction in allocating aid. Aid to Afghanistan has risen sharply, and at the October 2003 Madrid Conference, donors pledged $33 billion in new commitments for the reconstruction of Iraq. These countries face enormous challenges in making the transition to peace and in rebuilding their physical, economic, and social infrastructure. Despite the urgency of those concerns, the allocation of aid based on national security concerns may reduce the impact of aid on reducing poverty.

Civil society groups are helping to change the landscape for official flows. In addition to boosting development resources by providing an estimated $12–13 billion annually in aid, international nongovernmental organizations (NGOs) are taking a more prominent role in the debate over development policies.

These issues form the basis for this chapter. The main messages are:

- Aid flows increased in 2002 but remain well below historical levels and what is required to meet the Millennium Development Goals. Moreover, half of the $6 billion rise in the nominal value of aid reflects debt relief and a further $1 billion of the increase represents

higher aid to Afghanistan and Pakistan. Thus, the rise in official development assistance to all other developing countries was only $2 billion. Nonconcessional official finance is declining, largely due to repayments to the Paris Club under rescheduling agreements, reduced need for emergency financing packages, and prepayment of loans to the World Bank.

- Subordinating aid policy to national security considerations can reduce the effectiveness of aid in alleviating poverty. On the other hand, aid granted for strategic reasons can sometimes spur development and prevent a return to violence in postconflict societies.
- Aid recipients are improving their policies and institutions through partnerships with other recipients (for example, the New Partnership for Africa's Development) and with donors (for example, through the Poverty Reduction Strategy Paper [PRSP] process). Thus their ability to make effective use of aid is growing.
- International NGOs have boosted aid resources and made valuable contributions to global public goods and community development projects. In their expanded development role, however, NGOs confront many of the challenges familiar to official donors, including ensuring local ownership of projects and government effectiveness. They have broadened the debate over aid policies and had considerable success in single-issue campaigns. But accountability remains an issue. NGOs that are not clearly accountable to their members and to society can take irresponsible positions and engage in counterproductive behavior.

Recent trends in official flows

Aid flows increased somewhat in 2002 but remain well below historical levels, while the level of official nonconcessional lending is falling. Here we present two sets of data on official financing for developing countries (box 4.1). The first is net ODA, which refers to grants and net disbursements of concessional loans to developing countries or territories provided by donor governments for the purpose of promoting economic development and welfare. Data on ODA, which are available only through 2002, are reported by donors. The second set, official finance, includes grants and net lending (concessional and nonconcessional) received by developing countries from official sources. These data, reported by recipients, include estimates for 2003.

Official development assistance

Net ODA to developing countries from members of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) increased to $58 billion in 2002, up from $52 billion in 2001—a rise of 7.2 percent in real terms (table 4.1).[1] ODA amounted to 0.23 percent of donors' gross national income, up from 0.22 percent in the previous year. Twelve of the 22 DAC countries achieved increases in ODA in 2002, with the largest gains coming from the United States ($1.9 billion), France ($1.3 billion), and Italy ($0.7 billion).

However, the rise in aid provided by donors does not translate directly into an increase in aid received by developing countries. Half of the $6 billion boost in ODA was generated by an

Table 4.1 Net official development assistance, 1990–2002
$ billions

	1990	1997	1998	1999	2000	2001	2002	ODA/GNI in 2002 (%)	Percent change in real terms in 2002[a]
Total ODA	54.5	48.5	52.1	56.4	53.7	52.3	58.3	0.23	7.2
G-7 countries	42.5	35.1	38.6	39.4	40.2	38.2	42.6	0.20	9.2
United States	11.4	6.9	8.8	9.1	10.0	11.4	13.3	0.13	15.0
Japan	9.1	9.4	10.6	12.2	13.5	9.8	9.3	0.23	−1.2
Germany	6.3	5.9	5.6	5.5	5.0	5.0	5.3	0.27	−0.2
France	7.2	6.3	5.7	5.6	4.1	4.2	5.5	0.38	22.1
Non–G-7 countries	12.0	13.4	13.5	17.0	13.5	14.1	15.7	0.47	1.8
Memo item:									
EU countries	28.3	26.8	27.6	26.7	25.3	26.3	29.9	0.35	5.8

a. Takes into account inflation and exchange rate movements.
Source: OECD Development Assistance Committee.

Box 4.1 Defining aid

The international forum for defining aid is the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD).[a] DAC members provided more than 95 percent of international aid flows in 2000. DAC compiles statistics on aid and other official flows on the basis of information provided by bilateral and multilateral agencies.[b]

DAC donors provide two categories of aid—official development assistance (ODA) and official aid. The two forms are similar, except that only developing countries listed on Part I of the DAC "List of Aid Recipients" are eligible to receive ODA. Only ODA may be counted by DAC countries as part of their "aid effort," the donor country's aid budget relative to its GNI.

ODA comprises loans or grants to developing countries and territories provided by donor governments and their agencies for the purpose of promoting economic development and welfare. If the assistance is provided in the form of a loan it must be extended on concessional financial terms, that is, with a grant element of 25 percent or more, calculated as the net present value of the future payment stream discounted at 10 percent.

Countries on Part II of the DAC list—which includes countries in Eastern and Central Europe, the Russian Federation, other independent republics of the former Soviet Union, and a few high-income countries (French Polynesia, Israel, New Caledonia)—receive official aid.

Aid flows to developing countries can be presented from two perspectives, the donors' or the recipients'. Table 4.1 reports ODA *provided by* DAC donors—bilateral disbursements of concessional financing to developing countries plus concessional financing provided by bilateral donors to multilateral institutions (for example, IDA). By contrast, table 4.2 reports disbursements of concessional finance *received by* developing countries from both bilateral and multilateral sources. The two measures will not be the same, in part because some middle-income countries receive official aid, but mostly because funding received from donors by multilateral institutions does not match those institutions' disbursements to developing countries in any given year.

As reported in the text, a portion of what is counted as ODA does not represent funds disbursed directly to developing countries. This includes debt relief on nonconcessional loans and the administrative costs of running donor agencies. In addition, a portion of technical assistance funds is paid directly to consultants from industrial countries, rather than to developing-country governments. These three categories of net ODA amounted to $23.9 billion in 2002, or 40 percent of net ODA (box table).

ODA by DAC donors, 1996–2002

$ billions

	1996	1997	1998	1999	2000	2001	2002
Official development assistance	55.6	48.5	52.1	56.4	53.7	52.3	58.3
of which:							
Technical cooperation	14.1	12.9	13.1	13.0	12.8	13.6	15.5
Debt relief	3.4	3.1	3.0	2.3	2.0	2.5	5.3
Administrative costs	2.9	2.7	2.8	3.0	3.1	3.0	3.1

Source: OECD Development Assistance Committee.

a. The members of DAC are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.
b. The data discussed here appear in OECD 2003. DAC will publish data for 2003 in May 2004.

increase in debt relief, which more than doubled in 2002.[2] Administrative costs involved in managing donor agencies, also classified as ODA, remained at about $3 billion in 2002. Thus aid received by developing countries (net of debt relief) increased by only $3 billion. Afghanistan and Pakistan accounted for $1 billion of the increase; in the case of Afghanistan a large amount came as emergency assistance. Thus, the rise in ODA excluding these two countries was only $2 billion. Substantial increases will be required over the next few years to meet the commitments for higher aid made at the 2002 Monterrey Conference.

Moreover, the rise in ODA remains even further below the level required to meet the Millennium Development Goals. Analyses performed at the global and sectoral levels indicate that at least $50 billion annually in additional aid, or a doubling

Table 4.2 Net official financing of developing countries, 1990–2003
$ billions

	1990	1997	1998	1999	2000	2001	2002	2003[a]
Total	54.2	38.4	60.9	42.2	22.8	54.8	35.3	28.0
Grants	27.7	25.3	26.7	28.5	28.7	27.9	31.2	34.3
Net lending	26.5	13.2	34.2	13.7	−5.9	26.9	4.1	−6.3
Multilateral[b]	15.5	19.8	37.4	15.9	0.9	34.6	14.7	6.5
Concessional	6.7	7.6	7.4	7.0	5.6	7.3	7.5	6.4
Nonconcessional	8.8	12.3	30.0	8.8	−4.7	27.3	7.2	0.1
Bilateral	11.0	−6.6	−3.2	−2.2	−6.8	−7.7	−10.6	−12.8
Concessional	8.5	0.2	2.0	5.0	0.7	1.6	−1.8	−1.0
Nonconcessional	2.4	−6.9	−5.2	−7.2	−7.5	−9.3	−8.8	−11.8

a. Estimate.
b. Includes IMF.
Source: OECD Development Assistance Committee.

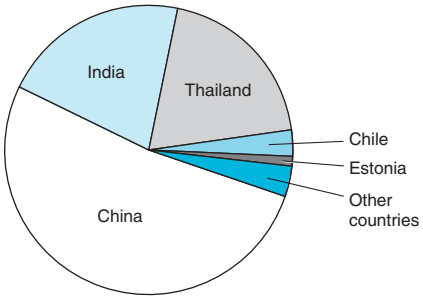
of current aid levels, will be required to meet the goals (World Bank 2003a). Analysis at the country level shows that countries with relatively good policies could effectively use substantial increases in aid.

Net official finance

Net official financing to developing countries is estimated at $28 billion in 2003, a drop of $7 billion from the previous year and just over half the level of 2001 (table 4.2). The sharp decline is due to a steep decrease in the use of emergency financing packages by the International Monetary Fund (IMF), particularly in comparison with large net disbursements in 2001, and to prepayments of loans to the World Bank. Net bilateral lending remained negative, as bilateral donors continued to reduce their lending in favor of grants and some developing countries made further repayments to the Paris Club under past rescheduling agreements (World Bank 2003d). Grants increased, reflecting a step-up in donors' efforts to increase development assistance in general and to boost resources to countries affected by recent international conflicts.[3]

Net lending from the World Bank fell from −$4.1 billion in 2002 to −$6.4 billion in 2003, largely due to $7.2 billion in prepayments of outstanding International Bank for Reconstruction and Development (IBRD) loans. This followed prepayments of $3.2 billion in 2002—led by China, India, and Thailand (figure 4.2)—and $0.3 billion in 2001. Most of the loans being repaid are Single Currency Pool loans and Currency Pool loans. The prepayments have been made possible by the steady rise in developing-country reserves in recent years (see chapter 1) and the simultaneous decline in interest rates. Most creditworthy countries can now borrow at lower rates than the 4–5 percent charged on pooled loans. LIBOR (the London interBank offered rate, the base used for many emerging-market loans) stands at less than 2 percent, and the spread over LIBOR paid by the most creditworthy developing countries can be as low as 100 basis points.

Figure 4.2 Geographical distribution of IBRD prepayments, 2002



Source: World Bank.

Prospects for a rise in official aid

While aid flows remain well below the levels of a decade ago, major donors have pledged to increase them and vowed to improve aid effectiveness (table 4.3). The United States and the European Union agreed to expand their aid programs in the context of discussions surrounding the International Conference on Financing for Development in Monterrey, Mexico (March 18–22, 2002). Those pledges express the intent of OECD governments, although actual disbursements will be subject to future decisions and the normal legislative processes of each donor country. The OECD estimates that if all DAC countries were to meet their expressed commitments, aid would rise

Table 4.3 Aid commitments and announcements after the Monterrey Conference, March 2002
Additional aid as % GNI

Country	ODA/GNI in 2002	Recent announcement	Year to be attained
Australia	0.26	0.26	2003–04
Austria	0.26	0.33	2006
Belgium	0.43	0.70	2010
Canada	0.28	8% annual increase	To 2010
Denmark	0.96	0.70	n.a.
Finland	0.35	0.44 (0.70 by 2012)	2007
France	0.38	0.50	2007
Germany	0.27	0.33	2006
Greece	0.21	0.33	2006
Ireland	0.40	0.70	2007
Italy	0.20	0.33	2006
Japan	0.23	1998–2002 average level ($10.5 bn)	In 2006
Luxembourg	0.77	1.00	2005
Netherlands	0.81	0.80	n.a.
New Zealand	0.22	Future level under review	n.a.
Norway	0.89	1.00	2005
Portugal	0.27	0.33	2006
Spain	0.26	0.33	2006
Sweden	0.83	Long-term goal 1% (at least 0.87% in 2006)	n.a.
Switzerland	0.32	0.40	2010
United Kingdom	0.31	0.40	2005–6
United States	0.13	$7bn increase	2006
Memo item:			
European Union	0.35	0.44	2010

Note: n.a. = not applicable. Excludes reconstruction spending on Iraq and Afghanistan.
Source: OECD Development Assistance Committee.

by 31 percent by 2006 and the ratio of ODA to GNI would increase to 0.26 percent. Even this level would remain well below the ratio of 0.33 percent consistently achieved until 1992, but would represent a substantial rise from current levels. Some countries have made further commitments to increase ODA beyond 2006. The international community should do its utmost to ensure that these existing commitments are met.

Aid commitments from the United States

The United States has proposed an increase in foreign aid through two channels. The Millennium Challenge Account (MCA) should provide $5 billion per year in additional aid to developing countries, with funding based on 16 economic and political indicators, including control of corruption, rule of law, primary education completion rate, country credit rating, and trade policy. According to the U.S. Department of State (2003a), if the allocations were made today, 10 to 20 countries would likely be presented for Board review. There are concerns about the geographical distribution of aid under the MCA. Brainard and Driscoll (2003) argue that, under the proposal, only three African countries would qualify for aid in the second year, due to their poor performance on governance and policy indicators. They advocate grading the performance of African governments relative to other countries in the region. Data are likely to be scarce, particularly for the poorest countries. For example, only 63 of 115 potentially eligible MCA countries have data for "days to start a business." The final recommendation on country allocations is to be made by a board, which should provide for flexibility in cases where data are unavailable.

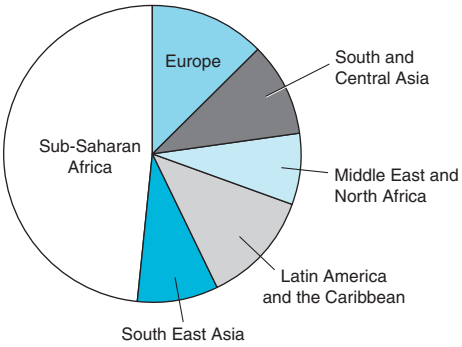
Additionally, the U.S. government (Office of the President 2003) has pledged $15 billion over five years to 14 countries in Sub-Saharan Africa and the Caribbean to prevent new HIV infections, provide antiretroviral treatment to those infected, and offer care for sufferers and AIDS orphans.[4]

World Bank staff estimates suggest that if MCA and HIV/AIDS commitments are honored, U.S. aid could increase from 0.13 percent of GNI in 2002 to 0.21 percent by 2006. Realizing this increase depends, however, on the willingness of the U.S. Congress to allocate funds. Even given sufficient appropriations, the timetable for disbursing funds may be optimistic, given the difficulties in making such programs operational (Birdsall, Shapiro, and Deese 2003).

Planned increases in European aid

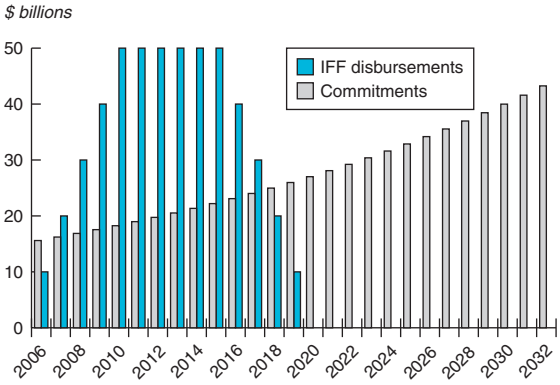
Participants in the Barcelona Summit in March 2002 agreed to increase ODA as a proportion of GNI for the entire European Union to 0.39 percent by 2006 (up from 0.35 percent in 2002), with no member state contributing less than 0.33 percent. The pledge is estimated to provide an additional $7 billion a year. According to the European Commissioner for Development and Humanitarian Aid, Poul Nielson (2003), the EU remains committed to reaching the U.N. goal of 0.7 percent. Since Barcelona, member states have made additional ODA pledges. The OECD estimates these new commitments, if honored, would raise ODA from the European Union in 2010 to $44 billion, or 0.44 percent of GNI. These estimates are based on the current EU membership; that is, they do not reflect the accession of Eastern European countries.

Figure 4.3 Geographical distribution of official development assistance from the European Union, 2002



Source: OECD Development Assistance Committee.

Figure 4.4 Possible commitments and disbursement under the International Finance Facility, 2006–32



Source: DFID 2003a, 2003b.

Sub-Saharan Africa will likely be a major recipient of increased European aid. It received 41 percent of EU member states' aid in 2001 (figure 4.3), and G-8 countries pledged at the Kananaskis summit in 2002 (reaffirmed at the 2003 Evian summit) to spend at least 50 percent of new resources for development on African countries.

In January 2003, the British government launched a proposal to establish an International Finance Facility (IFF). If approved by the international community, the IFF would require participating donors to state their commitments to aid over the next 30 to 35 years. Bonds will be issued in international capital markets on the back of these pledges, resulting in the aid becoming available immediately. The benefit of providing resources up front to aid recipients, many of whom desperately need funds to meet current consumption needs, would greatly exceed the interest cost of the bonds. Assuming that commitments by donors rise over time, as envisioned under the Monterrey Consensus, commitments and possible disbursements under the IFF may follow the pattern of figure 4.4.

The precise legal framework and the details of the covenants of IFF-issued bonds have yet to be determined. But the proposal suggests that the individual donors will bear the ultimate responsibility for repaying the bonds. The international capital markets will likely view any failure to honor commitments to the IFF as a default by the donor in question. Under this initiative, however, as the donor countries are likely to be DAC members, creditworthiness risk is likely to be low; it is envisaged the bonds will receive a triple-A rating (DFID 2003b).

While the IFF bonds would be repaid by money disbursed by the donor countries, the bonds are structured so that they would be contingent liabilities and thus not counted as increasing the fiscal deficit or national debt. Given the fiscal problems of many donors, treating the bonds as contingent, rather than direct, liabilities could ease acceptance of the proposal. To be excluded from national debt, the bonds must meet two conditions:

- The obligation of the donor to make committed annual payments to the IFF must not be automatic, but instead conditional on the behavior of the aid recipients. The United Kingdom has proposed two conditions under which donors would fail to provide pledged contributions with respect to a recipient: if the recipient falls into prolonged arrears to the IMF or becomes subject to United Nations sanctions (DFID 2003a). This approach introduces some tension into how the IFF would work. Investor confidence in repayment of the bonds, and hence the interest rate charged, will depend on there being little risk that recipients would not meet the conditions. However, there must also be some probability that the conditions would not be satisfied or else the IFF commitments would be viewed as direct liabilities of the donor governments.
- There must be a transfer of some decision-making control over disbursements of funds to an organization other than the donor. It is not clear what organization—an existing

international institution or a new one?—might fulfill this role.

The IFF is designed to increase aid flows in the run-up to 2015, the date set for achieving the Millennium Development Goals. Presumably, the increase in aid prior to 2015 would be balanced by a decline in aid afterward, as aid budgets were used to pay off IFF debts. Donor countries may agree, however, to an increase in their aid budgets after 2015, offsetting some of the debt repayments under the Facility.

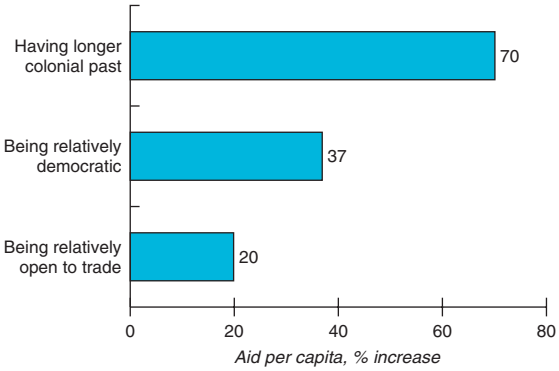
Strategic considerations and aid flows

Since the tragic events of September 11, 2001, and recent international conflicts, strategic considerations have figured prominently in the changing landscape of official flows. According to the U.S. Department of State (2003b), 134 acts of terrorism were committed in 22 developing countries in 2002, many of which had pledged support for the U.S. stance on terrorism. Strategically directed foreign aid is one means of helping countries track terrorist organizations, choke off their access to funding, and destroy their networks. The events of September 11 are believed to have been decisive in galvanizing donor commitments to increase ODA in the run-up to the Monterrey Conference of 2002 (Nielson 2002).

Strategic considerations—such as the Cold War, voting rights in the United Nations, and colonial relationships—historically have been influential in determining bilateral aid flows (Alesina and Dollar 1998). Strategic considerations are more important than policy (such as democratic accountability and openness to trade) in determining the amount of aid a country receives above the average (figure 4.5). And they vastly outweigh motivations based on the need of the recipient, such as balance of payments imbalances and the level of absolute poverty (McKinlay and Little 1979).

Recent data indicate that strategic considerations may be affecting the allocation of aid. Aid to Afghanistan and bordering countries—Pakistan, Tajikistan, Turkmenistan, and Uzbekistan—increased from $1.1 billion in 2000 to $3.7 billion in 2002 (table 4.4). In mid-2003 the Bush administration sought a new aid package for Pakistan ($3 billion) and asked for $21.1 billion for fiscal year 2004 for reconstruction efforts in Iraq and

Figure 4.5 Reasons for additional aid to a country



Source: Alesina and Dollar 1998.

Table 4.4 Net ODA to Afghanistan and neighboring countries, 1998–2002

$ millions

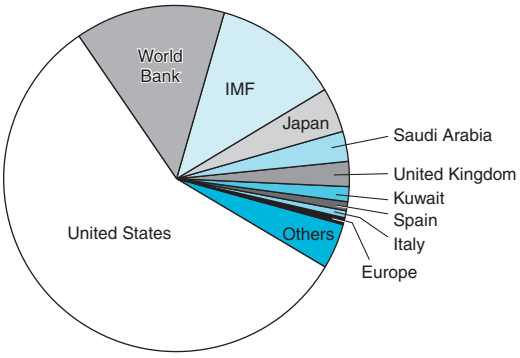
	1998	1999	2000	2001	2002
Afghanistan	154	142	141	403	1,261
Pakistan	1,057	732	702	1,934	2,099
Tajikistan	160	122	124	167	167
Turkmenistan	16	21	16	40	32
Uzbekistan	144	134	151	124	174
Total	**1,531**	**1,151**	**1,133**	**2,668**	**3,733**

Source: OECD Development Assistance Committee.

Afghanistan.[5] The immense development challenges facing these countries, which would require increased aid regardless of their strategic position, are discussed in box 4.2.

Substantial resources will be required for Iraq's reconstruction. The World Bank, United Nations, and Coalition Provisional Authority estimate that Iraq will require a total of $55 billion from donors for 2004–07. Infrastructure projects—electricity, water and sanitation, solid waste, transport, telecommunications—account for almost half the total. This estimate assumes a stable security situation, a rise in oil revenues, and an economic recovery that generates substantial tax revenues. At the International Donors' Conference for the reconstruction of Iraq, held in Madrid in October 2003, more than $33 billion was pledged through 2007 in the form of loans, grants, and export credits. The largest pledges were from the United States ($20.3 billion), Japan (up to $5 billion), the World Bank ($3–5 billion), and the IMF ($2.5–4.25 billion) (figure 4.6). These pledges leave an estimated shortfall of $22 billion in meeting

Figure 4.6 Distribution of donor pledges made at Madrid Conference, October 2003



Note: The World Bank and IMF pledged $3–5 billion and $2.55–4.25 billion, respectively. The above chart shows the mean for both institutions.
Source: World Bank estimates.

Iraqi reconstruction needs. The Madrid conference also agreed to address Iraq's heavy burden of external debt, estimated at more than $120 billion by the Paris Club. As yet, no agreement has been reached on the terms of debt restructuring. There is great uncertainty about how and when pledges will materialize, and about whether, in some cases, they reflect pre-existing allocations.

The allocation of aid according to strategic considerations can impair aid effectiveness. Where aid is provided to corrupt, repressive, or incompetent governments it can strengthen their legitimacy, encourage poor governance, and prolong the duration of the regime, as occurred with the distribution of aid to Zaire during the Cold War (Lancaster 1999). Trade, fiscal, and monetary policies in Zaire deteriorated almost continually from the early 1970s to the late 1980s, as aid flows as a percentage

Box 4.2 Aid and the challenges of postconflict reconstruction

Postconflict economies face enormous challenges in making the transition to peace. Spurring development in Afghanistan, the Democratic Republic of Congo, Iraq, Liberia, Solomon Islands, and Timor-Leste requires reconstructing physical, economic, and social infrastructure as well as building institutions that maintain security, promote reconciliation, and are seen as legitimate in the eyes of the local population. Some argue that conflict resolution, as a global public good, should be borne by the entire international community (Kaul, Grunberg, and Stern 1999).

Many postconflict societies remain vulnerable to relapsing into violence. Providing additional resources (through ODA or debt relief) helps finance broad-based public spending to redress grievances—and thereby may tip the balance toward peace (Addison and Murshed 2001). This is particularly true if international support is coordinated (Michailof, Kostner, and Devictor 2002). Collier and Hoeffler (2002) find evidence that in the first 10 years of peace, postconflict countries have twice the absorptive capacity for aid as in normal times. Many have great need for additional aid resources to address special problems. The under-five mortality rate in Afghanistan, for example, is 260 per 1,000 live births—far more than the average of 121 for the poorest countries. The primary-education completion rate in Yemen and Pakistan is 58 and 59 percent respectively—far below the average of 78 percent for the low-income countries. In a few cases, however, aid may exacerbate conflict by encouraging competition for resources (Hannington 1992 cites the example of Somalia).

Beyond the immediate humanitarian concern of providing sustenance, shelter, and emergency medical treatment to those in need, postconflict societies face four main challenges:

- *The reconstruction of government and legal structures.* The collapse of a regime often leaves a power vacuum, not only giving rise to looting, but also creating a risk of social fragmentation. The establishment of functioning institutions of law and order is a prerequisite to poverty reduction and economic development (Michailof, Kostner, and Devictor 2002).
- *The reconstruction of physical infrastructure.* Conflicts lead to the destruction of bridges, roads, schools, and hospitals while disrupting electricity and water supplies. They also can create additional hazards for the civilian population. For example, land mines are a severe problem in countries such as Angola, Bosnia-Herzegovina, Eritrea, and Somalia.
- *The reconstruction of the monetary and financial system.* Conflicts often weaken or destroy a currency, severely damage financial infrastructure, deplete markets, and halt productive activity. Economic recovery is vital to stabilize an often fragile peace, requiring a reliable medium of exchange, a functioning financial system, resolution of the outstanding debt position,

Box 4.2 *(continued)*

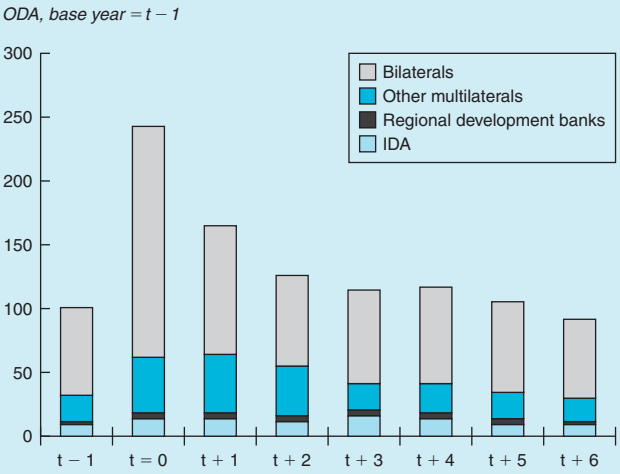
creation of jobs, and payment of civil servants (Michailof, Kostner, and Devictor 2002).

- *The reconstruction of social capital.* Wars often weaken the productive element of the population, increase numbers of refugees, and cause elites to flee, leaving a shortage of trained personnel and little institutional capacity for reconstruction. On top of these challenges, ex-combatants often need to be reintegrated into society through education and work programs and the reestablishment of trust between communities.

These challenges require a variety of skills—notably logistical abilities to arrange immediate food relief, but also engineering, policing, economic management, and refugee repatriation and resettlement. Because agencies vary in their comparative advantages, reconstruction must be a collaborative process. The mistakes made in countries such as Cambodia, where competing donor interests and policies and a lack of coordination among agencies diminished the effectiveness of aid, need to be avoided in the future (Karim and Hess 2001).

For a sample of 17 postconflict countries in the 1990s and early 2000s, aid more than doubled immediately after the conflict, dropped by almost 40 percent in the next year, and then gradually returned to preconflict levels by the sixth year (see figure). ODA to postconflict countries is dominated by bilateral donors, which mainly provide emergency assistance, while contributions from the International Development Association are relatively stable. Initially, humanitarian assistance dominates aid; after the first year, reconstruction assistance takes over (Demekas and others 2002).

Distribution of official aid following the onset of peace in time t = 0



Sources: World Bank staff estimates using data from OECD Development Assistance Committee and *GDF*, various years.

of the country's GDP rose from around 2 percent to around 6 percent (Burnside and Dollar 1997).

Aid allocated for strategic reasons is not always used inefficiently. The Marshall Plan, designed to facilitate a European economic recovery in the aftermath of World War II, had additional objectives—among them resisting the global expansion of communism. Over several years, the Marshall Plan provided $100 to $200 per inhabitant per year to Western Europe (in 2001 prices). The cumulative total was almost $1,000 per person. By contrast, aid per capita to Sub-Saharan Africa was $21 in 2001.[6]

Did the aid to Europe work? In postwar Western Europe, GDP growth averaged 4 percent per year from 1950 to 1973, compared with 1 percent for 1913–1950. However, economic policies (such as trade liberalization and effective demand management) and the boost provided by recovery from the devastation of the war were the main reasons behind the impressive GDP growth in postwar Western Europe. Nevertheless, the Marshall Plan provided vital international finance for the importation of capital goods needed in reconstruction.

Progress in raising aid effectiveness

The Monterrey Consensus called for more aid to developing countries and better policies in those countries to improve the effectiveness of resources. The two parts of the consensus are obviously connected—it is easier to justify additional resource flows if aid is shown to be effective. Improving aid effectiveness requires actions by donors and recipients to strengthen their policies. Here we focus on selected recent proposals, and progress in ongoing programs, that contributed to or may contribute to aid effectiveness.

Proposals for new aid initiatives from major donors, aimed at raising the volume of aid, hold

some potential for increasing the effectiveness of that aid, in part by making it more stable and predictable. The evidence is mixed on whether aid in fact has been more volatile than other sources of government revenues.[7] It does appear that aid commitments provide insufficient information to reliably predict disbursements (Bulir and Hamman 2003). In any event, it is clear that large, unexpected shifts in the volume of aid can disrupt macroeconomic management and erode the effectiveness of aid-financed expenditures. Commitments by donors concerning the overall volume of aid, combined with more transparent mechanisms for allocating some aid expenditures (for example, under the U.S. Millennium Challenge Account), may provide some further information to aid recipients concerning likely aid levels. Relying on multiyear commitments to obtain aid resources from the capital markets (rather than basing each year's disbursements on government appropriations), as proposed under the IFF, also would increase the predictability of aid expenditures.

Strong governance and effective economic policies are essential for aid effectiveness. The allocation of funds according to economic and political indicators, proposed under the Millennium Challenge Account, should help channel funds to good performers and thus raise the effectiveness of aid. Other donors also are stressing the importance of policy performance in their aid allocation. A recent survey indicates that donors increasingly are emphasizing selectivity in aid allocation, favoring recipients with stronger governance, program implementation, and absorptive capacity (DFID 2002). Supporting good performers is one of the British government's fundamental determinants for allocating aid. Recipients of aid from the Netherlands are selected on the basis of poverty—and the degree to which they are well governed (Droeze 2002).

Greater emphasis on performance in aid allocation does not imply, however, that the better performers will necessarily be overwhelmed by increases in aid, beyond their ability to use the funds productively. First, aid allocations change slowly. Donors are often involved in multiyear programs and have long-term commitments to their aid partners. Shifting aid at the margin to better performers is unlikely to result in massive increases in disbursements. Second, the move toward using the quality of the policy regime in deciding aid allocations does not mean that other motivations for aid are ignored. Indeed, recent international conflicts are likely to reinforce strategic motivations for aid in some donor programs.

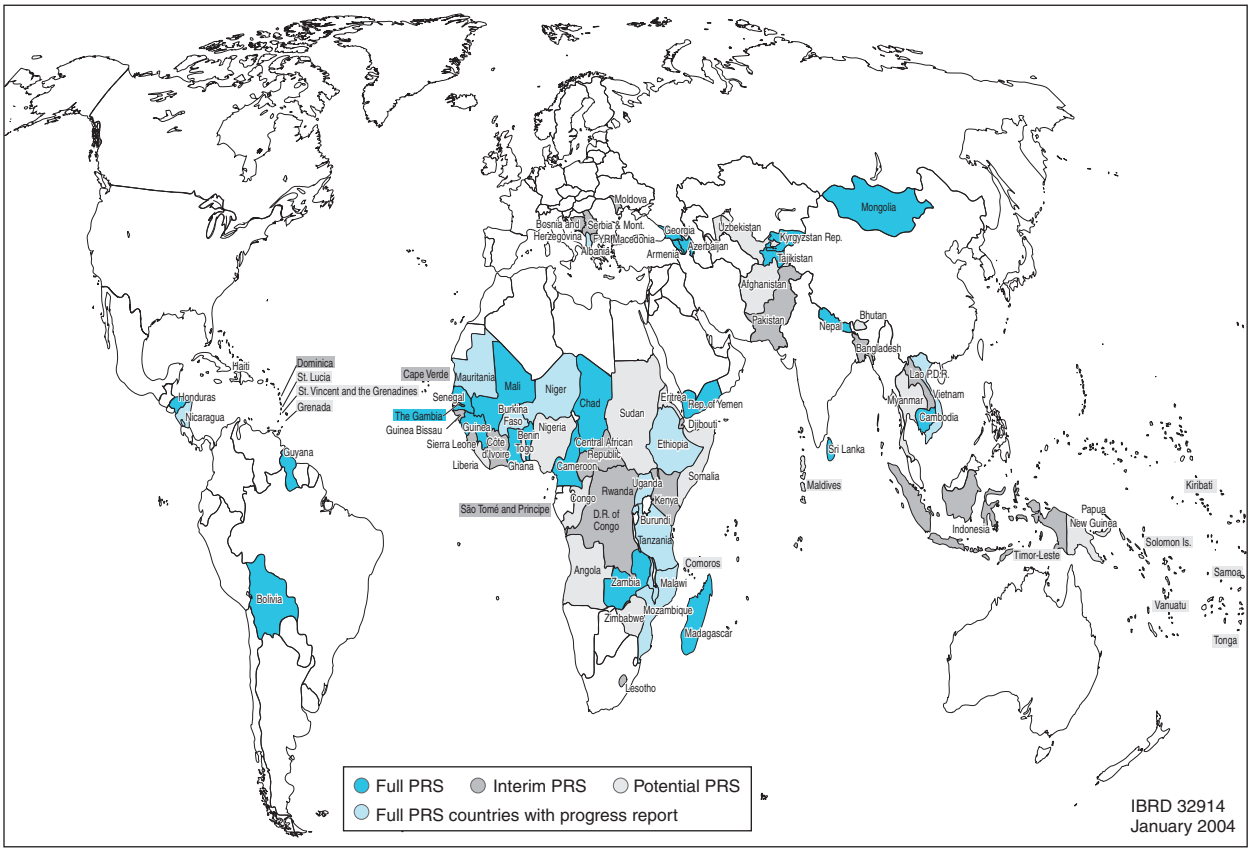
Most important, the better performing recipients are better able to absorb increased aid resources effectively. While the productivity of aid is subject to the law of diminishing returns, it depends most closely on the policy and institutional environment of the recipient country. A study of 18 aid recipients that have improved their policies over the past decade, continue to use aid productively, and have significant unmet development needs, shows that all could benefit from substantial increases in aid beyond current levels (World Bank 2003a).

Poverty Reduction Strategy Papers

More focused aid allocations to the better performers have been helped by the adoption of the Poverty Reduction Strategy Papers. Prepared by developing countries, PRSPs set out a program of action to reduce poverty with help from development partners. Considerable progress has been made in the PRSP process.[8] As of January 2004, 35 countries had completed their full PRSPs, and 12 countries had been implementing the strategy for at least one year and produced a PRSP Progress Report. An additional 19 countries had embarked on the PRSP process, after finalizing their interim PRSPs (figure 4.7). The PRSP process is helping to improve donors' and recipients' policies although progress has been limited in some areas:

- More open and participatory processes are often being sustained during implementation. Several NGOs have praised efforts to broaden participation, although many remain dissatisfied with the process.
- Government ownership has improved, as shown by more engagement by parliaments and improved dialogue between PRSP teams and line ministries, but further progress is required in integrating the PRSP with other planning documents and agencies.
- There are signs of a shift in spending priorities toward poverty-reducing spending. In the 14 PRSP countries where data are available, poverty-reducing expenditures increased on average by 1.4 percent of GDP and 3.9 percent of total expenditures from 1999 to 2001.[9]

Figure 4.7 Full, interim, and potential PRSPs, by country, January 2004



Source: World Bank.

The increase was most rapid among African PRSP countries.

- The principle that donor support should be aligned around country-owned poverty-reduction strategies is now widely accepted, and PRSPs are enhancing donor coordination. However, donors' progress in harmonizing assistance has been limited by national systems of procurement and financial management that do not meet international good practice standards.
- The PRSP process continues to be time consuming, with the time from interim PRSP to full PRSP averaging 20 months. These long preparation times stem from the need to broaden participation, obtain adequate technical assistance, and adjust to political changes or recover from disruption. They also reflect capacity constraints, particularly in postconflict countries.
- Particular attention is required to ensure that the PRSP process supports the general growth of the economy, a key ingredient for sustained poverty reduction. Further work is needed to relate macroeconomic targets to the PRSPs' broader goals (for example, to analyze the implications of achieving debt sustainability for the fiscal path and other policy choices), and to strengthen the links between the sectoral policies envisaged in the PRSP and the budget. However, performance has been strong: countries that have completed PRSPs have averaged real GDP growth of nearly 5 percent since the mid-1990s, a marked improvement over performance in the 1980–95 period.

New Partnership for Africa's Development

African countries have engaged in a far-reaching process to improve their policy and institutions—and thus to strengthen aid effectiveness. The New Partnership for Africa's Development (NEPAD), adopted in July 2001 by African heads of state as the development plan for the African Union, is intended to enhance regional integration and

Table 4.5 Quality of governance, institutions, and public services during the 1990s
Index, 0–10

	Government stability	Democratic accountability	Ethnic tensions	Quality of bureaucracy	Law & order	Corruption	Investment profile
Asian NIEs[a]	6.8	6.0	8.3	8.2	8.1	6.8	6
Asia	6.0	5.5	6.3	5.9	6.5	5.3	5.1
Western hemisphere	5.7	6.1	7.4	4.1	5.3	4.9	5.3
Africa	5.5	4.4	5.3	3.8	4.8	4.5	4.6
World	6.1	6.1	6.8	5.5	6.5	5.6	5.2

Note: NIE = newly industrialized economy. Index runs from 0 to 10, representing averages of annual scores in 1990s. High scores indicate better quality. For all groupings, the unweighted average of countries for which information is available. Indicators have been rescaled from 0 to 10.
a. Hong Kong (China), Republic of Korea, Singapore, and Taiwan (China).
Source: Funke and Nsouli 2003.

coordination. Given the secretariat's limited resources, the main thrust of NEPAD's project activities is to overcome political and administrative obstacles to development projects (for example, by getting different administrative bodies to work together and helping to resolve disagreements by bringing issues to heads of state).

This focus on coordination reflects the mutual dependence of many African economies, including several landlocked countries that must rely on neighbors for the bulk of their international trade. Many of the continent's major waterways cross two or more countries. Diseases such as malaria and AIDS, which have had catastrophic effects on the African people and their economies, are easily transmitted across boundaries. The size of many African economies (21 countries have populations of fewer than 5 million) means that regional (or continental) cooperation has the potential for greatly reducing costs through economies of scale, as well as for facilitating mutually beneficial trade in natural resources. For example, low-cost sources of hydropower have gone unused because of the problems involved in producing energy in one country for consumption in another, often with transmission across a third. And physical incompatibilities between transport systems (rail lines may be of different gauges or may not link at borders), coupled with long delays at customs and other costs involved in crossing borders, impede trade among African economies (World Bank 2000).

One especially important focus for NEPAD is to strengthen governance through the African Peer Review (APR) mechanism. The voluntary APR is designed to focus on economic and corporate governance—including budget management, audit and accounting procedures, and financial-sector supervision. Some political issues also would be included, such as a review of the capacity of legislatures and effective anticorruption measures. Presently, Africa compares unfavorably with other countries on indexes of the quality of governance, institutions, and public services (table 4.5).

A panel of eminent Africans, reporting to the APR implementation committee, is appointed to oversee the review and select teams to carry out the work. The United Nations Economic Commission for Africa will conduct the technical assessment in economic governance and management, while the African Development Bank will consider banking and financial standards (NEPAD 2003). As of July 2003, 15 countries had signed up to be reviewed (all Africa 2003).[10] Ultimately, the peer-review process could serve as a common mechanism of assessment for donors as well, thus reducing the administrative demands on African governments. Donors' reliance on the APR process would also reduce their own costs and encourage greater ownership of reform programs based on the findings of the review.

The APR reflects the African Union's departure from the principle of noninvolvement in other countries' domestic policies. Members of the union realize with increasing urgency that violence and abuses of power in individual countries tend to adversely affect neighboring countries—in part through reputational effects spilling over national borders, as investors may not adequately distinguish among some countries, but also because violence in one country can indeed spread to others. Further, to the extent that African development depends on regional cooperation (as argued above), African countries have an interest in reducing instability and improving economic policies across the continent. The APR represents a promising step toward an African mechanism for addressing these concerns.

The Heavily Indebted Poor Countries Initiative

In 1996 the World Bank and IMF launched the HIPC Initiative to mitigate the debt crisis that had affected some of the world's poorest countries in the 1980s and 1990s. Enhanced in 1999, the initiative aims to provide a permanent exit from debt restructuring, to promote growth, and to allow resources to be redirected to poverty reduction.

The initiative has made substantial progress in reducing the debt burden of the poorest developing countries. Twenty-seven heavily indebted poor countries, or more than two-thirds of the 38 countries that potentially qualify for assistance under the initiative, have reached the "decision point," when donors commit to the amount of debt relief required to reach sustainable levels.[11] More than $31 billion of debt relief in net present value (NPV) terms has been committed to these 27 countries, making up 85 percent of the total expected relief for the 34 HIPCs for which data are available. Most of the HIPCs that have not reached a decision point are constrained by domestic conflict or unsettled transitions from postconflict situations. Also, in some of these countries a concerted international effort would be needed to resolve outstanding arrears.

In the 27 countries that have reached the decision point, the HIPC Initiative has led to a substantial decline in debt stocks and debt service. The NPV of debt for these countries was estimated at $77 billion before traditional debt-relief mechanisms (stock of debt operations involving a 67 percent reduction in NPV terms), but only $32 billion after the full delivery of traditional debt relief and assistance under the HIPC Initiative (further declining to $26 billion after additional bilateral relief committed by several creditors). Indicators of debt sustainability, such as debt-to-exports ratios and debt-service ratios, are forecast to be cut by 50 percent or more after debt relief, to levels comparable to, or below, those of other low-income countries (table 4.6).

The decline in debt-service payments in the 27 HIPCs that have reached the decision point, coupled with policy reforms, has made possible reallocations of funds to address social goals. Poverty-reducing expenditures in the 27 countries increased from $6.4 billion in 1999 to $8.4 billion in 2002, or about twice the annual savings in debt service. The rise in poverty-reducing expenditures was supported by an increase in donor assistance. Gross official flows to the 27 countries increased from about $8 billion in 1997 to almost $12 billion in 2002, with half of the increase due to HIPC relief. While it is impossible to know what donor assistance would have been in the absence of the initiative, the rise in official assistance provides some indication that HIPC Initiative resources may be additional to other aid, and indeed that the HIPC Initiative, by encouraging policy reform, may be helping to attract donor finance.

Table 4.6 Debt indicators for HIPCs that have reached decision point

	Before enhanced HIPC relief[a]	HIPC relief at completion point[b]
NPV of debt-to-exports ratio[c]	274	128
NPV of debt-to-GDP ratio	61	30
Debt service-to-exports ratio[d]	16	8

a. Debt stocks are after traditional Paris Club relief, but before the HIPC decision point. Data refer mostly to end-1998 and 1999 (for debt service, average of 1998 and 1999).
b. Forecast for 2005.
c. Exports are defined as the three-year average exports of goods and services up to the date specified.
d. Exports are defined as goods and services in the current year.
Source: World Bank.

The growing importance of international civil society in development

The growing presence of private groups in international meetings (around the table and on the street), the success of major human-development campaigns, and the growing resources allocated by NGOs all reflect the rise of civil society as a major force in international development.[12]

The rise of NGOs

Private organizations dedicated to political, religious, or charitable causes are not a new phenomenon. Philanthropic activity in China was strengthened under Buddhism from at least the eighth century, and the Western religious missionary movements date back to the sixteenth century. The modern, secular NGO movement has its origins in the Red Cross, begun in the 1860s. Advocacy NGOs may trace their antecedents to the antislavery movement of the nineteenth century.

NGOs have various goals, activities, positions, and structures. The main sectors of civil

society involved in global development finance are development NGOs, environmental NGOs, organized labor, policy research institutes, and religious bodies (principally Protestant and Roman Catholic churches). This diversity makes it difficult to define the universe of NGOs, and thus to measure their size and impact. But despite this lack of precision, there is little doubt that the number of people and organizations involved in international development activities has grown substantially.

In the 1970s, NGOs had only a marginal role in development (Fowler 2000). NGOs became more important with the debt crisis of the 1980s, and their numbers have mushroomed in the past decade (Edwards 2001; Zaidi 1999). The *Yearbook of International Organizations* (Union of International Associations 2001) reports that the number of international NGOs increased by about 50 percent from the early 1990s. Increases have been particularly steep in groups working on global issues, such as human rights, the rights of women, the environment, and poverty. Several forces explain the growth of international NGOs. Globalization has heightened concern among citizens of industrial countries regarding events in the developing world—an altruistic response to better and more timely news from abroad and a reflection of the growing importance of developing countries in the global economy.

The NGO movement also gained from growing concern over the effectiveness of aid and state-led development. Failed aid programs led donors to channel more resources through nonstate actors (Smillie and others 1999). More broadly, the collapse of state-led, one-party systems in Eastern Europe and the failure of state direction of the economy in many developing countries—followed by the direct reduction in the capacity of the state from the debt crisis of the 1980s—encouraged donors to channel funds through NGOs. These developments also stimulated the intense reconsideration of development policies. Greater emphasis was placed on social capital, partnership, and shared ownership as keys to sustainability (Edwards 2001). NGOs were viewed as closely in touch with the needs of the poor (Tvedt 1998),[13] so international NGOs became a vehicle for improving aid effectiveness through their contacts with local NGOs in developing countries.

The end of the Cold War and the global expansion of democratic political systems have increased governments' acceptance of NGOs as legitimate international actors. During the Cold War, the potential for civil society groups to have an appreciable impact on the development debate was limited—disputes between communist countries and the West dominated international discussions, and autocratic regimes repressed dissent in developing countries. But the number of countries with open political systems has increased significantly over the past three decades (Freedom House 2003) as the Soviet Union broke up and political systems in Africa, Asia, and Latin America were transformed. Of the 139 countries with ratings from the early 1970s, 44 moved toward greater freedom as defined in the ratings; only 17 deteriorated. As international bodies and domestic politics moved toward allowing freer debate, NGOs have naturally gained a greater opportunity to participate.

Technological innovations also have supported the increasing influence of NGOs. The Internet has facilitated an explosion of information, greatly expanding the ability of groups with limited resources to communicate with like-minded organizations and the general public. E-mail and the Internet have greatly eased the challenge of organizing mass demonstrations.

NGOs allocate a growing amount of assistance to developing countries, using their own resources and those of donors. Although they provided only 0.2 percent of aid in 1970 (Atack 1999), they now provide, from their own resources, about $7 billion—roughly one-seventh of DAC ODA (table 4.7). NGOs in the United States provided more than one-half of the total and (along with Germany) had the highest level of aid relative to gross national income. Grants by NGOs tend to be

Table 4.7 Aid from private voluntary organizations, 2001

Country	$ millions	% of GNI
Canada	116	0.02
France	—	—
Germany	808	0.04
Italy	32	. .
Japan	235	0.01
United Kingdom	327	0.02
United States	4,569	0.04
Total DAC countries	7,289	0.03
Memo item:		
DAC ODA	52,336	0.22

Note: — = not available; . . = negligible. Includes only aid provided from organizations' own resources.
Source: OECD Development Assistance Committee.

Box 4.3 Aid from nongovernmental organizations

The contribution of NGOs to development is difficult to quantify, for several reasons. First, because many of their staff, particularly those working in developed countries, are volunteers, the value of their labor is never measured in money terms. Second, even when they are paid, their compensation may be considerably less than the market value of their services, as in the case of teachers or community workers in developing countries. Third, many of the activities undertaken by NGOs are not strictly developmental in aim, but may promote cultural or recreational activities.

Further difficulties arise in tracking the flow of financial resources. NGOs receive income from private donations, fundraising, investments, donations, and subsidies from national governments and international organizations. International organizations such as the International Committee of the Red Cross receive revenue from their own national branches.

Statistics compiled by OECD's Development Assistance Committee (DAC) cover flows for developmental or humanitarian relief. Data are gathered on three types of flow: contributions made by NGOs from their own resources, contributions by governments to NGOs' own programs, and government aid programs administered by NGOs:

- In contributions made by NGOs from their own resources, DAC member countries have reported about $7 billion annually in recent years—more than half from NGOs in the United States.
- Contributions by governments to NGOs' own programs are reported as a little more than $1 billion annually, but this may underestimate the flows, as a few donors do not report.
- Funds channeled through NGOs, reported by no more than half of donors, are certainly significantly underestimated at the official figure of about $1 billion. In particular, the United States does not report this item, but in 1994 USAID estimated U.S. government contributions channeled through voluntary agencies at $1.7 billion. Including this amount, and allowing for other nonreporting donors, it is likely that the total amount of bilateral aid channeled through NGOs is about $4 billion annually.

Because the three items are additive, total flows for both development and relief handled by NGOs are approximately $12–13 billion annually.

Sources: OECD Development Assistance Committee and USAID.

higher in countries where charitable contributions are tax-deductible—Germany and most of the English-speaking industrial countries (Smillie and others 1999).

The amount of aid channeled through NGOs is more difficult to estimate. Fowler (2000) judges that about 50 percent of NGO expenditures come from governments. DAC estimates, based on incomplete reports, are that NGOs may intermediate about $4 billion annually (box 4.3).

The establishment of well-funded foundations by several super-rich individuals accounts for some of the expansion in private donations to international development. The Bill and Melinda Gates Foundation was established in 2000 with an endowment of $24 billion; through June 2003 it had provided more than $3 billion in grants for global health. Global Funds was recently established to fight diseases, attracting money from governments, private individuals, and corporations.

The corporate sector has become another potential source of private aid. Consumer awareness about development makes messages about ethical international behavior a useful marketing tool: a firm's reputation for social responsibility has, in short, become an important social and economic asset (Micklewright and Wright 2003).

NGO reliance on donor funds

Those NGOs that have expanded their operations on the basis of government funds face several challenges.

First, donor funds can impair NGOs' independence, particularly as many of these organizations began with strong advocacy positions that frequently opposed donor country and multilateral policies. Overreliance on public funds can shift accountability from NGOs' members or clients toward government agencies and thus induce self-censorship (Fowler 2000). Government funding has caused some NGOs to drift away from their original mission and reduce their effectiveness as advocates (Smillie and others 1999).

Second, expansion may challenge NGO effectiveness. International NGOs often have an advantage in carrying out development projects because

of their close association with community-level organizations in developing countries. Their historic advantage is at risk, however, as the scope of their interventions increases and as NGOs are encouraged to expand the scale of projects beyond their native capacities (Zaidi 1999). NGOs have also been heavily involved in community-level institutional development—a time-intensive process. This focus can be lost when donors require short-term results.

Third, the receipt of donor funds forces NGOs to become more professional in their program planning, accounting, and reporting results. At the same time, their credibility with members and other private donors requires that they keep their administrative costs low. As a result, some NGOs have been forced to take contracts simply to cover administrative costs or have engaged in dramatic fund-raising tactics that impair their credibility (Smillie and others 1999).

NGO impact on local projects

Funds provided by international NGOs have had a major role in the explosive growth of local NGOs in developing countries. Some observers claim that the burgeoning number of local NGOs has been entirely driven by foreign funding, giving birth to thousands of NGOs in a matter of a few years (Zaidi 1999). Stiles (2002) notes that international NGOs were largely responsible for the creation of an NGO community in Bangladesh, and Levine (2002) describes the important role of international NGOs in funding Tanzanian conservation programs.

The role of international NGOs in providing and intermediating funds has been subject to some of the same criticisms that have been addressed to official aid. Dependence on international NGOs can stifle debate, as local NGOs fail to object to international NGOs' views for fear of losing funds. Local organizations often must spend an enormous amount of time dealing with demands from international NGOs for reports and evaluations (Smillie and others 1999). Moreover, where the state is weak, NGO activities can weaken government structures by siphoning off competent local professionals and by channeling resources to the provision of services that typically are the government's responsibility (Van Rooy 2002). Reusse (2001) claims that NGOs in Sudan tended to circumvent inefficient state institutions by working directly with beneficiaries, contributing to the erosion of the authority and legitimacy of local government structures. Of course, it is hard to argue that a poorly served population should be denied benefits from NGOs because of the potential impact on already ineffective government agencies. And the provision of services by NGOs, if properly designed and coordinated, can help to strengthen the management of government health services (see Van Rooy 2002 for an example from Zimbabwe). But this experience does underline the potential for dependency on international NGOs.

NGO advocacy

NGOs have played an important advocacy role for decades. Some writers describe a significant expansion in their influence dating from the early to mid-1990s, when NGOs were able to generate public pressure to push through an agreement on greenhouse gases at the 1992 Earth Summit in Rio (Hudock 2000). Thereafter, NGOs sought to mobilize public opinion and to influence decision-makers from the 1995 World Summit for Social Development in Copenhagen (Wildeman 2000). They grabbed headlines with colorful and sometimes violent demonstrations during the 1998 annual meeting of the World Bank and IMF in Berlin and the 1999 World Trade Organization meeting in Seattle (Dawson and Bhatt 2001). It is difficult to gauge the impact of street protests on specific agreements; in some cases the violence of radical groups is seen to have damaged the reputation of the movement as a whole. But there is little doubt that the mass protests have had an appreciable impact on the debate over development issues.

More measurable success has come in single-issue campaigns, through public advocacy and by exerting influence on government and intergovernmental organizations. Jubilee 2000 successfully lobbied for reducing the debt burden of the poorest countries, and hundreds of NGOs worked with the Canadian government to outlaw landmines. In fact, the coordinating NGO won a Nobel Prize for its efforts. NGOs helped to dismantle apartheid in South Africa (Spiro 1995) and played a central role in improving conditions for child laborers in Bangladesh (Edwards 2001). Aston (2001) describes the positive role that NGOs

have played in the United Nations by raising emerging issues, providing expertise, and contributing to the consensus-building process. They have met with considerable success in pushing the World Bank and IMF to increase the transparency of their operations (Birdsall 2002).

The success of NGOs in influencing an array of development issues inevitably raises the issue of whether they are accountable to a broad-based constituency. Several observers criticize the limited accountability of many NGOs to their members. The growing professionalism of NGO staff and their access to information may confer greater autonomy on leaders vis-à-vis boards or members (Tvedt 1998), although this development is common to most organizations. Nuscheler (2001) notes that several major NGOs have hierarchical structures that limit member influence. Many are nonmembership organizations, with even fewer constraints (Spiro 1995).[14] Nevertheless, leadership activities are clearly circumscribed. Outside boards and advisory committees can discipline NGO leadership. Some of the larger NGOs have adopted a strict internal governance structure to reduce or manage disputes. Since the costs of exit are low and no NGO has a monopoly over any issue, members can leave if they object to the leadership. Members of NGOs that are focused on a small set of issues are probably in a better position to monitor and discipline leadership than are voters in democratic states (Wapner 2002).

The issue of accountability to society is murkier. Effective advocacy requires coordination and compromise with other groups (Keck and Sikkink 1998). NGOs involved in or associated with activities that the broader public finds objectionable can see their influence decline. Violence in Seattle and in Washington, D.C., eroded public support for campaigns against the WTO and the multilateral organizations.

NGOs' growing expertise and public recognition have raised their visibility by earning them a voice in U.N. meetings, World Bank decision-making, and various international negotiations. Such connections—like those with fellow NGOs and the broader public—open NGOs to greater scrutiny and evaluation. The most influential depend on an extensive network of members and donors. They are thus likely to be responsive to a host of outside pressures.

Notes

1. OECD will publish data for 2003 in May 2004.

2. External debt relief can improve the macroeconomic environment and free resources to be directed toward development. However, in some cases the debt service forgiven would not have been paid in any event, limiting the benefits in terms of increased resources. The Monterrey Conference urged donors to ensure that resources provided for debt relief do not detract from ODA resources.

3. The data for developing countries as a group do not include Afghanistan or Iraq, for which we lack sufficient information to estimate net flows or the stock of debt. These countries are discussed separately.

4. The countries that will benefit under the Emergency Plan for AIDS Relief are Botswana, Cote d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia.

5. These figures include security-related expenditures that are not counted as ODA under the OECD/DAC definition.

6. Aid flows to the Marshall Plan countries were probably smaller relative to per capita income than aid flows to Sub-Saharan Africa are today.

7. See *Global Development Finance* 2002 for a discussion. Bulir and Hamann (2003) provide further evidence of the volatility, and to some extent the pro-cyclicality, of aid.

8. Except where other citations are specifically given, this overview of the PRSP process relies on World Bank (2003c).

9. The definition of poverty-reducing expenditures varies across countries, although many countries include primary education and basic health, as well as expenditures for rural development. Country-specific definitions can be found in World Bank (2003b), appendix table 5.

10. These include Algeria, Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ethiopia, Gabon, Ghana, Kenya, Mali, Mozambique, Nigeria, Rwanda, Senegal, South Africa, and Uganda. Ghana and South Africa will be the first to be reviewed.

11. The 27 countries include 19 that have yet to reach the completion point (Cameroon, Chad, Democratic Republic of the Congo, Ethiopia, The Gambia, Ghana, Guinea, Guinea-Bissau, Guyana, Honduras, Madagascar, Malawi, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, and Zambia) and 8 that have reached the completion point (Benin, Bolivia, Burkina Faso, Mali, Mauritania, Mozambique, Tanzania, and Uganda). See World Bank (2003b) for a description of the HIPC Initiative process.

12. We use the term "nongovernmental organizations" to refer to foundations, advocacy groups, and agencies administering development programs. See Vakil (1997) for a discussion of alternative definitions.

13. Tvedt (1998) also finds mixed evidence of the ability of NGOs (compared with government, for example) to reach the poor.

14. Here, as elsewhere in discussing NGOs, it is hard to generalize. For example, some membership NGOs do elect their leadership, including Amnesty International and the Sierra Club.

References

Addison, Tony, and S. Mansoob Murshed. 2001. "From Conflict to Reconstruction: Reviving the Social Contract." WIDER Discussion Paper 2001/48. World Institute for Development Economics Research, United Nations University, Tokyo.

Alesina, Alberto, and David Dollar. 1998. "Who Gives Foreign Aid to Whom and Why?" NBER Working Paper 6612. National Bureau of Economic Research, Cambridge, Mass. June.

allAfrica. 2003. "SA, Ghana First to Be Reviewed by NEPAD." South African Press Association. July 25.

Aston, Jurij Daniel. 2001. "The United Nations Committee on Non-Governmental Organizations: Guarding the Entrance to a Politically Divided House." *European Journal of International Law* 12(5): 943–62.

Atack, Iain. 1999. "Four Criteria of Development NGO Legitimacy." *World Development* 27(5): 855–64.

Birdsall, Nancy. 2002. "Global Finance: Representation Failure and the Role of Civil Society." In Jan Aart Scholte with Albrecht Schnabel, eds., *Civil Society and Global Finance*. Warwick Studies in Globalization. London: Routledge.

Birdsall, Nancy, Isaac Shapiro, and Brian Deese. 2003. "How Significant Are the Administration's Proposed Increases in Foreign Development Aid?" Center for Global Development/Center on Budget and Policy Priorities, Washington, D.C.

Brainard, Lael, and Allison Driscoll. 2003. "Making the Millennium Challenge Account Work for Africa." Brookings Institution, Washington, D.C.

Bulir, Ales, and A. Javier Hamann. 2003. "Aid Volatility: An Empirical Assessment." IMF Staff Paper 50(1). International Monetary Fund, Washington, D.C.

Burnside, Craig, and David Dollar. 1997. "Aid Spurs Growth—in a Sound Policy Environment." *Finance & Development*. December.

Collier, Paul, and Anke Hoeffler. 2002. "Aid, Policy, and Growth in Post-Conflict Societies." World Bank Policy Research Working Paper 2902. Washington, D.C. October.

Dawson, Thomas C., and Ghita Bhatt. 2001. "The IMF and Civil Society: Striking a Balance." IMF Policy Discussion Paper 01/2. International Monetary Fund, Washington, D.C. September.

Demekas, Dimitri G., Jimmy McHugh, and Theodora Kosma. 2002. "The Economics of Post-Conflict Aid." IMF Working Paper 02/198. International Monetary Fund, Washington, D.C.

DFID (U.K. Department for International Development). 2002. Results of the Survey of Bilateral Donors. Mimeo. London.

———. 2003a. "International Finance Facility." London. January.

———. 2003b. "International Finance Facility—A Technical Note." London. February.

Droeze, F. H. 2002. "Selectivity and Allocation Policies for Dutch Bilateral Aid." Policy Planning Unit, Ministry of Foreign Affairs, Government of the Netherlands. Processed.

Edwards, Michael. 2001. "Edwards Urges Building Constructive Dialogue between IMF and Nongovernmental Organizations." *IMF Survey* 30.

Fowler, Alan. 2000. "NGO Futures—Beyond Aid: NGDO Values and the Fourth Position." *Third World Quarterly* 21(4): 589–603.

Freedom House. 2003. "Freedom in the World Country Ratings." www.freedomhouse.org.

Funke, Norbert, and Saleh M. Nsouli. 2003. "The New Partnership for Africa's Development (NEPAD): Opportunities and Challenges." IMF Working Paper 03/69. International Monetary Fund, Washington, D.C. Originally published in "International Country Risk Guide." Political Risk Services.

Hannington, Brian. 1992. "Food for Guns." In Robert Miller, ed., *Aid as Peacemaker: Canadian Development Assistance and Third World Conflict*. Ottawa: Carleton University Press.

Hudock, Ann C. 2000. "NGOs' Seat at the Donor Table: Enjoying the Food or Serving the Dinner?" *IDS Bulletin* 31(3): 14–18.

Karim, Farahnaz, and Gregory Hess. 2001. "Thinking about Aid Management and Peacebuilding in Afghanistan." Peacepath Discussion Paper. Peacepath Consulting, Rome. November.

Kaul, Inge, Isabelle Grunberg, and Marc A. Stern. 1999. *Global Public Goods: International Cooperation in the 21st Century*. New York and Oxford: Oxford University Press.

Keck, Margaret E., and Kathryn Sikkink. 1998. *Activists Beyond Borders*. Ithaca, N.Y.: Cornell University Press.

Lancaster, Carol. 1999. "Aid Effectiveness in Africa: The Unfinished Agenda." *Journal of African Economies* 8(4): 487–503.

Levine, Arielle. 2002. "Convergence or Convenience? International Conservation NGOs and Development Assistance in Tanzania." *World Development* 30(6): 1043–55.

McKinlay, R. D., and R. Little, 1979. "The U.S. Aid Relationship: A Test of the Recipient Need and the Donor Interest Models." *Political Studies* 27(2).

Michailof, Serge, Markus Kostner, and Xavier Devictor. 2002. "Post-Conflict Recovery in Africa: An Agenda for the African Region." Africa Region Working Paper Series 30. World Bank, Washington, D.C.

Micklewright, John, and Anna Wright. 2003. "Private Donations for International Development." U.N.-Wide Project on Innovative Sources for Development Finance, New York.

NEPAD. 2003. "African Peer Review Mechanism Organization and Processes." NEPAD Secretariat, Pretoria.

Nielson, Poul. 2002. Extracts of a Conversation in Rollnick, Roman, and Jay Newton-Small. "US-EU: A Major Commitment." *Earth Times*. March 18.

———. 2003. "Financing for Development—the Role of the European Union in Development Assistance and in Increasing ODA." *United Nations Chronicle* no. 2. http://www.un.org/Pubs/chronicle/2003/issue2/0203p66.html.

Nuscheler, Franz. 2001. "NGO Scene in the Twilight Zone: Is the Honeymoon Over?" *Development and Cooperation* 6 (November–December): 8–13.

OECD (Organisation for Economic Co-operation and Development). 2003. *Annual Report on Development Cooperation*. Paris.

Office of the President. 2003. "Fact Sheet: The President's Emergency Plan for AIDS Relief." http://www.whitehouse.gov/news/releases/2003/01/20030129-1.html. January.

Reusse, Eberhard. 2001. "NGOs at the Crossroads: A Proposal for a Future NGO Strategy." *Development and Cooperation* 6 (November–December): 18–20.

Smillie, Ian, and Henny Helmich, with Tony German and Judith Randel. 1999. *Stakeholders: Government-NGO Partnerships for International Development*. Paris: OECD.

Spiro, Peter J. 1995. "New Global Communities: Nongovernmental Organizations in International Decision-Making Institutions. *Washington Quarterly* 118(1): 45–56.

Stiles, Kendall. 2002. "International Support for NGOs in Bangladesh: Some Unintended Consequences." *World Development* 30(5): 835–46.

Tvedt, Terje. 1998. *Angels of Mercy or Development Diplomats? NGOs and Foreign Aid*. Oxford: James Curry.

U.S. Department of State. 2003a. "Millennium Challenge Account: Frequently Asked Questions." http://www.mca.gov/.

U.S. Department of State. 2003b. "Patterns of Global Terrorism." http://www.state.gov/s/ct/rls/pgtrpt/2002/.

Union of International Associations. 2001. *Yearbook of International Organizations*. Munich: K.G. Saur.

Vakil, Anna C. 1997. "Confronting the Classification Problem: Toward a Taxonomy of NGOs." *World Development* 25(12): 2057–70.

Van Rooy, Alison. 2002. "What Next? Civil Society's Prospects in a World of Global Finance." In Jan Aart Scholte with Albrecht Schnabel, eds., *Civil Society and Global Finance*. Warwick Studies in Globalisation. London: Routledge.

Wapner, Paul. 2002. "Defending Accountability in NGOs." *Chicago Journal of International Law* 3(1).

Wildeman, Caroline. 2000. "The Missing Link: The Role of Civil Society in the Development Process." *Development* 43(2): 36–39.

World Bank. 2000. *Can Africa Claim the 21st Century?* Washington, D.C.: World Bank.

———. 2003a. "Supporting Sound Policies with Adequate and Appropriate Financing." World Bank, Washington, D.C.

———. 2003b. "Heavily Indebted Poor Countries (HIPC) Initiative—Status of Implementation." World Bank and IMF, Washington, D.C.

———. 2003c. "Poverty Reduction Strategy Papers: Progress in Implementation." IDA/SecM2003-0468. Washington, D.C.

———. 2003d. *Global Development Finance*. Washington, D.C.

Zaidi, S. Akbar. 1999. "NGO Failure and the Need to Bring Back the State." *Journal of International Development* 11, 259–71.

5

Financing Developing Countries' Trade

TRADE FINANCE—OR LOANS TIED directly to international trade transactions—make an important contribution to development. Developing countries' international trade (exports plus imports) is equivalent to about one-half of their gross national income; finance and related services (document preparation, management of transactions, risk insurance) play a critical role in supporting that trade. These services are perhaps even more important for international than domestic trade, because lack of familiarity with foreign firms and legal systems tends to raise the risk of international trade.

Trade finance supplies the liquidity necessary for efficient trade. Traded goods stand as security for banks and other firms, thus enabling less creditworthy and poorer countries to expand their access to international loans. Trade finance also can help countries grow rapidly out of crises by exporting. Indeed, the World Trade Organization was directed at its Fifth Ministerial Meeting in Cancún to contribute to efforts to maintain trade finance during crises.

A host of intermediaries and guarantors are active in supporting trade finance, including commercial banks, goods-producing firms, official export credit agencies, multilateral development banks, private insurers, and specialized firms.

Trade finance is provided in various forms. Direct forms include loans to finance purchases, prepayments by buyers, and delayed payment by sellers. Indirect support comes in the form of insurance, guarantees, and lending with accounts receivable as collateral.

In this chapter we discuss the growing importance of trade finance, showing how less creditworthy countries have increased their access to finance by linking transactions to international trade. The main messages that arise from this analysis are:

- Participation in international trade can help less creditworthy countries and firms expand their access to finance. Banks are more willing to lend when traded goods are available as security. Suppliers and customers are more willing to extend credit to firms with which they have a commercial relationship, because the information gained through commercial interactions is useful in evaluating creditworthiness. Firms involved in international trade, and foreign-owned firms, serve as intermediaries that pass on credit to firms (particularly in poor countries) that lack direct access to international finance—a fact that underscores the importance of open trade and investment regimes to widening access to finance.
- Trade finance to developing countries rose sharply during the 1990s—for the most part before the Asian economic crisis of 1997–98. Commitments from commercial banks may have increased fourfold; the exposure of export credit agencies and private insurers rose by a third; and trade credit from firms was relatively stable.
- Trade credit from suppliers and customers was more resilient during crises than was trade finance from banks. Export credit agencies' exposure declined after crises, probably due to a drop in demand, but recovered rapidly.
- Governments can support trade finance by ensuring a sound and efficient financial system. Steps governments can take to strengthen

trade finance include providing legal standing for electronic documents (to facilitate more efficient letters of credit) and for the assignment of receivables (to encourage factoring).

Evolution in the sources, magnitude, and methods of trade finance

Trade finance is provided by commercial banks, official export credit agencies, multilateral development banks, insurance firms, suppliers, and purchasers. While the sources of trade finance are plain enough, the data available from each source suffer from limitations that make it impossible to estimate the global amount of external trade finance provided to developing countries. For commercial banks, for example, only a subset of developing countries' external borrowing is identified by purpose, and of that, only data on commitments (not disbursements, repayments, or the stock of debt) are reported. Official export credit agencies and private insurers report their exposure, but these data have some overlap with bank lending, since it is impossible to distinguish between bank loans that are guaranteed or insured and those that are not. The data on trade credit from suppliers and purchasers are taken from incomplete surveys that do not distinguish between international and domestic sources of finance. Therefore, rather than attempt to provide an estimate of trade finance to developing countries, we focus on the evolution over time of each of the different sources.

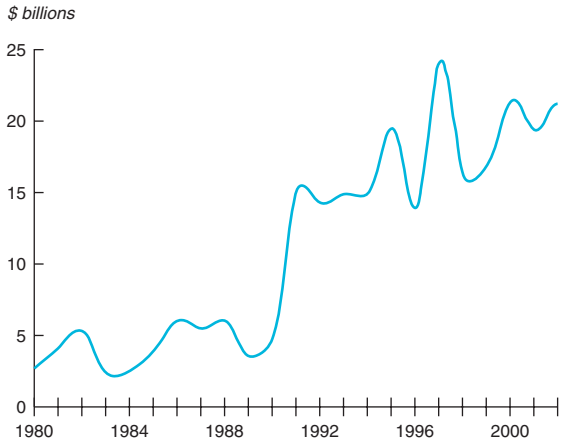
All in all, it appears that trade finance provided by commercial banks, and trade credit from suppliers and creditors, expanded significantly prior to the East Asian crisis of 1997–98. Trade finance collapsed with the crisis; thereafter trade finance from banks and support from export credit agencies and private insurers resumed their upward trend with the expansion of developing countries' trade, while trade credit from firms stagnated.

Trade finance from commercial banks

The available data on trade finance from commercial banks, based on publicly reported transactions, have mirrored trends in overall bank lending since the early 1980s.[1] Trade finance commitments roughly tripled from the mid-1980s to the early 1990s, peaking immediately before the East Asian crisis (figure 5.1). In part, this experience reflected the overall surge in developing countries' trade and in commercial bank lending until 1997; in part, a shift in bank lending toward trade finance. The share of trade finance in bank lending commitments has been subject to considerable cyclical fluctuation; on average it has risen by 11 percent a year since the early 1980s (figure 5.2).

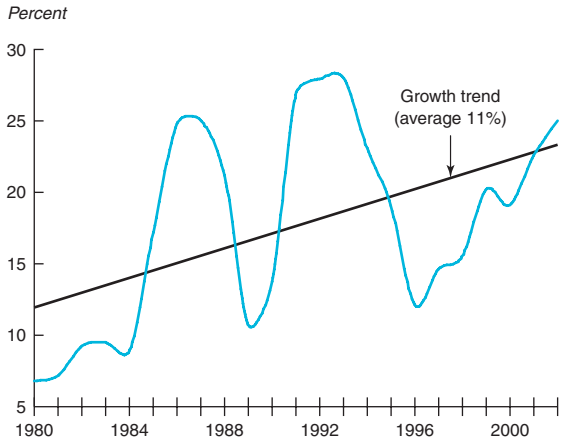
Trade finance commitments reported by Loanware were $21 billion in 2002, or about 25 percent of total commitments. The Loanware database provides a sense of the growth of trade

Figure 5.1 Trade finance from market-based sources, 1980–2002



Sources: World Bank and Dealogic Loanware.

Figure 5.2 Share of trade finance in total bank lending, 1980–2002



Sources: World Bank and Dealogic Loanware.

finance to developing countries, but it does not include all trade finance transactions. For example, bilateral financing arrangements that are not publicly announced are not captured. Thus the data understate the actual level of trade finance.[2] Also, the Loanware database includes information on commitments but not on actual disbursements or repayments, making it impossible to reliably calculate stocks or flows. If the share of trade finance in Bank for International Settlements claims on developing countries is the same as the share of trade finance in Loanware commitments to developing countries, then the stock of outstanding bank claims on developing countries related to trade finance would be on the order of $300 billion, or about one-sixth of developing-country imports. As far as the coverage of imports is concerned, this would exclude direct loans from official agencies and trade credit provided by suppliers and purchasers.

The average spread on trade finance transactions has declined significantly over the past 20 years in response to general trends in developing countries' borrowing and structural changes in trade finance. Spreads hit a peak of more than 700 basis points in the mid-1980s, when major developing-country borrowers were mired in debt. Spreads fell to 400–450 basis points in 1990–92, and to a low of about 150 basis points with the boom in commercial bank lending to developing countries before the East Asian crisis. The fall in spreads may also have been in response to the decline in the use of letters of credit and other forms of documentation (box 5.1). Spreads on trade finance transactions do not appear to differ greatly from spreads on other bank lending. For a sample of 10 countries

Box 5.1 The decline in documentation requirements for trade finance loans

One incentive for tying financial transactions to trade, as opposed to general lines of credit or unsecured bonds, is that the traded goods can provide some security for the loan. Complicated arrangements have evolved over the past centuries to balance the lender's desire for security in trade finance transactions with the borrower's need for liquidity. The principal vehicle used is the documentary letter of credit, which accounts for 45 percent of all import-export fulfillment transactions (Handal 2001). Under the letter-of-credit system, the importer requests a local bank (the issuing bank) to open a letter of credit in favor of the exporter. A bank in the exporter's country (the nominated bank) pays the exporter on the strength of documents showing that the goods have been shipped and conform to the terms of sale. The nominated bank then sends the documents to the issuing bank for reimbursement. The importer then collects the documents, presents them to the carrier, and takes delivery of the goods. Letters of credit provide liquidity, allow each party to deal with counterparts in its own jurisdiction, reduce the exporter's exposure to the risk of the importer's insolvency or nonpayment, and reduce the importer's risk of paying for goods that do not meet the contract specifications. On the other hand, the time required for the shipping and review of documents can be substantial: one-half to two-thirds of documents tendered are inconsistent with the credit terms and are rejected when first presented (Laryea 2001). And any process that relies on documentary evidence is subject to fraud, such as counterfeiting of documents.

Globalization is reducing the use of cumbersome documentation in trade finance. The share of world trade occurring through cross-border production networks, where multinationals produce each stage of a final good in a different location, has grown significantly (World Bank 2003). The long-term relationships required for network production reduce the need for many of the security arrangements, such as letters of credit, historically used in trade finance. Trade finance transactions relying on conventional documentary procedures have fallen from 91 percent of all transactions in the late 1980s to 32 percent over the past five years (see box table).

Moreover, where letters of credit are still necessary, there is substantial potential for shifting to automated systems. Simple transfer of documentation from paper to the Internet is estimated to save exporters up to 10 days on preparation and delivery of documents—leading to faster payment, earlier access to funds, and reduced administrative costs (Anonymous 1999). Even more promising is the potential to use the Internet to provide a mirror image of the physical supply chain (Ivey 2002). Through the Internet, banks, traders, and transport companies could be tied into a seamless, automated, end-to-end business process (Kreitman 2001) in which credit would be granted and repaid at precisely the moment of shipment and receipt

Box 5.1 *(continued)*

of goods. Such a system could reduce substantially the huge amount of working capital tied up in the inventory supply chain. It also could squeeze costs—just as resource-planning systems did for internal business processes during the 1980s and 1990s.

However, significant barriers confront the transfer to online systems: (a) trade finance documentation is not standardized, reducing the potential savings from switching to online systems; (b) in some developing countries, government regulations require that documents need a stamp in order to have legal standing (Marlin 2003); (c) encryption technologies, and the procedures guarding access to passwords, would have to be adequate to ensure the authenticity of documents; (d) telephone line stability and transmission speed, and the availability of Internet service providers, may not be adequate in many developing countries (Loong 2002); and (e) the process of education in using electronic letters of credit is likely to take some time and result in steady growth rather than immediate, widespread adoption (Taylor 2002).

Several companies have offered Internet-based systems to replace trade documentation, to help evaluate credit risk, and to support the provision of trade credit at various points in the supply chain (Gamble 2001). And progress is being made in defining standard documents. For example, the International Chamber of Commerce has issued a supplement to its Uniform Customs and Practices, called eUCP, defining the rules for issuance and acceptance of electronic trade documents (Marlin 2003). Nevertheless, the extent to which online systems are supplanting paper transactions is unclear. Lee (2001) anticipated that letters of credit would be replaced, perhaps totally, in a very short time. On the other hand, Gamble (2001) believed it was too early for Internet-based trade finance providers to have significant market penetration, and Ivey (2002) viewed their market share as negligible.

Modes of commercial-bank trade finance, 1980–2002

Percent

Mode	1980–85	1986–90	1991–95	1996–2002
Conventional documentation	77	91	62	32
Term loans	12	8	33	62
Revolving credits	9	1	5	5
Other	2	0	0	1

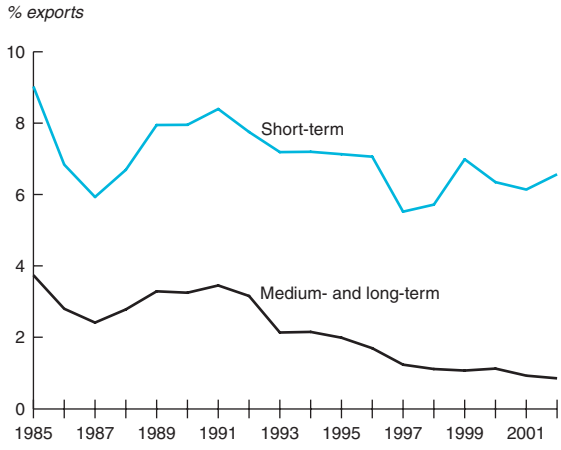
Source: Dealogic Loanware.

where comparable transactions could be identified, trade finance spreads averaged 28 basis points lower than spreads on other bank loans over 1996–2002.[3] However, this data excludes fees, which may be particularly significant in trade finance.

Trade finance from export credit agencies and the private insurance market

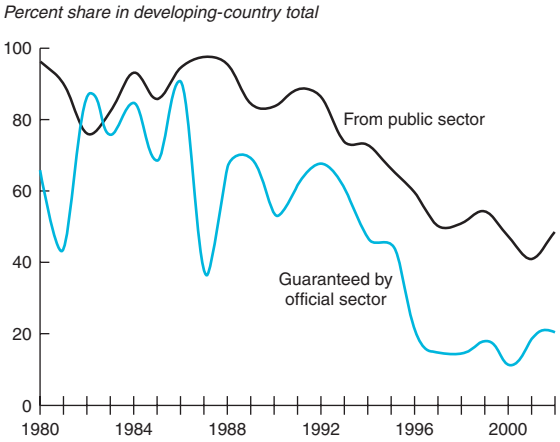
The stock of trade finance from export credit agencies (including guarantees, insurance, and government-backed loans) and from the private insurance market increased over the 1990s. The International Union of Credit and Investment Insurers (Berne Union) reports that the stock of loans and guarantees by member organizations rose from $375 billion in 1990 to $500 billion in 2002[4]—a decline from about 11 percent of member countries' exports in 1990 to 7 percent by 2001 (figure 5.3).[5] Of this amount, the role of export credit agencies

Figure 5.3 Business covered by export credit agencies and private insurers in Berne Union member countries, exports of 1985–2002



Source: World Bank staff estimates using Berne Union data.

Figure 5.4 Trade finance for developing countries from public sector or guaranteed by official sector, 1980–2002



Source: World Bank staff estimates based on Dealogic Loanware data.

has declined relative to the private insurance companies. Private insurance companies account for nearly half of new commitments by international credit and investment insurers ($6.7 billion in 2002), from a base of close to zero in the early 1990s. The apparent rise of private insurers is bolstered by data showing that the share of developing countries' trade finance covered by creditor government guarantees, and the share going to the public sector, have fallen by more than 50 percent since 1990 (figure 5.4). While the Berne Union does not report exposure by country, the Organisation for Economic Co-operation and Development (OECD) reports export credit agencies' coverage of medium- and long-term flows to developing countries, which averaged $36 billion from 1990 to 2001.[6]

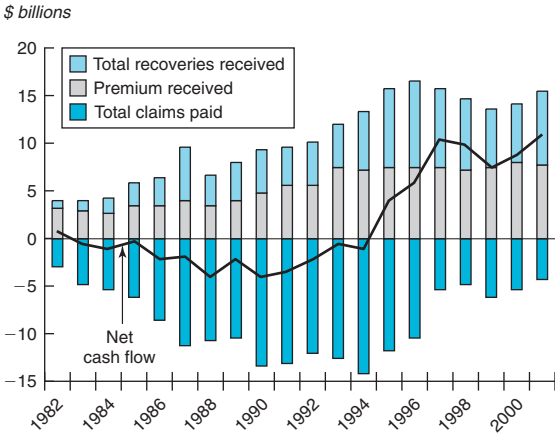
The growth in private insurance in the 1990s. As the private insurance market has become increasingly sophisticated in analyzing and mitigating political risk, the need for guarantees from official export credit agencies has diminished (Stephens 1999). At the same time, a wave of privatizations in emerging markets has shifted export risks from a sovereign to a commercial footing. The International Monetary Fund (IMF 2001) estimates that between 85 and 95 percent of short-term credit insurance business within and beyond the European Union is now underwritten by private insurers—without the involvement of governments. The big players, including AIG, Lloyd's of London, Sovereign Risk Insurance Ltd, Zurich Emerging Market Solutions, and Chubb, are now offering longer policy terms and increased project capacity. The increase in the number of foreign insurers in domestic insurance markets in developing countries, such AIG in China, provides these large insurance companies with on-the-ground information about market conditions and improved risk assessment.

Private insurers may have an advantage over official export credit agencies in being able to respond quickly, providing quotes in days and insuring against large risks within weeks, as opposed to months or years for official agencies (Mackie 2003). While export credit agencies are believed to be cheaper on ratings in certain categories, they may be more expensive in pricing a package of risks or a multicountry program (James 2001). This is because the private insurers are in a better position to offer discounts for large volumes and for diversified exporters. In addition, private insurers generally are better able to offer coverage for a wide variety of risks (such as business interruption, license-cancellation coverage, and contingency risks) than are export credit agencies.

However, the private insurance sector is still heavily skewed toward short-term export credit. In the medium- to long-term business, private insurers constitute only 0.2 percent of new commitments by Berne Union members. Also, for the large private insurers, growth over the past decade has been affected by a range of developed-country shocks (such as substantial claims from September 11, the collapse of equity prices, and low interest rates) that have affected both claims and investments but have not affected export credit agencies as directly.

The decline of export credit agencies. The relative decline in the activity of export credit agencies has been due to several factors. In the 1980s and early 1990s, export credit agencies experienced considerable losses on their portfolios in developing countries. As a result, the total net cash flows of Berne Union members was strongly negative during the period. Subsequent initiatives and international agreements (including the World Trade Organization's Agreement on Subsidies and Countervailing Measures and the 1999 Knaepen Package[7]) have attempted to strengthen the solvency of these agencies, factoring in requirements such as minimum country-risk-premium ratios. This, together with the entry of private insurers, has led to a rise in net cash flow for Berne Union members from −$4 billion in 1990 to $11 billion by 2001 (figure 5.5). At the same time, pressures to eliminate

Figure 5.5 Net cash flow from Berne Union members, 1982–2001



Source: Berne Union.

tied aid and to prevent lending from having undesirable economic consequences have restricted the type of activities export credit agencies can support (box 5.2).

Trade finance from multilateral organizations

The multilateral development banks have sought ways to support trade finance transactions and help insulate developing-country trade from the paralyzing effects of financial crises. They undertake a host of projects related to international trade, including research, advice on trade policy, assistance with trade negotiations, loans to finance trade-related infrastructure, and technical assistance to strengthen institutions that support trade. Here we are concerned only with finance for international, private sector trade transactions by the major multilaterals lenders. Their trade finance operations take various forms, among them guarantees of trade instruments issued by local banks and loan facilities on-lent through commercial banks.

In the 1980s, the World Bank was heavily committed to trade finance loans, primarily lines of credit to private sector firms engaged in international trade, with state-owned development banks as intermediaries. This lending peaked in the second half of the 1980s at $700 million. However, poor financial sector development and repayment records by enterprises have since caused a substantial decline. The Bank's trade finance projects now support insurance schemes to foster the development of domestic financing capacity, such as regional trade facilitation projects for seven countries in Sub-Saharan Africa (Tang 2003).

The International Finance Corporation (IFC) provides trade finance facilities to boost long-term economic development and to increase foreign-exchange liquidity during crises. Various interventions are used, depending on country circumstances. For example, IFC may guarantee a percentage of international banks' exposure related to confirming letters of credit, booking acceptances, or purchasing trade-related notes issued or guaranteed by local banks. Or IFC may extend credit lines for trade finance directly to local banks, or provide financing to exporters (backed by receivables or securitized exports). IFC-supported trade finance packages to countries hit by crisis totaled about $1 billion in 2003 (Brujis 2003).

The Trade Facilitation Programme of the European Bank for Reconstruction and Development (EBRD) provides guarantees against the political and commercial risk of transactions undertaken by issuing banks. Among other instruments, guarantees cover letters of credit, advance payment guarantees and bonds, bills of exchange and trade-related promissory notes, and bid and performance bonds. The program can be used for trade transactions associated with exports from, or imports to, the EBRD's countries of operation. More than 70 issuing banks in these countries participate, together with 440 cooperating banks throughout the world. The EBRD also extends to banks short-term loans that are on-lent to local companies to provide the working capital necessary to fulfill foreign trade contracts. Since the relaunch of its Trade Facilitation Programme in 1999, the EBRD has guaranteed and financed approximately 1,300 trade transactions totaling more than 900 million euros (EBRD 2003).

The Asian Development Bank's (ADB) Trade Finance Facilitation Program provides guarantees to facilitate local banks' access to short-term trade facilities from international banks, including instruments such as letters of credit, standby letters of credit, and bankers' acceptances. The program also provides short-term loans to local banks that on-lend funds to private sector firms involved in international trade (ADB 2003).

The multilateral development banks have used these facilities to support emerging markets in crisis. For example, in 1998 the ADB provided finance to the Thai Export-Import Bank, including

Box 5.2 Social responsibility and export credit agencies

In the past decade export credit agencies have moved decisively to limit corruption, guard against adverse environmental impacts, and avoid financing nonproductive projects. The move has come in response to increased public scrutiny of their activities and to demands from nongovernmental organizations that the agencies increase transparency and adopt binding environmental and social guidelines and standards (Maurer and Bhandari 2000; ECA Watch 2003).[a] These efforts have helped ensure that lending by export credit agencies contributes to borrowers' growth, a prerequisite for sustainable borrowing. They also have contributed to the decline in commitments. Export credit agencies have taken steps in the following areas to improve the social responsibility of their guarantee programs:

- *Tied aid.* Tied aid—trade-related aid credits provided by donor governments for public sector projects in developing countries, conditioned on the purchase of equipment from suppliers in donor countries—fell from 15 percent of net official development assistance in 1991 to 3 percent in 2000 ($1.8 billion, a 20-year low). The 1991 Helsinki Package placed constraints on export credit agencies by limiting the provision of tied aid to "non-commercially viable" projects with genuine development objectives and characteristics, and by mandating that at least 35 percent of tied aid be provided on concessional terms.[b]
- *Transparency.* Export credit agencies have been criticized for their lack of transparency in decision-making (Maurer and Bhandari 2000). Some export credit agencies are now setting out their business principles and reporting publicly on their comparative position in terms of coverage, pricing, and products offered (ECGD 2003). Many now publish on their Web sites information about the exports and projects they support (Godier 2003).
- *Anti-corruption and good governance.* In May 2003, the OECD Working Group on Export Credits and Credit Guarantees proposed measures to stamp out bribery in transactions supported by official export credits. The OECD proposals would require export credit agencies to inform all applicants requesting export credits of the legal consequences of bribery in international business transactions. They also would oblige applicants to declare that neither they nor anyone acting on their behalf have been engaged in or will engage in bribery.
- *Environmental and social impact.* Most members of the OECD's Export Credits and Credit Guarantees group agreed in 2001 to implement common approaches to environmental issues. Members are now required to screen and review the environmental impact of exported capital goods and projects supported by export credits, including their potential impact on the generation of significant air emissions, effluents, waste, or noise; significant use of natural resources; and the resettlement of indigenous and vulnerable groups. The new requirements are most likely to affect projects supported by export credit agencies, but support for "nonproductive" exports—notably armaments—also has become an important issue. The G-7 has called for stronger measures by the OECD against the practice of using export credits to help poor countries buy arms and other nonproductive items (de Jonquieres, Tett, and Fidler 2000).

a. See chapter 4 for a discussion of the increasing influence of nongovernmental organizations on development activities, and UNIDO (2002) for a discussion of the growth of corporate social responsibility.
b. The requirement of noncommercially viable projects was included to ensure that tied aid would be additional to otherwise available external resources; in other words, that bilateral funds would be used for projects that offered potentially large external benefits but lacked the ability to generate sufficient financial returns to make them eligible for commercial financing.

a $50 million loan and a partial guarantee for a $950 million syndicated loan from international banks. Draw-down of the funds was modest, partly due to the high margins charged by the intermediating banks and partly because the liquidity of the banking system improved faster than expected. The EBRD program was used to support the Russian Federation's recovery from its 1998 crisis. IFC has supported trade financing, in various forms, to banks lending to the Republic of Korea, to Brazilian banks, and to Indonesian and Argentinian exporters. During the recent crisis in Brazil, IFC provided $630 million in trade credit to leading Brazilian banks, which supported $1 billion of export activity and helped to restore confidence during a period when trade lines were shrinking. In 2003 the Inter-American Development Bank lent $110 million to Banco Bradesco to improve access to trade finance for Brazilian companies. These initiatives increased liquidity and may have helped to ease risk perceptions (IMF forthcoming).

Trade credit from suppliers and customers

Finance provided by a supplier or customer (referred to as "trade credit") generally comes in the form of extended payment terms offered by a supplier to its buyer (supplier's credit), or prepayment by a customer to its supplier (customer's credit). Pervasive in modern economies, both forms of short-term arrangements are used to finance domestic and cross-border trade.

Firms offer trade credit to their customers for various reasons. First, suppliers' knowledge of their customers and the market often allows them to quickly assess a change in their creditworthiness (Mian and Smith 1992; Jain 2001).

Second, depending on market structure, a suppliers' threat to cut off future supplies in the event of default may be more credible, and more influential, than a financial institution's threat to foreclose (Cunat 2000). In common law countries, suppliers can repossess goods more easily than banks can seize collateral (Frank and Maksimovic 1998); they are often better able to value and sell repossessed goods than banks are to dispose of collateral.

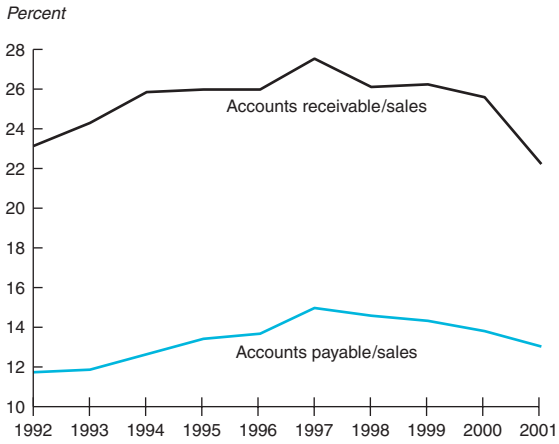
Third, trade credit can be used to practice price discrimination, when discrimination directly through prices is undesirable or illegal. Firms with a high margin between sales and variable costs have a strong incentive to make additional sales without cutting the price to existing customers (Schwartz and Whitcomb 1979; Brennan and others 1988).

Fourth, by separating the exchange of goods from the exchange of money, trade credit substantially reduces the transaction costs involved in paying and administering invoices between suppliers and buyers who regularly exchange goods or services (Ferris 1981).

Fifth, some industries may require trade credit as a guarantee of product quality (Lee and Stowe 1993; Long and others 1993; Emery and Nayar 1998; Deloof and Jegers 1995). In some cases the supplier will willingly extend credit to allow the customer sufficient time to test the product. In other circumstances customers may demand trade credit from their suppliers as an assurance of quality.

Finally, when the bulk of a supplier's sales are to one firm, the supplier will have an incentive to provide finance to secure the survival of the customer when it faces a temporary liquidity problem. When making its decision to extend trade credit, the supplier will also take into consideration the present value of the profit margins on future sales.

Figure 5.6 Evolution of trade credit as a share of sales in developing countries, 1992–2001



Note: Because it is not possible to distinguish domestic trade credit from cross-border trade credit, the trends shown in the figure reflect the change in the aggregate volume of trade credit.
Sources: Worldscope and World Bank (see note 8).

Trade credit is an important source of finance to firms in developing countries. Two measures of trade credit have evolved over time (figure 5.6): (a) trade credit extended by firms, as measured by the share of accounts receivable in total sales; and (b) trade credit borrowed from suppliers, as measured by share of accounts payable in total sales. Both measures reflect the annual average of the firms in the sample taken from the Worldscope database.[8]

Trade credit extended (accounts receivable) by the firms in the Worldscope sample rose from 23 percent of sales in 1992 to more than 27 percent in 1997, before falling back to 25 percent in 2000; thus trade credit covers about 90 days of sales. A similar pattern can be seen in the trade credit accepted (the ratio of accounts payable to sales). The sample firms provided significantly more trade credit than they received. This is not surprising, because the Worldscope database includes the largest and most stable firms in each economy, those most likely to act as financial intermediaries. The fall in the trade credit measures after 1997 is due chiefly to the large drop in the accounts payable and receivable ratios in the Asian crisis countries.

The increase in the use of trade credit before the East Asian crisis probably reflects the increased access to finance of firms in developing countries. The liberalization of capital markets and the deepening of domestic financial systems in many developing countries have increased access

to capital, especially for large, publicly traded companies. This finding of increased access is consistent with a study by Demirguc-Kunt and Maksimovic (2002), which showed that the development of trade credit arrangements between firms complements the development of the banking system. In addition, increased openness to trade may have raised the supply of trade credit in developing countries by increasing trading with firms in more developed financial systems that have greater access to capital than most domestic firms. Finally, the rise in trade credit may be linked to the increased ability of firms in developing countries to sell their accounts receivable for short-term financing, a process known as factoring (box 5.3).

Firms use trade credit when they are not eligible for loans from financial institutions (Petersen and Rajan 1997), and the interest rates on trade credit often are much greater than on loans from commercial banks. Above some level, banks tend to ration credit rather than charge an interest rate that fully compensates it for the risk incurred. Banks do this for two reasons. First, they often find it difficult to judge firms' risk, and, second, charging a very high interest rate will tend to attract risky firms with a high probability of default.

Box 5.3 Factoring

Factoring is the sale of accounts receivable or invoices to a separate company that will collect the debts. The seller immediately receives from the factor a percentage (often 80 percent) of the face value of receivables, speeding up cash flow. The remaining balance minus interest on the 80 percent and the fees to be paid to the factor are transferred to the company once the customer has paid. In addition to finance, factors also provide credit insurance and financial management services.

Factoring can be an attractive source of credit. It is difficult to use accounts receivable as collateral for bank loans in many emerging markets, owing to the absence of laws allowing lenders to secure intangible or floating assets and the inability of judicial systems to enforce such contracts quickly and efficiently. Furthermore, most emerging markets do not have the technological infrastructure or access to commercial credit information necessary to allow this type of financing. However, almost all middle-income countries allow the assignment or sale of accounts receivable to a third party. In addition, factors specializing in a particular industry may be able to pool information on customers from different clients and thus get a better idea of customers' creditworthiness than the producing firm. This role of the factor can be particularly important in reducing risk for firms selling to overseas markets, where they may know little about customers' creditworthiness.

The factor may retain the right to seek full recourse from the client if a customer does not pay its invoice (recourse factoring), or it may assume the credit risk (nonrecourse factoring). The nonrecourse variant is more common. Due to the dearth of historical credit information, however, and the potential for fraudulent behavior (for example, false accounts receivable or nonexistent customers), nonrecourse factoring in emerging markets often poses substantial risk for the factor. An appealing alternative in such countries can be "reverse factoring," where the factor purchases only receivables from high-quality customers. Because the factor's risk is low, it can do without recourse. In effect, reverse factoring enables the company to borrow on the credit risk of its creditworthy customers.

Total worldwide factoring involving international trade receivables increased by 70 percent in 1997–2001, to almost $50 billion.[a] One reason is that more business is now done on open account, increasing the volume of accounts receivable available for financing. Exporters turn to factoring to avoid the expense and burdensome paperwork associated with letters of credit, while continuing to compete for business using attractive trade credit terms. Factoring remains a relatively minor source of credit in emerging markets, however, averaging about 4 percent of exports in the 26 emerging markets for which data are available (see figure). By contrast, in the G-7 countries (France, Germany, Italy, Japan, the United Kingdom, and the United States), factoring averaged 16 percent of exports.

An efficient legal system that protects creditors' rights is important for the development of a factoring industry (Klapper 2000). For example, countries that permit the assignment of receivables and have secured-transaction laws have a greater factoring volume. Making factoring a legally recognized financial product can strengthen its credibility in the eyes of the public, make it easier for courts to enforce contracts, and remove the disadvantage that factoring firms often face compared to banks (value-added taxes are charged on prepayment interest to factors, but not on the interest received on bank loans). Also important for factoring are good credit information and payments systems and the absence of administrative obstacles to obtaining foreign exchange. Credit insurance for

Box 5.3 *(continued)*

International factoring as a percentage of exports in selected countries

Source: Factor Chain International.

factored trade receivables, where available, enables the factor in effect to subcontract risk assessment and credit-risk management. Thus cooperation between factors and export credit agencies can be beneficial for the development of a well-functioning factoring industry.

a. These estimates are from Factor Chain International, established in 1968 as the umbrella organization for independent factoring companies around the world. The members of Factor Chain International represent nearly 60 countries and handle more than 52 percent of international factoring volumes and 44 percent of the total factoring volume.

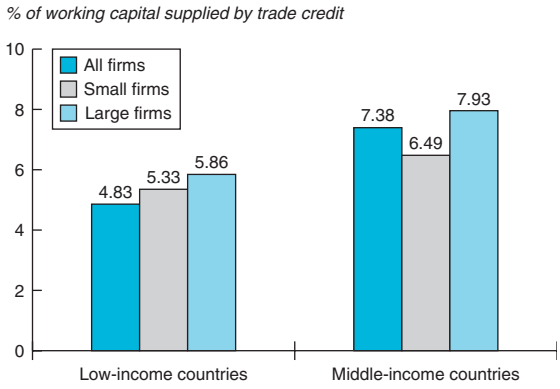
By contrast, suppliers are in a better position to evaluate risk and can thus afford to lend to riskier firms, while charging a high rate of interest.

Suppliers often provide trade credit in the form of a discount for early payment (Wilner 1997; Ng and others 1999). A common contract is a "2–10 net 30" contract, meaning that a customer who pays within 10 days of delivery qualifies for a 2 percent discount. Failure to enjoy the discount for early payment can be considered the interest charge for late payment. If a firm pays on day 30, it has effectively borrowed money for 20 days at an annual interest rate of about 44 percent.[9]

Some firms use trade credit to improve their credit standing, as the seller's extension of credit can signal to a bank that the buyer is creditworthy (Biais and Gollier 1997). Finally, firms using trade credit also benefit from lower transaction costs because the exchange of goods and the exchange of money occur in tandem.

Information from surveys of developing-country firms conducted by the World Bank's Investment Climate Unit between 1998 and 2002 provides further information on the distribution of trade credit during the period.[10] Firms in middle-income countries use trade credit equal to 7.5 percent of their working capital (defined as cash, inventories, and accounts receivable), whereas firms in low-income countries receive trade credit equal to just 5 percent of working capital (figure 5.7). Financial systems in middle-income countries tend to be deeper than those in low-income countries, so firms in the middle-income countries are in a better position to trade with other firms that can provide trade credit. Moreover, in both low- and middle-income countries large firms have more access to trade credit than do small firms, a finding reinforced by evidence from U.S. data that small firms use less trade credit than large ones (Petersen and Rajan 1997). Both findings are

Figure 5.7 Use of trade credit as working capital, by size of firm



Note: Results are based on more than 9,000 responses from firms in 38 countries. Small firms are firms with fewer than 150 employees. As not all firms in the sample disclose the number of their employees, the average use of trade credit by all firms does not necessarily fall between the average of the small and the large firms.
Source: World Bank, Investment Climate Surveys.

consistent with the view that small firms tend to be less creditworthy than larger firms, and that the volume of trade credit is rationed.

Unfortunately the survey does not provide information about the source of trade credit received or the destination of that provided. As such it is impossible to make a distinction between domestic trade credit and cross-border trade credit.

Access of less creditworthy borrowers to trade finance

Participation in cross-border trade has helped less creditworthy borrowers expand their access to international finance, aided by security arrangements that reduce creditors' risk, by the efforts of official export credit agencies to widen market access for creditworthy countries, and by informational advantages that enable customers and suppliers to extend credit where banks are reluctant.

Access to commercial bank loans

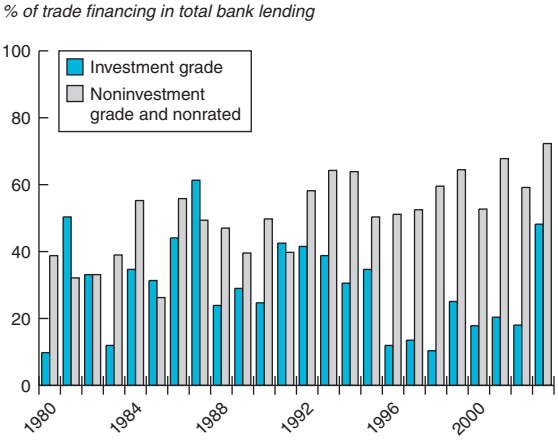
Many low-income and less creditworthy developing countries lack reliable access to commercial banks for many transactions but still can borrow for trade finance.[11] Firms that have established a reputation for reliability in foreign trade may be perceived as more creditworthy than firms selling solely in the domestic market. And international banks are likely to be more familiar with such firms. The rise in outsourcing and in foreign direct investment by multinationals has meant that more firms in low-income countries are either owned by or closely related to multinationals, which can provide references and security for loans. In addition, exporters in low-income countries often enjoy preferential access to foreign exchange and thus may be viewed as better able to service foreign-currency debts than firms producing for the local market.

Another reason why less creditworthy countries may rely more on trade finance than on other forms of bank lending is that trade finance transactions can be structured so that the goods provide security for the loan. Credit may be extended only once goods are received or after the buyer has paid into an offshore escrow account that the lender can access (Coetzee 2003).

Trade finance has thus been able to serve markets that investment bankers have shunned (Kenny and Weston 2003). The new Basel capital accord recognizes the effect of collateral in mitigating the risk of trade finance: short-term, self-liquidating letters of credit arising from the movement of goods are assigned the same risk weighting as short-term claims on investment-grade banks.

Available data indicate that tying borrowing to specific trade transactions can help increase high-risk customers' access to commercial bank loans. In almost every year since 1980, the share of trade finance commitments in total bank lending has been higher for noninvestment-grade or unrated developing countries than for investment-grade countries (figure 5.8). Between 1980 and

Figure 5.8 Trade finance from commercial banks, by investment rating, 1980–2003



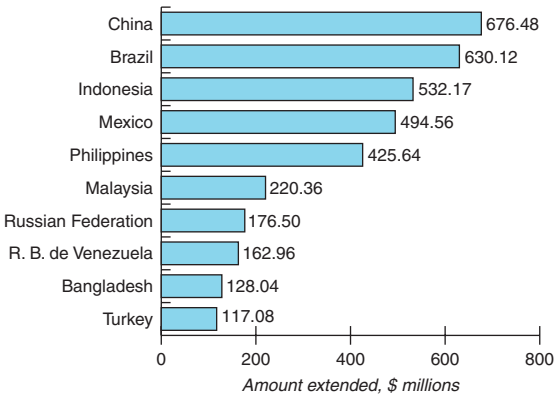
Sources: Dealogic Loanware and World Bank staff estimates.

2003, trade financing accounted for only 13 percent of the total bank commitments of investment-grade countries, about 26 percent of bank commitments for noninvestment-grade countries, and almost 40 percent for countries that carried no credit risk rating. Interestingly, investment-grade countries have experienced a gradual decline in their share of trade finance commitments in bank lending, perhaps reflecting their improved access to credit and reduced need to tie borrowing to specific transactions.

Access to export credit guarantees

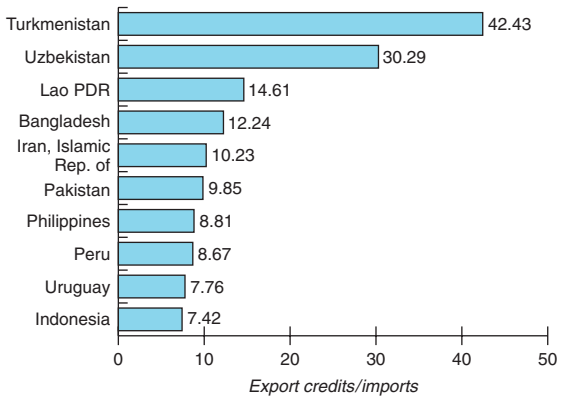
Export credit agencies are an important source of finance for low-income countries. As measured by gross disbursements covered, the middle-income economies have dominated official export credit guarantees to developing countries (figure 5.9).[12] However, considering official export credits as a percentage of imports, noninvestment-grade countries (as defined by their Moody's rating) had the greatest access from 1999 to 2001 (figure 5.10). In relation to the size of their imports, countries such as Bangladesh, the Lao People's Democratic Republic, Turkmenistan, and Uzbekistan were major recipients of loans and guarantees from export credit agencies during that period. In some countries this phenomenon reflects the participation of export credit agencies in projects that are large relative to the size of these economies. But more broadly, it reflects an important mission of export credit agencies—to help their nationals export to high-risk countries.

Figure 5.9 Countries receiving the most official export credits, 1999–2001



Source: World Bank estimates using OECD data.

Figure 5.10 Countries with the highest ratios of export credits to imports, 1999–2001



Sources: World Bank staff estimates using OECD data and Moody's credit rating.

Table 5.1 Ratio of officially supported export credits to imports

Percent

	Export credits/imports
Investment-grade countries	2.22
Noninvestment-grade countries	3.98
Nonrated countries	2.41
Low-income countries	4.02
Middle-income countries	2.78

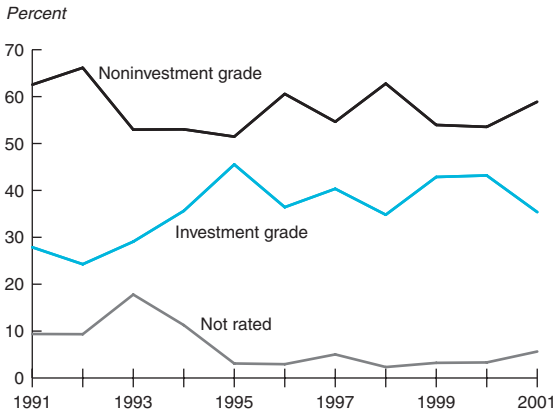
Source: World Bank staff estimates using OECD Development Assistance Committee and World Bank data.

There is some evidence that export credit agencies tend to widen access to credit for less creditworthy countries. Noninvestment-grade countries saw 4 percent of their imports covered by export credit guarantees, compared with only about 2 percent of imports for the investment-grade countries (table 5.1). And noninvestment-grade countries consistently accounted for more than 50 percent of export credits over the 1990s (figure 5.11).

Trade credit and indirect access to the international capital markets

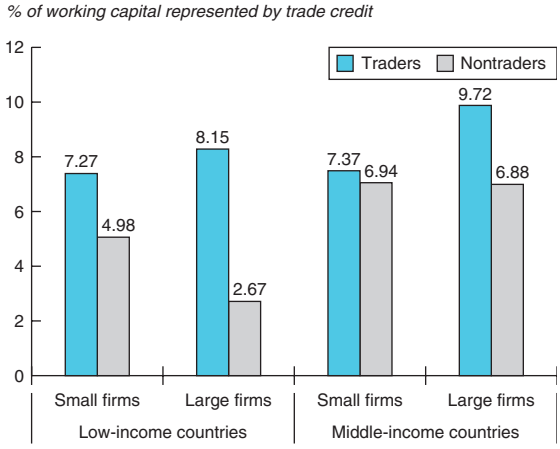
Trade credit from suppliers and customers can help firms in developing countries increase their access to the international capital markets. First, developing-country firms involved in international trade receive trade credit from foreign firms that tap the capital markets for finance. The developing-country firms, in turn, provide trade credit to other firms, thus providing indirect access to finance

Figure 5.11 Ratio of officially supported export credits to imports, 1991–2001



Sources: World Bank staff estimates using OECD data and Moody's credit ratings.

Figure 5.12 Use of trade credit to finance working capital, by type and size of firm



Source: World Bank, Investment Climate Surveys, 1998–2002.

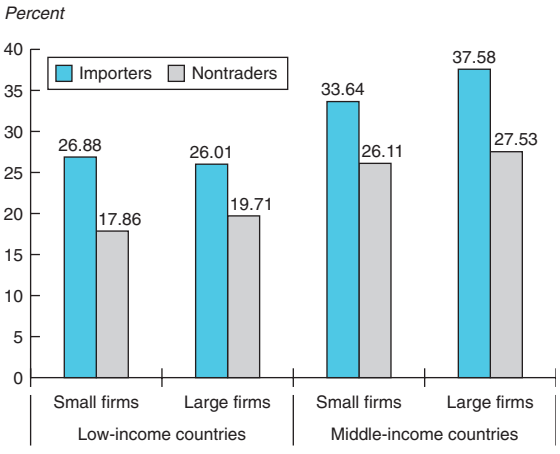
from the international capital markets. Similarly, foreign-owned firms in developing countries face less severe financing constraints than domestic firms; they use their preferential access to finance to provide trade credit to other firms.

Firms involved in international trade use more trade credit than firms that trade only domestically (figure 5.12). The difference between traders and nontraders is much more pronounced among large firms, especially in low-income countries. In low-income countries, for example, large companies involved in international trade finance more than 8 percent of their working capital with trade credit, whereas firms not involved in international trade finance only 2.5 percent of their working capital in that manner. It is not possible to know how much of the trade credit these traders receive is cross-border credit. It is likely that a portion is received from abroad.

To determine whether the link to international capital markets is extended to other firms in the country, we need to focus on importers, as they receive cross-border suppliers' credit while potentially extending trade credit domestically. (Exporters, on the other hand, will extend a large part of their trade credit to foreign firms.) In the low- and middle-income countries alike, importers small and large provide substantially more trade credit than do firms that are not involved in international trade (figure 5.13). Small importers in low-income countries make 27 percent of their sales on credit, compared with 18 percent for small firms not involved in international trade. However, because 52 percent of the importers in our sample also export, we cannot conclude with certainty that trade credit is being extended to domestic firms unless we divide the importers into one group that also exports and another that sells only domestically. Doing this, we see that both groups provide more trade credit compared to the firms that are not involved in international trade (figure 5.14).[13]

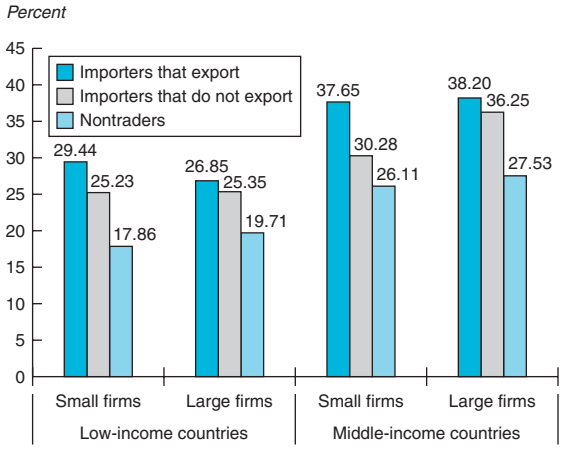
Foreign ownership of domestic firms also can provide indirect access to international finance. Firms that have a foreign company as owner or

Figure 5.13 Percentage of sales on credit, by type and size of firm



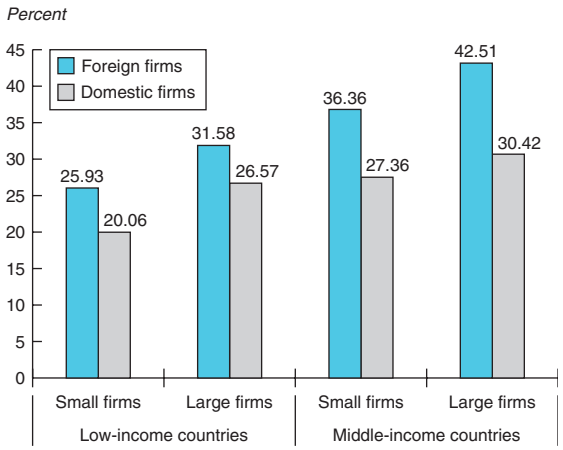
Source: World Bank, Investment Climate Surveys, 1998–2002.

Figure 5.14 Percentage of sales on credit, by type and size of firm



Source: World Bank, Investment Climate Surveys, 1998–2002.

Figure 5.15 Percentage of sales on credit, by type and size of firm



Source: World Bank, Investment Climate Surveys, 1998–2002.

largest shareholder extend more trade credit than do domestic firms in both low- and middle-income countries (figure 5.15). Small foreign-owned firms in low-income countries make, on average, 26 percent of their sales on credit, whereas domestic firms sell just 20 percent on credit. For small firms in middle-income countries these percentages are 36 percent against 27 percent. The results are comparable for the large firms.

The idea that foreign ownership can alleviate the financing constraints of firms in developing countries is confirmed by other questions in the Investment Climate Unit (ICU) firm-level survey. Of domestic firms, 22 percent in middle-income and 24 percent in low-income countries report that access to financing is a major obstacle for the operation and growth of their business. By contrast, only 11 percent of the foreign-owned firms in the low-income countries and 13 percent in the middle-income countries report that they lack access to financing. Among small firms, foreign-owned firms have better access to financing than do domestic firms.

Trade finance in times of crisis

Finance linked to international trade has in some cases been more resilient during crises than other forms of debt finance, owing to various reasons already discussed—the existence of security arrangements linked to traded goods, suppliers' information on their borrowers, suppliers' incentives to support customers during cyclical downturns, and government policies directed at maintaining international trade ties. The degree of resilience, however, has varied from crisis to crisis and from one source of trade finance to another. Complicating the picture is the difficulty of determining whether a decline in trade finance during a crisis reflects creditors' decisions or reduced demand. These issues are explored below with reference to the principal sources of trade finance and related support.

Commercial banks

Banks may be more willing to maintain trade-finance credit lines than other loans during a crisis. First, as stated above, the security arrangements underlying many trade finance transactions reduce risk. Second, because governments are so concerned about maintaining trade ties in times of crisis, the central bank may treat trade finance debt more favorably than general bank credit, allowing firms to service trade finance loans while otherwise blocking access to foreign exchange, or by providing better terms to trade finance loans during debt negotiations. Some early debt restructuring agreements—for example, the Philippines' debt restructuring of the late 1970s and the Mexican and Brazilian crises of the 1980s—excluded short-term lending and provided for the maintenance of trade lines. Although this represented a loss of liquidity for creditors—and although the trade lines were maintained on terms

less favorable than those lenders might have preferred—creditors did not typically experience a loss of principal on such lending. This historical precedent could encourage banks to maintain trade credit lines during crises, even when they cut off other forms of lending.

Other factors may work against trade finance during crises. Its risks do rise during crises, due to the costs of litigation (and weaknesses in developing countries' legal systems) if disputes arise after insolvency, as well as the costs of reselling goods. And it may not be favored in a particular situation, just as it was not always given preference in debt restructurings in the 1990s. When it was, the preference was narrowly drawn and typically did not apply to all measures taken to deal with the crisis. For example, in Argentina businesses engaged in foreign trade were more likely to be permitted to transfer funds abroad, but were not assured of being able to do so, and could buy and sell foreign exchange at the official rate. The Russian Federation excluded some, but not all, trade loans from the 90-day moratorium on foreign exchange payments following the 1998 default. But trade finance enjoyed no preference at all in the Mexican peso crisis (Samberg 2002). The May 1998 Frankfurt Agreement between Indonesia and its international private creditors provided for the payment on $1.4 billion of trade finance arrears, in return for which banks agreed to maintain trade lines in Indonesia. On the other hand, no distinction was made between trade finance and other loans in the government-guaranteed agreement by commercial banks to restructure bank debt in Korea or in the banks' agreement to maintain credit lines to Brazil between February and August 1999.

One reason that trade credit was not always afforded differential treatment in the 1990s was that the easing of capital controls (under which trade finance transactions often enjoyed preferential access to scarce foreign exchange) and the movement away from detailed documentation requirements underlying trade finance transactions have blurred the lines between trade credit and other forms of short-term financing (IMF forthcoming).

The inconsistent treatment may be one reason why trade finance has not held up in recent crises. In Argentina, export and import financing lines broke down in the run-up to the crisis of late 2001, with many credit lines cancelled, both for international banks operating in Argentina and for domestic banks. In Brazil, trade financing declined in both 1998 and 2002. In 1998, trade finance had risen thanks to its privileged position in the capital control regime and the strong incentive to borrow abroad, which was due to the large differential between domestic and international interest rates and the de facto crawling exchange rate. As a result, trade credit rose strongly in 1995–98, but these positions unwound rapidly as the crisis approached.[14] Trade lines to Brazil also contracted sharply in 2002, as lenders became increasingly concerned about Brazilian prospects and future policies. Outstanding credit lines connected to trade fell from $24 billion in March 2002 to just $16 billion by the end of the year. By contrast, other credit lines rose marginally. In addition, maturities on remaining facilities plummeted, while interest rate spreads rose from about 100 to 600 basis points (IMF forthcoming). As confidence has recovered since, trade lines have picked up—but only moderately.

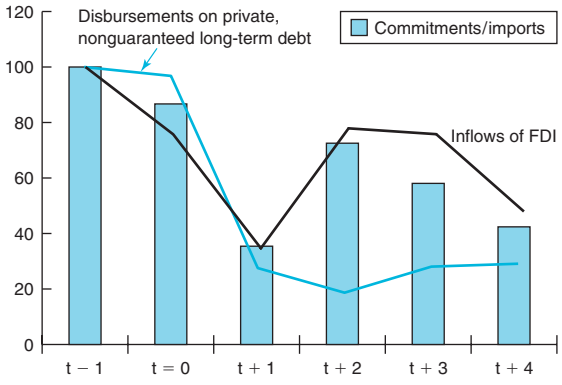
Trade finance also dropped sharply to Indonesia, Malaysia, and Thailand following the East Asian crisis. Many banks failed to distinguish between trade finance and other loans when reducing country exposure. In part this reflected concern over the solvency of local banks. It was reported that international banks refused to confirm or underwrite letters of credit opened by local Indonesian banks at the peak of the crisis (Auboin and Meier-Ewert 2002). Unfortunately, the balance-of-payments reports from these countries do not distinguish between bank finance devoted to trade and lending for other purposes. Data from publicly announced transactions, however, do reflect a collapse of trade finance to the three countries, from $1.6 billion in commitments in 1997 to $150 million in 1998. This decline reflected both creditors' concerns about their exposure, and the fall in demand as exchange-rate depreciation and the severe recession reduced imports. Even after the crisis, banks that continued to lend for trade finance returned to the use of letters of credit and other documentary requirements that had largely been abandoned (Power 1999; Anonymous 1999).

Export credit agencies

New commitments by export credit agencies have fallen to countries facing financial crises. Taking

Figure 5.16 New commitments of export credit agencies in years following crises

Index numbers, base year t − 1 = 100



Source: World Bank staff estimates using Berne Union data.

the median of a sample of eight countries affected recently by crisis, new commitments fell by 60 percent relative to imports in the year following the crisis (figure 5.16).[15] New export credit commitments to these countries moved in line with foreign direct investment, falling less sharply than disbursements on nonguaranteed loans from private sources.

Thus, the decline in new commitments following crises did not necessarily represent a run for the exit by export credit agencies. Indeed, industrial-country governments often wish to keep lines of trade credit open to support allies, sustain market confidence to reduce contagion, and avoid the need for expensive bailouts (Stephens 1998). For example, during the Korean crisis, the Export-Import Bank of the United States provided short-term insurance for more than $1 billion in U.S. sales to Korea (Auboin and Meier-Ewert 2002). Also, Japan's export credit agency provided financing through the Bank of Indonesia to guarantee payment of letters of credit issued by local banks, although the facility was hardly used (IMF forthcoming).

Rather than reluctance on the part of export credit agencies, it is more likely that the decline in new commitments to East Asia (relative to imports) represents decreased demand from exporters in industrialized countries (Cline 2001).

Trade credit from suppliers and purchasers

Trade credit may be more stable during crises than bank lending or bond flows for two reasons. First, relationships between customers and suppliers normally involve considerable sunk costs (Cunat 2000), so suppliers in industrial countries may be reluctant to cut off their customers during crises. Second, suppliers' informational advantages may lead them to maintain credit lines during crises in which contagion is playing a part; that is, where a particular firm's (or country's) fundamentals are strong, but investors are blindly cutting off credit because they cannot distinguish effectively among firms (or countries). Under such circumstances, suppliers are less likely to suffer from myopia.

Studies of industrial countries indicate that trade credit is more resilient than bank lending during a credit crunch. For example, Nilsen (2002) shows that during monetary contraction small and large firms without a bond rating react by borrowing more from their suppliers. Mateut and others (2002) find that the absolute level of trade credit taken up by manufacturing firms in the United Kingdom increases by 19 percent during a period of monetary tightening, while the ratio of bank lending to trade credit decreases from 1.19 to 0.66. Furthermore, they show that it is mostly the small, financially weaker firms that are excluded from bank lending and thus resort to trade credit.

The impact of financial crises on trade credit in developing countries has been mixed. During the Mexican and Asian crises, stronger firms extended more and took less credit, while financially constrained firms took more credit from their suppliers (Love and others 2003). By contrast, Love and Zaidi (2003) found no evidence of resilience of trade credit for small- and medium-sized enterprises in countries affected by the Asian crisis. Both the percentage of output sold on credit and the percentage of input bought on credit were lower after the crisis. The decrease was even more pronounced for firms with only limited access to bank lending.[16] Using the same database as Love and Zaidi (2003), we also find a fall in the use of trade credit in Indonesia, Korea, and Thailand after the crisis.[17] On average, the share of inputs financed by trade credit fell by 10 percent. In addition, credit terms deteriorated: the average length of loans fell by 7 percent, while the implicit interest rate rose by 40 basis points. Although less than a third of the firms were affected by the deterioration in the volume and terms of trade credit, all major sectors covered by the survey showed a marked deterioration.

Table 5.2 Use of trade credit before and after East Asian crisis of 1997–98

Percent

	Before crisis	After crisis	% change	% of firms with deterioration
Share of input financed by trade credit	77.7	69.7	−10.3	32.3
Length of trade credit (days)	69.1	54.2	−7.1	27.3
Discount terms	8.5	8.9	4.7	32.7

Source: World Bank, Asian Corporate Crisis and Recovery Firm-Level Survey. See Dwor-Frecaut, Colaco, and Hallward-Driemeier (2000).

Nevertheless, the decline in the volume of credit and deterioration in its terms during the East Asian crisis were much more pronounced for bank lending than for trade credit. The share of bank lending in finance external to the firm dropped by 15 percent after the crisis, compared with 10 percent for trade credit (table 5.2), with almost half the firms experiencing a deterioration. Moreover, while the survey does not provide the interest rate paid on bank lending, there is no doubt that bank interest rates increased by much more than the 40 basis point rise in trade credit. The rise in the money market rate (one indicator of financial conditions) from June 1997 to March 1998 was 44 percentage points in Indonesia, 9 percentage points in Thailand, and 12 percentage points in Korea. The greater drop in bank finance, relative to trade credit, is also apparent from the fact that of firms that faced an output decline after the crisis (72 percent of the firms in our sample), 45 percent considered insufficient bank credit to be a major reason for the decline, while only 34 percent identified insufficient suppliers' credit as a major reason.

Unlike the finding in a previous section—that firms involved in international trade had greater access to trade credit than other firms—international trade did not help firms maintain access to trade credit after the East Asian crisis. Thirty-seven percent of importers experienced a fall in trade credit use, compared to 36 percent of exporters and 33 percent of the firms that bought and sold only on the domestic market. While importers may have had access to trade credit from foreign firms that were less affected by the crisis than domestic suppliers, the creditworthiness of importers was hit hard by crisis-induced currency devaluation. While exporters benefited from the devaluation, a significant share of their suppliers were probably domestic firms that experienced a deterioration in their ability to extend credit. Moreover, many of the suppliers to both exporters and importers may have been from other Asian countries affected by the crisis and hence also were less able to supply trade credit.[18] It also is possible that the foreign-exchange exposure of firms involved in the survey was higher than normal before the crisis.

The earlier finding that foreign-owned firms enjoy better access to trade credit than do domestically owned firms is confirmed by the data on the East Asian crisis. Less than 20 percent of foreign-owned firms showed a drop in the provision of trade credit after the crisis, versus more than 30 percent of the firms without foreign equity.[19] This suggests that foreign investment in domestic firms can provide an extra benefit—trade credit from these firms will be less affected by turmoil than will credit from domestically owned firms.

Clearly, we are at the early stages of investigating the relationship between developing-country crises and trade credit from suppliers and purchasers. The survey data now becoming available should support further research in this and other areas. For the moment, however, the data are insufficient to answer with certainty some of the key questions addressed in this chapter. Future research will benefit greatly from information that distinguishes between domestic and external sources of trade credit provided to developing-country firms. Eventually, larger surveys, or more comprehensive reporting requirements, will be necessary to estimate the total volume of trade credit more reliably. In general, one lesson from this chapter is that expanding the data available for each of the major sources of trade finance—commercial banks, export credit agencies, private insurers, multilateral development banks, and other firms—would greatly improve our understanding of the impact of trade finance on developing countries.

Notes

1. The data on trade finance provided by commercial banks are taken from the Loanware database, which reports the purpose of each loan, including "trade finance." These transactions are reported by the trade financing desks of international banks.

2. Because the database of the Bank for International Settlements does not include a breakdown by the purpose of the loan, it is impossible to say whether trade finance transactions are more under-reported than other transactions. The estimated stocks of syndicated loans (assuming that new facilities are fully drawn and no early repayments are made) in the Loanware database are equal to about half of the outstanding loans reported by the Bank for International Settlements to Latin America and developing Europe, but to about 100 percent of loans to Asia, Africa, and the Middle East (Gadanecz and von Kleist 2002).

3. The 10 countries are Brazil, India, Indonesia, the Islamic Republic of Iran, Mexico, Pakistan, the República Bolivariana de Venezuela, the Russian Federation, Thailand, and Turkey.

4. The Berne Union is a collection of 51 export credit agencies and insurance companies from 42 countries. It includes the World Bank Group's Multilateral Investment Guarantee Agency. A portion of the business covered by export credit agencies includes interest payments due, so that the stock of business covered is not the same concept as the stock of debt.

5. Although short-term business generally provides a better indication of trade finance from Berne Union members, medium- to long-term business includes capital goods imports and longer-term trade contracts, which are important lines of trade business.

6. The OECD reports data on export credit disbursements with a repayment term of one year or more. The data are aggregated; that is, they are not broken down by transaction. It also reports data on officially supported export credits with a repayment term of five years or more, on a transaction-specific basis. Comparing OECD and Berne Union data is problematic, as the former refers to the stock of business covered, and the latter to the flows covered. The two databases also differ in populations, methodology, and type of business covered. However, the OECD is the only known source of data on flows from export credit agencies.

7. The Knaepen Package was a set of measures incorporated into the OECD's Arrangement on Guidelines for Officially Supported Export Credits, covering minimum country-risk-premium rates and standards for determining country risk categories.

8. The Worldscope database includes information on publicly traded firms of significant interest to international investors. Firms in the financial and service sectors, and countries with only a small number of firms providing information on use and provision of trade credit, were excluded from our sample. The measures of accounts receivable relative to total sales and accounts payable relative to total sales exclude credit extended by customers through prepayments. The data are taken from the yearly financial statements of the firms in the sample.

9. In some cases no discount for early payment is offered; in other words, the firm receives an interest-free loan. Often no penalty is charged for late payments, which can reduce the aforementioned rates by two-fifths (Wilner 1997). However, even with this reduction the annual interest rates paid on trade-credit loans far exceed the interest rates paid on bank loans.

10. The firm-level surveys of the World Bank's Investment Climate Unit (conducted between 1998 and 2002) include quantitative indicators such as sales, supplies, ownership, and sources of finance and employment levels, along with qualitative questions about the business environment and the motivation to do business. Currently data are available for 38 countries. Excluded from consideration here are countries with no information on the use and provision of trade credit by their firms. The number of survey respondents ranges from nine to ten thousand, depending on the question. Only a subset of these firms made data available on their size, their trading behavior, and their ownership, reducing the number of firms on which the estimates in the main text are based.

11. Middle-income countries can also expand their access to capital through trade finance. For example, emerging Eastern European countries have used structured trade finance to expand the amount and extend the term of financing beyond what was available in the capital markets (Lennkh and Schoeller 2003).

12. The data on gross disbursements covered are taken from the OECD and differ from the Berne Union data (used in figure 5.3), which reflect the stock of business covered.

13. The higher trade credit provided by importers that also export may be a sign that firms that trade with companies from developing countries demand a guarantee of the quality of products they buy before they pay, as they realize it could be very difficult to obtain a refund from firms in countries with a slow judicial system. This is confirmed by the fact that firms that export provide on average more trade credit than their nontrading counterparts in both the low- and middle-income countries.

14. It is not clear to what extent the rise in trade finance reflected commercial bank loans or suppliers' credits.

15. The eight countries are Argentina, Brazil, Indonesia, Malaysia, the Philippines, the Russian Federation, Thailand, and Turkey.

16. Love and Zaidi (2003) use five measures to determine access to bank lending: declined loan applications, reliance on bank loans, restrictiveness in bank credit, sustainability in loan repayments, and constraints in short-term bank loans for working capital.

17. The Asian Corporate Crisis and Recovery Firm-Level Survey, conducted by the World Bank in Indonesia, Korea, the Philippines, and Thailand between November 1998 and February 1999, covers about 3,000 mainly small and medium-sized enterprises in the manufacturing sector (Dwor-Frecaut, Colaco, and Hallward-Driemeier 2000). The survey suffers from a survivorship bias. As the survey was carried out after the crisis, those firms that were most vulnerable at the onset of the crisis are not represented. We have excluded firms in the Philippines due to some inconsistencies in the data.

18. The survey does not provide information about the country from which the firm imports its inputs.

19. Information on foreign ownership is not available for Indonesian firms. The foreign-owned firms include firms that have a foreign majority shareholder.

References

ADB (Asian Development Bank). 2003. Trade Finance Facilitation Program. www.adb.org/PrivateSector/Finance/trade_fin.asp.

Anonymous. 1999. "Taking the Pain out of Trade Documentation." *Asiamoney* (London) 10 (June): 50–51.

Auboin, Marc, and Moritz Meier-Ewert. 2002. "Improving the Availability of Trade Finance during Financial Crises." World Trade Organization, Lausanne, Switzerland. Processed.

Berne Union (International Union of Credit and Investment Insurers). Various years. *The Berne Union Yearbook*. Berne.

Biais, Bruno, and Christian Gollier. 1997. "Trade Credit and Credit Rationing." *Review of Financial Studies* 10: 903–37.

Brennan, Michael, Vojislav Maksimovic, and Josef Zechner. 1988. "Vendor Financing." *Journal of Finance* 43: 1127–41.

Brujis, Marcos. 2003. "Trade Finance Facilities: Effective Liquidity Crisis Intervention." Presentation to the Global Export Finance Corporate Conference in Madrid. October 29.

Cline, William R. 2001. "Ex-Im Exports and Private Capital—Will Financial Markets Squeeze the Bank?" In G. C. Hufbauer and R. M. Rodriguez, eds., *The Ex-Im Bank in the 21st Century—A New Approach?* Washington, D.C.: Institute for International Economics.

Coetzee, Deon. 2003. "Best Practices for African Trade and Investment." In Lisa Paul, ed., *Global Export and Trade Finance Review 2002/2003*. Colchester, Essex, U.K.: Euromoney Yearbooks.

Cunat, Vicente. 2000. "Trade Credit: Suppliers as Debt Collectors and Insurance Providers." Financial Markets Group Discussion Paper 365, London School of Economics.

de Jonquieres, Guy, Gillian Tett, and Stephen Fidler. 2000. "G7 Calls for Arms Credits Clampdown." *Financial Times*. August 1.

Deloof, Marc, and Marc Jegers. 1995. "Trade Credit, Product Quality, and Intragroup Trade: Some European Evidence." Working Paper, Free University of Brussels, Belgium.

Demirguc-Kunt, Asli, and Vojislav Maksimovic. 2002. "Firms as Financial Intermediaries: Evidence from Trade Credit Data." World Bank, Washington, D.C. Processed.

Dwor-Frecaut, Dominique, Francis X. Colaco, and Mary Hallward-Driemeier. 2000. "Asian Corporate Recovery, Findings from Firm-Level Surveys in Five Countries." World Bank, Washington, D.C. Processed.

EBRD. 2003. EBRD's Trade Facilitation Program. www.ebrd.com/tfp.

ECA Watch. 2003. "Unusual Suspects—Unearthing the Shadowy World of Export Credit Agencies." www.eca-watch.org

ECGD. 2003. "Report on the Comparison of Export Credit Agencies." Export Credits Guarantee Department. London. February.

Emery, Gary W., and Nandkumar Nayar. 1998. "Product Quality and Payment Policy." *Review of Quantitative Finance and Accounting* 10: 269–84.

Ferris, J. Stephen. 1981. "A Transactions Theory of Trade Credit." *Quarterly Journal of Economics* 96: 243–70.

Frank, Murray, and Vojislav Maksimovic. 1998. "Trade Credit, Collateral, and Adverse Selection." UBC Working Paper, University of Maryland, College Park.

Gadanecz, Blaise, and Karsten von Kleist. 2002. "Do Syndicated Credits Anticipate BIS Consolidated Banking Data?" *BIS Quarterly Review* (Basel, Switzerland). March.

Gamble, Richard H. 2001. "Beyond Letters of Credit: Innovations in Trade Finance." *Business Credit* 103(10): 16.

Godier, Kevin. 2003. "A High Priority." In International Union of Credit and Investment Insurers, *The Berne Union Yearbook*, pp.108–09.

Handal, J. 2001. "Are On-line Letters of Credit in Your Future?" *World Trade* 14(1): 68.

IMF (International Monetary Fund). 2001. *Official Financing for Developing Countries*. Washington, D.C.

———. Forthcoming. "Trade Finance in Financial Crises: Assessment of Key Issues." Washington, D.C.

Ivey, Jamie. 2002. "Promise of a Paperless Future for Trade Finance." *Corporate Finance* (London) 206: 10.

Jain, Neelam. 2001. "Monitoring Cost and Trade Credit." *Quarterly Review of Economics and Finance* 41: 89–110.

James, David. 2001. "Political Risk Insurance in the Private Market." Brochbank Syndicate Management London.

Kenny, Michael, and Rubin Weston. 2003. "Trade and Commodity Finance: Challenges and Solutions." In Lisa Paul, ed., *Global Export and Trade Finance Review 2002/2003*. Colchester, Essex, U.K.: Euromoney Yearbooks.

Klapper, Leora. 2000. "The Determinants of Global Factoring." *World Factoring Yearbook 2000*. Bromley, Kent, U.K.: BCR Publishing.

Kreitman, Roger. 2001. "The New Trade Finance." *Business Credit* 103(10): 58.

Laryea, Emmanuel T. 2001. "Payment for Paperless Trade: Are There Viable Alternatives to the Documentary Credit?" *Law and Policy in International Business* 33(1): 3.

Lee, Joy. 2001. "The LC Goes On-line." *Asiamoney* 12(1): 72.

Lee, Yul W., and John D. Stowe. 1993. "Product Risk, Asymmetric Information, and Trade Credit." *Journal of Financial and Quantitative Analysis* 28: 285–300.

Lennkh, Peter, and Erwin Schoeller. 2003. "Advantages of Cooperating with a Banking Network Group in Central and Eastern Europe and Asia." In Lisa Paul, ed., *Global Export and Trade Finance Review 2002/2003*. Colchester, Essex, U.K.: Euromoney Yearbooks.

Long, Michael S., Ileen B. Malitz, and S. Abraham Ravid. 1993. "Trade Credit, Quality Guarantees, and Product Marketability." *Financial Management* 22: 117–27.

Loong, Pauline. 2002. "Reality Bytes in the Shift to E-trade." *Asiamoney* (London) 13(9): 42.

Love, Inessa, Lorenzo A. Preve, and Virginia Sarria-Allende. 2003. "Trade Credit and Bank Credit, Evidence from the Recent Financial Crises." World Bank, Washington, D.C. Processed.

Love, Inessa, and Rida Zaidi. 2003. "Trade Credit and Financing Constraints: Evidence from the East Asian Crisis." World Bank, Washington, D.C. Processed.

Mackie, Alan. 2003. "Changing Face of Trade Insurance." In International Union of Credit and Investment Insurers, *The Berne Union Yearbook*, pp. 48–49.

Marlin, Steven. 2003. "Charting a New Course." *Bank Systems and Technology* (New York) 40(5): 32.

Mateut, Simona, Spiros Bougheas, and Paul Mizen. 2002. "Trade Credit, Bank Lending, and Monetary Policy Transmission." Discussion Papers in Economics 02/11, University of Nottingham, U.K.

Maurer, Crescencia, and Ruchi Bhandari. 2000. "The Climate of Export Credit Agencies." Climate Notes, World Resources Institute, Washington, D.C. May.

Mian, Shehzad L., and Clifford W. Smith. 1992. "Accounts Receivable Management Policy: Theory and Evidence." *Journal of Finance* 47: 169–200.

Ng, Chee K., Janet K. Smith, and Richard L. Smith. 1999. "Evidence on the Determinants of Credit Terms Used in Interfirm Trade." *Journal of Finance* 54: 1109–29.

Nilsen, Jeffrey H. 2002. "Trade Credit and the Bank Lending Channel." *Journal of Money, Credit, and Banking* 34: 226–53.

Petersen, Mitchell A., and Raghuran G. Rajan. 1997. "Trade Credit: Theories and Evidence." *Review of Financial Studies* 10: 661–91.

Power, Brian. 1999. "Coping with Illiquidity." *Asiamoney* (London) (June): 6.

Samberg, Gilbert. 2002. "Debt Restructuring: Trade Finance Falls from Favor." *International Financial Law Review* 21(11): 21.

Schwartz, Robert A., and David Whitcomb. 1979. "The Trade Credit Decision." In James L. Bicksler, ed., *Handbook of Financial Economics*. Amsterdam: North-Holland.

Stephens, Malcolm. 1998. "Export Credit Agencies, Trade Finance, and South East Asia." IMF Working Paper 98/175, International Monetary Fund, Washington, D.C.

———. 1999. *The Changing Role of Export Credit Agencies*. Washington, D.C.: International Monetary Fund.

Tang, Helena. 2003. "World Bank Activities on Trade." International Trade Department Trade Note, World Bank, Washington, D.C. May.

Taylor, Dan. 2002. Interview published on Web site of International Chamber of Commerce. www.iccwbo.org/home/news_archives/2002/stories/interview-Dan%20Taylor.asp.

UNIDO (United Nations Industrial Development Organization). 2002. "Corporate Social Responsibility—Implications for Small and Medium Enterprises in Developing Countries." Vienna.

Wilner, Benjamin S. 1997. "Paying Your Bills: An Empirical Study of Trade Credit." Unpublished paper, University of Iowa.

World Bank. 2003. *Global Economic Prospects*. Washington, D.C.

6

The Challenge of Financing Infrastructure in Developing Countries

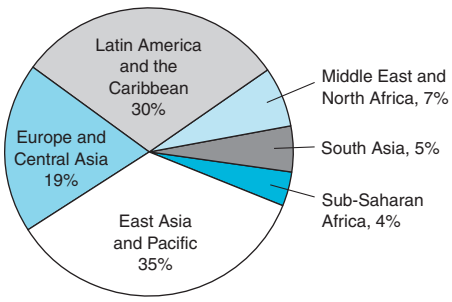
ESTABLISHING A SOUND FINANCING framework to meet developing countries' growing infrastructure needs remains a key challenge for policymakers. Efficient transport, reliable energy, safe drinking water, and modern telecommunication systems are critical to attracting foreign direct investment, expanding international trade, and achieving long-term investment and growth. Worldwide, most future infrastructure demand is likely to come from the developing world (home to 85 percent of the world's population), where access to infrastructure services falls well behind the levels in the developed world (box 6.1).[1] Estimates by several international organizations and researchers point to the substantial investment required in developing countries, including an annual amount of $120 billion in the electricity sector from 2001 to 2010 (International Energy Agency 2003) and $49 billion for water and sanitation from 2001 to 2015 (Camdessus 2003). China's infrastructure investment needs remain massive, estimated at about $2 trillion during the 2001–10 period (Asian Development Bank 2002). The rebuilding of Iraq's civilian infrastructure likewise will require considerable capital.

Global capital markets have the depth, maturity, size, and sophistication *potentially* to fund all viable investments and projects in developing countries' infrastructure. That they have failed to do so, and that the flow of private finance to infrastructure has declined so dramatically in recent years, is a reflection of several factors—chief among them the impact of recent macroeconomic shocks, ongoing transformations in the global electricity and telecommunications industries, the weakness of local capital markets in most developing countries, and unfinished reforms needed in many developing countries to place their infrastructure industries on a commercial footing.

From 1992 to 2003, total international investment in developing countries' infrastructure is estimated to have been $622 billion—an average of $52 billion a year and 3.8 percent of total gross domestic investment in the developing world (box 6.2). The investment was unevenly distributed. Countries in East Asia and Latin America accounted for almost two-thirds of the total (figure 6.1). Complementing the volume of cross-border flows have been resources that countries have mobilized domestically, predominantly from public sources.[2]

Policy responses to the imbalance of supply and demand in developing-country infrastructure have gathered momentum in the past two years. On the official side, the need to scale up multilateral assistance as a way of leveraging private capital, advancing reforms, and disseminating knowledge

Figure 6.1 Regional composition of international investment in infrastructure, 1992–2003



Sources: Dealogic Bondware and Loanware and World Bank staff estimates.

Box 6.1 Growing demand for infrastructure services in developing countries

Demand for infrastructure services is likely to grow more quickly in developing countries than in the developed economies for the foreseeable future. Infrastructure stocks and service access are relatively low in the developing world (see table). Currently, per capita electricity consumption is 1,054 kilowatt hours in developing countries, compared with 8,876 kilowatt hours in developed countries. Telecommunication links are five times less dense than in the developed world. Demand for infrastructure increases with per capita income, and growth is faster at lower income levels. A long-standing literature has established a close relationship between infrastructure and economic growth (World Bank 1994; Philippe, Aghion, and Schankerman 1999; Nadiri and Mamuneas 1996).

Stock of infrastructure in developing countries

	Installed capacity per 1,000 persons (kW) 2001	Electricity consumption per capita (kWh) 2001	Average telephone mainlines per 1,000 persons 2001	Road density (km/sq. km of land) 2000[a]	Access to improved water source (% of population) 2000
Developing countries	272	1,054	95	0.15	78
East Asia	223	921	59	0.15	71
Europe and Central Asia	992	3,425	217	0.11	88
Latin America and the Caribbean	431	1,709	150	0.15	88
Middle East and North Africa	338	1,411	86	0.08	84
South Asia	99	426	31	0.94	76
Sub-Saharan Africa	105	394	29	0.08	62
Developed Countries	2,044	8,876	501	0.58	99

a. Data are for the latest year available during the period 1996–2000.
Sources: Electricity—U.S. Energy Information Administration 2003; Telephone mainlines—World Bank, *World Development Indicators 2003;* Roads—International Road Federation 2002.

and best practice is now well recognized. That recognition culminated in the launching of the World Bank's Infrastructure Action Plan in 2003 (see www.worldbank.org/infrastructure). On the private side, too, there is a recognition of the need for a more balanced public-private approach to financing and for innovative risk-sharing mechanisms.

This chapter focuses on the financing of developing-country infrastructure. Finance matters for infrastructure development not only for the usual reason of allocative efficiency, but also because of certain distinctive economic characteristics of infrastructure—a high capital intensity, elements of natural monopoly, and location-specific investments—all of which affect private sector incentives to commit long-term capital. We adopt an eclectic approach, because of the vast scope of the subject matter and its multisectoral nature, and highlight the interface between government policy and investor behavior, on the one hand, and the intricate structure of developing-country infrastructure financing, on the other. The key messages are:

- The bottlenecks in ensuring a healthy flow of capital from international markets to developing-country infrastructure are related to policies, institutions, and regulation. Multilaterals can play a crucial role in providing risk-mitigation instruments (including guarantees and political risk insurance) and promoting the development of local capital markets. However, no single solution will fit all sectors and all countries.
- Emerging modes of infrastructure financing, based on private finance and ownership, have not proven resilient in the face of recent domestic macroeconomic shocks and international financial crises. Indeed, such shocks have had a more enduring impact on investors' confidence than did the downward movement in the global telecommunications

Box 6.2 Measuring capital flows to developing countries' infrastructure

The analysis in this chapter draws on three measures of capital flows to developing-country infrastructure:

- *International investment in developing-country infrastructure* is defined as the total volume of capital raised internationally through bank loans, bonds, and equity offerings for the core economic infrastructure sectors of telecommunications (all types of communication infrastructure and services), transport (all modes of transport infrastructure and services, as well as transport companies, such as airline and railway operators), power (including electricity generation and electric and gas utilities), and water and sanitation (all activities regarding water supply and treatment and waste management infrastructure and services) in developing countries. Data on debt volumes cover transactions on international loan syndications and bond issues reported by capital-market sources, including Dealogic Bondware and Loanware. Information on equity flows is based on World Bank staff estimates, using estimated debt-equity ratios that range from 42/58 for mobile telecommunications to 78/22 for road transportation, with those ratios being based on a study by Foreign Investment Advisory Services (Sader 2000).
- *Private participation in infrastructure (PPI)* comes directly from the World Bank PPI Project Database, which tracks information on total infrastructure investment with private involvement in developing countries. The database covers projects in the energy, telecommunications, transport, and water sectors that are owned or managed by private companies in developing countries and that directly or indirectly serve the public. Only projects that have reached financial closure are included. In general, investments are recorded on a commitments basis in the year of financial closure; actual disbursements are not tracked.
- *Project finance for infrastructure* refers to transactions for nonrecourse and limited recourse project finance through international capital markets, but excludes export credit agency facility financing, which is considered trade finance. Such information is compiled from deals reported in Dealogic's Projectware database.

and electricity industries. This poor resiliency underscores the importance of macroeconomic stability and measures to prevent future financial crises.

- Public entities, such as municipal utilities and parastatal corporations, will remain major players in the financing, development, and delivery of infrastructure services in many developing countries. Fundamental improvements in their creditworthiness will be essential to facilitate their access to global and domestic capital markets, as well as to bring in private equity investments to a range of public-private partnerships. Corporate-level and sector-specific reforms will have to be pursued. At the corporate level, investment planning, financial reporting, and corporate governance will have to meet commercial standards. At the sector level, reforms in the complementary regulatory environment will be essential to minimize regulatory risk.
- Substantial investments in developing-country infrastructure are unlikely to materialize unless there is a strong institutional framework for protecting creditors' rights, effective covenants, and reliable avenues of legal enforcement and remedy. Bond investors respond to a strong institutional framework by lowering the cost of capital.

The changing balance between the public and private sectors

Participation by the private sector in infrastructure has a long history. The procurement of public infrastructure facilities can be traced to the "master contractor model" of Roman times. Project financing dates back to the Middle Ages, when, in 1299, the English Crown financed the development of a silver mine in Devon through an off-balance-sheet loan from a leading Italian merchant bank, assuming much of the operational and market risks. The concession structure dates back to sixteenth-century France, where the state granted a private company a concession to build

the Canal du Midi in 1514. In the United States, the need to finance railroads and canals in the nineteenth century helped foster the development of the national debt market.

Despite this long history, infrastructure has, relative to other capital-intensive industries, undergone sharp shifts in government policy, public attitude, and the intellectual environment. Twenty-five years ago, infrastructure services in virtually all developing countries, and in most developed ones, were controlled by the state, through ownership of vertically integrated utilities and other infrastructure entities. In the Philippines, for example, the government-owned National Power Corporation maintained a monopoly on the generation and wholesale distribution of electricity, as did Kazakhenergo in Kazakhstan and the Office National de l'Electricite in Morocco. In the telecommunications industry, government-owned monopolies were normally dominant, including Telefonos de Mexico SA de CV, Telecom Egypt, and Nitel in Nigeria. Similar examples abound.

In countries where infrastructure assets were privately owned, as in the United States, the dominant institutional structure was that of the "vertically regulated monopoly utility," under which utilities enjoyed local franchise monopolies in return for allowing their rates to be regulated and agreeing to serve the interests of the public.[3]

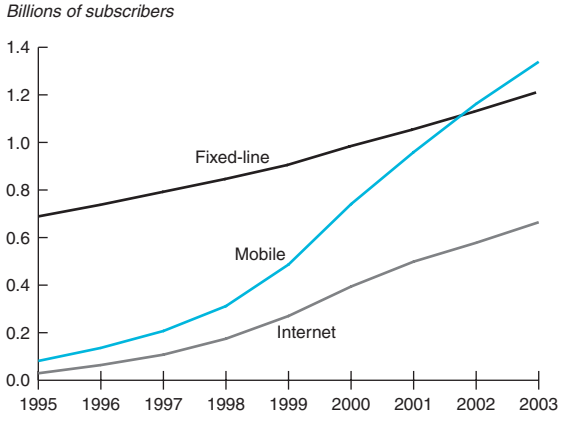
Financing for infrastructure reflected the stability of both the public ownership model and the reliance on regulated utilities. Under the first model, investors and creditors could count on the explicit backing of governments. State-owned utilities were dependent upon the fiscal budget for new investments and often for meeting shortfalls in operating revenues. In the latter model, that of the vertically regulated monopoly, stability came from the utilities' income stream—which was predictable because charges were regulated.

Charges were based on a transparent calculation of return on fixed assets or price-cap regulation with the incentive for enhanced return through cost savings. The main burden was borne by tax- and ratepayers, who implicitly underwrote the investment risks and sometimes suffered from the inefficiency of state-owned utilities. Operating inefficiencies in developing-country infrastructure are estimated to have caused losses of $55 billion a year, equivalent to 1 percent of developing-country GDP (World Bank 1994).

Over the past three decades, the global infrastructure markets have undergone unprecedented change and institutional reorganization. Rapid technological advances, particularly in the telecommunications sector, and conscious changes in public policy brought deregulation and competition in mature markets and liberalization in the developing world.

The telecommunications industry, once reliant upon fixed-line voice service, now boasts a variety of new products and services, from videoconferencing to third-generation mobile telephones. Since 1995, worldwide mobile phone subscriptions have soared by 1,360 percent, compared to 76 percent for fixed-line services (figure 6.2). With 1.3 billion subscribers, mobile phones are now the main form of telecommunication. Internet connections ballooned from 4 million in 1995 to 665 million by 2003. With innovations such as broadband transmission and wireless technologies, telecommunications infrastructure is set to undergo further changes. Many developing countries, especially those in which geography is an impediment to fixed telecommunication infrastructure, are expected to skip the deployment of wired technology in favor of wireless. In the power sector, recent technological advances have led to reductions in the capital costs of power plants using new or renewable fuel sources. Technological change can encourage competition by lowering sunk costs and reducing the natural monopoly elements of infrastructure industries.

Figure 6.2 The growth of mobile telecommunications and the Internet, 1995–2003



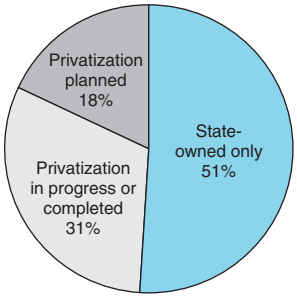
Source: International Telecommunication Union.

Various forces have driven conscious changes in public policy. In the United States, building on the success of earlier deregulation of the rail, airline, and gas industries, the regulatory reform process gained momentum in the 1990s with the passage of the Energy Policy Act of 1992 and the Telecommunications Act of 1996, both aimed at fostering competition to enhance efficiency, encourage technological innovation, and lower prices. In Europe, the desire to bring about a single market in gas, electricity, transport, and telecommunications has been a key driver of change. And in much of the developing world, the driving forces have been fiscal pressure, disenchantment with the performance of publicly owned utilities, and the need for new investments and modernization.

The shift to private sector involvement has taken different forms in the various sectors:

- *Telecommunications*. Considerable progress has been made in privatizing, restructuring, and introducing competition into segments of the telecommunications industry. Privatizations have occurred through the sale of assets to strategic investors (often major international companies) and through equity offerings in local and international markets. In most countries, the private sector is now dominant. In 1991, telecommunications in some 150 countries were state-owned, but by 2003 the number had fallen to 79. By contrast, the number of telecommunication regulators, usually an indication of the entry of private participants, rose from 12 to 123.
- *Power.* Worldwide reform in the electric power sector has been more uneven and contentious than in the telecommunications industry. In developing countries, progress has been made in privatizing and diversifying generating capacity, where international capital has contributed to the development of a private power market around competitive bidding on long-term power-purchase contracts. The thrust of restructuring has been on unbundling the ownership of vertically integrated utilities, separating the structurally competitive segments of generation and supply from the monopoly segments of transmission and distribution. In a survey of 52 developing countries having a generating capacity of between 29 megawatts (The Gambia) and 318 gigawatts (China),[4] 31 percent had completed, or were near completing, the privatization of state-owned power utilities (figure 6.3). A further 18 percent had begun the privatization process, either by enacting reform legislation or by partially divesting state ownership. In 67 percent of the countries reviewed, independent power providers (IPPs) had been established, with another 21 percent planning to open electricity markets to them.
- *Transport*. In transport, the movement to private ownership has been complicated by the economics of the industry, with private finance feasible only to the extent that users can be appropriately charged. Because infrastructure operators typically are able to charge only direct users, most private projects must be self-contained and have no close alternatives. Most privately financed schemes have been for bridges, tunnels, toll roads, and railways, as well as some major ports and airports. According to the World Bank's PPI Database, from 1990 to 2002, private participation in transport projects took place in 66 developing countries, encompassing 704 projects and absorbing $120 billion in capital.
- *Water and sanitation*. Before 1990, the sector relied almost entirely on government financing to meet operating costs and investment needs.[5] As late as the mid-1990s, 65–70 percent of water and sanitation projects were still financed by the public sector; 5 percent by the domestic public sector; 10–15 percent by international donors; and 10–15 percent by international private companies (Camdessus

Figure 6.3 Status of electrical power sector privatization in developing countries, 2001



Source: World Bank staff estimates using U.S. Electricity Information Administration 2003.

2003). The predominance of the public sector is expected to continue for the foreseeable future. However, with the introduction of various forms of public-private partnership in project design, development, finance, production, and service provision, private participation in water and sanitation has grown. Between 1990 and 2001, the private sector invested $40 billion in 203 water and sanitation projects in developing countries.

The transition to private participation in infrastructure has not yet settled; consequently, the financing environment for developing-country infrastructure is not clearly defined. In many developing countries, the agenda of market liberalization, regulatory reform, and the restructuring of state-owned monopoly utilities remains unfinished. Furthermore, given the characteristics of certain infrastructure industries, including the huge sunk costs involved, elements of natural monopoly, and their political saliency, there remains a strong rationale for state intervention, even in cases where privatization has been completed. Also, investors must factor in ongoing transformations of the global infrastructure industry, such as how to accurately price and gauge demand for new products resulting from rapid technological change.

Together with a series of recent financial crises, these developments have taken their toll, presenting a hierarchy of risks at the industry, country, and project levels. Those risks raise the cost of capital and make investors and creditors averse to long-term investments in developing-country infrastructure.

Recent developments in private external financing

The investment opportunities that came with the wave of privatization and liberalization in the early 1990s encouraged major international project operators and contractors facing poorer growth prospects in their home countries to invest in power plants, roads, and telecommunication facilities in the developing world. The entry of multinationals in the infrastructure sectors, which had traditionally been closed to international competitors and private participation, implied a process of learning, experimentation, and bargaining by firms and host governments. Firms had three comparative advantages in overcoming the barriers to entry in developing-country infrastructure. First, the utilization of modern technology, particularly in the telecommunications sector. Second, access to capital at a lower cost than that available to host countries' governments. And third, a capacity to operate at a global level, implying, among other things, an ability to draw on synergies involved in structuring business relationships in the form of joint ventures, consortia, and special-purpose vehicles.[6]

Expansion was initially fuelled by optimistic expectations about demand, the commitment of governments to contractual terms, the credit quality of project off-takers, consumers' ability to pay, and, above all, the stability of macroeconomic conditions. In the transport sector, for example, Standard and Poor's studied 32 toll roads worldwide, finding that traffic forecasts were too high in 28 cases—actual traffic volumes averaged only 73 percent of the forecast (Bain and Wilkins 2002). In the power sector, state-owned enterprises commonly entered into long-term power-purchase agreements on the understanding that those agreements would be guaranteed by a tariff indexed to hard currencies, such as the dollar, over the contract's entire life, backstopped by government guarantees. As those expectations proved overoptimistic, capital flows to developing-country infrastructure began to decline. Meanwhile, capital flows to infrastructure remain concentrated in a small number of countries.

Growth in the 1990s

The total volume of infrastructure finance raised internationally through commercial bank syndications, bond issuance, and equity participation rose from $23 billion in 1994 to $90 billion in 1997. Infrastructure investment with private participation in developing countries rose from $38 billion in 1994 to $114 billion in 1997, and the volume of project finance deals rose from $8 billion to $52 billion over the same period (figure 6.4). As a share of total gross domestic capital formation, international investment in developing-country infrastructure grew from 1.5 percent in 1992 to 6.2 percent in 1997 (table 6.1).

The financing of most forms of infrastructure involves a combination of project promoters, lenders, multilaterals, and export credit agencies, each with its own objectives but tied together

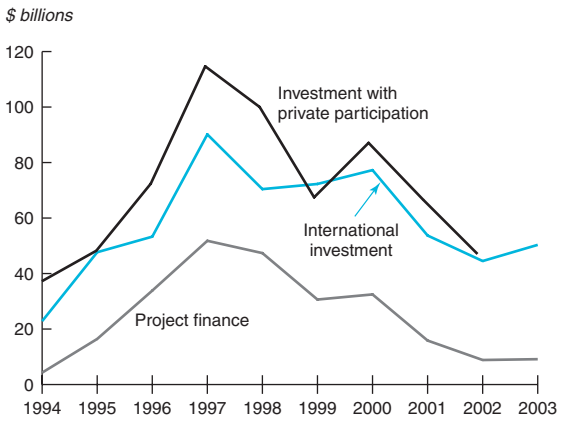
Table 6.1 International investment in developing countries' infrastructure as a share of total gross domestic capital formation, 1992–2003

Percent

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total	1.5	2.5	2.1	3.8	3.8	6.2	5.1	5.6	5.4	3.7	2.9	3.4
East Asia & Pacific	2.8	5.1	3.5	4.7	4.6	4.7	5.1	3.1	4.4	1.7	3.1	4.2
Europe & Central Asia	0.6	0.8	1.3	4.3	3.2	5.9	7.0	8.3	8.1	4.3	4.9	5.5
Latin America & the Caribbean	1.3	1.4	1.2	2.7	4.2	8.1	5.9	5.9	7.5	7.8	2.8	1.7
Other regions	0.8	1.5	1.6	3.2	2.2	5.8	2.4	7.0	3.0	2.6	1.1	2.1

Note: Data for 2003 are from January through November.
Sources: Dealogic Bondware, Loanware, and Projectware, and World Bank staff estimates.

Figure 6.4 Private financial flows to developing countries' infrastructure, 1994–2003



Note: Data for 2003 are from January through November.
Sources: Dealogic Bondware, Loanware, and Projectware, and World Bank staff estimates.

through a nexus of contracts (box 6.3). Of these different players, the greatest source of finance traditionally has been commercial banks, often in connection with officially backed export credit agencies and multilateral organizations. The international syndicated loan market has accounted for 62 percent of international investment in developing-country infrastructure in the past decade. In the 1990s, the rise was led by banks domiciled in Japan, the United States, and Europe (primarily France, Germany, the Netherlands, and the United Kingdom), which together accounted for about three-quarters of all commercial bank infrastructure finance for developing countries in 1990–97, when such financing grew nearly nine-fold. Box 6.4 provides information on the key characteristics of syndicated bank lending to infrastructure.

Box 6.3 Phu My 3—An example of the multisource nature of infrastructure finance

Most infrastructure finance deals draw on an array of local and international funding sources, including syndicated commercial bank loans, bond issuances, equipment leasing, multilateral and export credit agency loans or guarantees, and equity commitments by project promoters and dedicated equity funds.

Vietnam's first international Build-Operate-Transfer power project, Phu My 3, with a generating capacity of 717 megawatts, reached financial closure in June 2003. Three-quarters of the funding took the form of debt, $40 million of which came from the Asian Development Bank; $99 million from the Japanese export credit agency, JBIC; and $170 million from a syndicate of international banks (Bank of Tokyo-Mitsubishi, Credit Agricole Indosuez, Credit Lyonnais, Fortis Bank, and Mizuho Corporate Bank). The equity component of $103 million was provided by the main sponsors (Electricite de France, Sumitomo Corporation, and Tokyo Electric Power Company), as shareholders' capital. The extended political risk insurance supporting the commercial tranche is provided by the Asian Development Bank, the Multilateral Investment Guarantee Agency, and Nippon Export and Investment Insurance.

The financing structure of Phu My 3, with several types of debt, equity, and credit enhancements, is not unique to Vietnam or the power sector. It satisfies two needs: to ensure access to international capital markets and to enhance efficiency by reducing overall financing costs, and extending debt maturity to match the project's underlying economics.

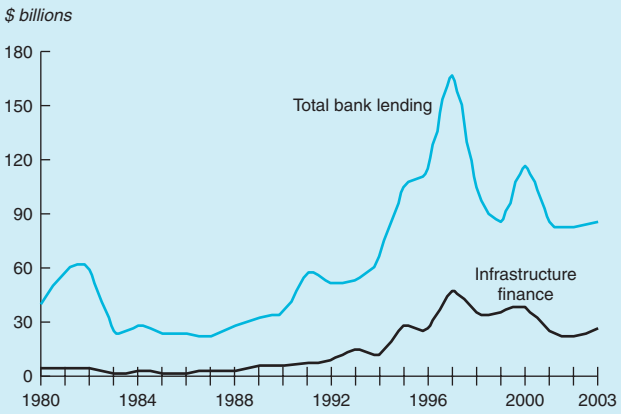
Box 6.4 Key characteristics of syndicated bank lending to infrastructure

Banks engage in syndicated lending to diversify their portfolio, both as a matter of commercial prudence and to comply with capital-adequacy requirements. Syndicated lending benefits the borrowers in several ways. First, it offers a wide range of maturities—from 364 days of revolving credit to 10-year project finance loans. Second, it provides necessary flexibility in loan drawdown during project construction. Third, bank loans can usually be repaid without penalty, creating flexibility for later refinancing.

Almost by definition, such syndicated bank loans are priced at a floating rate, at a spread or margin (expressed in basis points) over a benchmark rate such as LIBOR or Euribor; nearly all are denominated in major currencies. In addition, they share three notable characteristics:

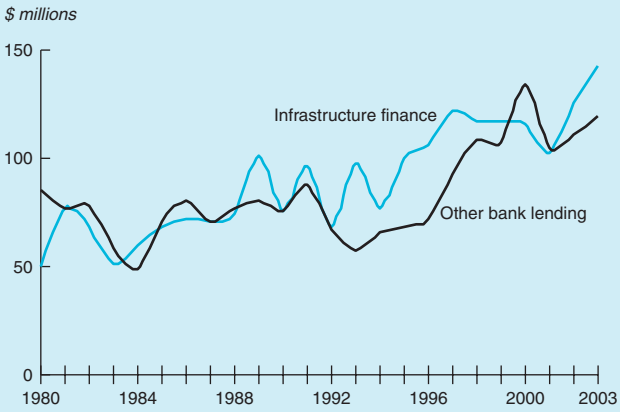
- Syndicated bank loans for infrastructure are closely linked with overall bank lending to developing countries (see figure below at left). As total new bank loans increased from close to $20 billion in the mid-1980s to almost $170 billion in 1997, infrastructure finance from commercial banks rose from about $3 billion to almost $50 billion. Since, it has dipped back to less than $30 billion.
- Infrastructure-related instruments have longer maturities than those for other activities (see figure at right). However, the average tenure for infrastructure finance declined from around 8.5 years in the 1980s to 7 years in the 1990s, decreasing further in 2000–03. The decline can be explained by the composition of borrowers. Average maturity was higher when East Asia dominated such financing, with maturities averaging eight years in East Asia between 1980 and 2003, compared with six in Latin America.
- Pricing has followed the overall structure for margins in bank lending (see lower right figure). Particularly noteworthy is the jump in pricing since 1998, as banks' risk aversion increased. The average margin on infrastructure finance increased from an average of 160 basis points in 1995–97 to 220 basis points in 2000–03, compared with an increase in the margin on general bank lending over the same period from 142 basis points to about 200 basis points.

Infrastructure financing and total bank lending, 1980–2003



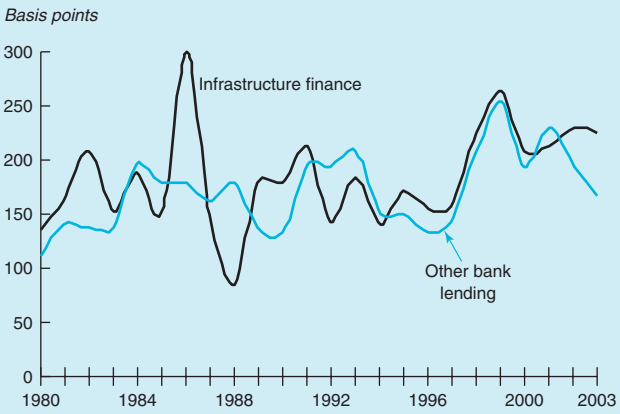
Sources: Dealogic Loanware and World Bank staff estimates.

Average size of transactions, 1980–2003



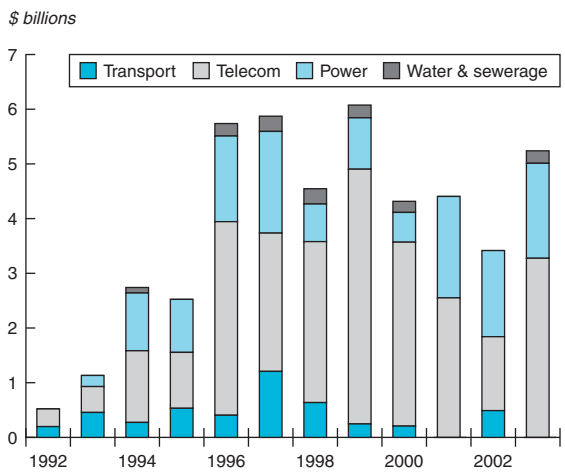
Sources: Dealogic Loanware and World Bank staff estimates.

Average margin over benchmark rates, 1980–2003



Sources: Dealogic Loanware and World Bank staff estimates.

Figure 6.5 Bond financing for developing-country infrastructure, 1992–2003



Note: Data for 2003 are from January through November.
Source: Dealogic Bondware.

A nascent bond market has also developed, driven by the economic reforms, market liberalization, and financial innovations of the early 1990s. New issuance amounted to about $4 billion in 2000–03, with most of the activity occurring in telecommunications (figure 6.5). The main issuing countries have been Argentina, Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, Mexico, the Philippines, Qatar, the República Bolivariana de Venezuela, and Thailand. As the market has gained maturity, it has delivered a series of high-profile transactions—among them the $1.2 billion bond issued by Qatar for the Laffan Liquified Natural Gas project, $1 billion issued by the República Bolivariana de Venezuela for the Petrozuarta oil project, and $125 million issued by the Philippines for the Quezon power project—and has encompassed a broad range of project types, issue sizes, and seniority.

Compared to the bank market, bond markets offer some advantages in terms of longer maturities, tradability, and back-weighted repayment structures that help to support equity returns. Infrastructure project bonds appeal in particular to institutional investors, such as insurance companies and pension funds, for which the long-term nature of investment projects is an advantage, as they can generate stable, long-term cash flows to match long-term liabilities.

During the mid-1990s, spreads on project bonds were 200–400 basis points, and maturities averaged more than 10 years (table 6.2). A sample of

Table 6.2 Infrastructure bond issuance, 1994–2003

	Number of bond issued	Maturity (*years*)	Amount (*$ billions*)	Launch spreads (*basis points*)
1994	16	7.9	2.8	246
1995	17	10.8	2.5	231
1996	31	10.9	5.8	313
1997	31	10.2	6.0	354
1998	22	8.5	4.5	418
1999	25	6.8	6.0	443
2000	17	5.9	4.3	409
2001	15	6.3	4.3	384
2002	21	7.7	3.4	670
2003	13	8.8	3.7	—

Note: — = not available. Data for 2003 are from January through November.
Source: Dealogic Bondware.

105 emerging-market project bonds issued between January 1993 and March 2002 found that, on average, project bonds were rated barely below investment grade—between BBB− and BBB according to Standard and Poor's rating classifications. The spread on project bonds typically was lower than on the sovereign bonds of the corresponding countries.

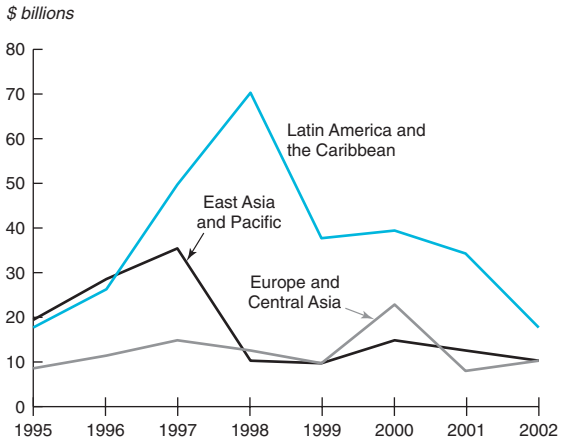
Infrastructure finance in the wake of macroeconomic and industry shocks

Since 1997, every important measure of infrastructure finance to developing countries—total external finance, project finance, and investment with private participation—has declined by at least 50 percent (see figure 6.4). The downturn was led by a series of crises affecting emerging-market economies, notably the East Asian countries, the Russian Federation, and Brazil. In recent years, the trend has been accentuated by a retrenchment by major commercial banks and a weakening of the global infrastructure industry.

Two factors suggest that the initial downturn was most influenced by an increase in host-country-related risks (country and project risks) rather than global industry-specific risk:

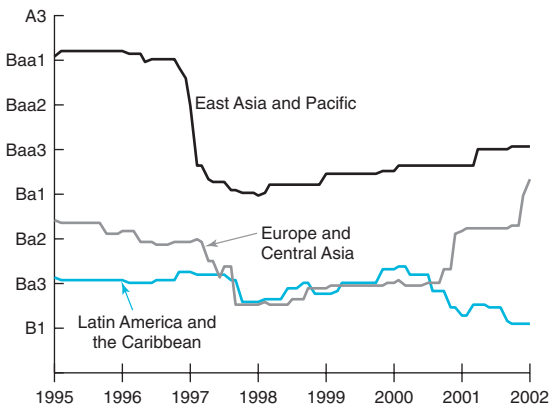
- The significant drop in investments with private participation between 1997 and 2000 was highly correlated with the increase in sensitivity to country risks due to financial crises. In 1997–98, investments in East Asia and in Europe and Central Asia dipped dramatically (figure 6.6), coinciding with a sharp fall in sovereign credit ratings in those regions (figure 6.7). Investments and credit ratings in Latin America followed a year later.[7]

Figure 6.6 Investment in developing-country infrastructure with private participation, 1995–2002



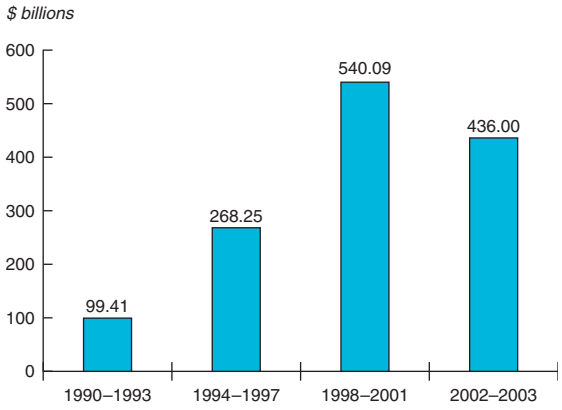
Source: PPI Project Database.

Figure 6.7 Average regional credit quality, 1995–2002



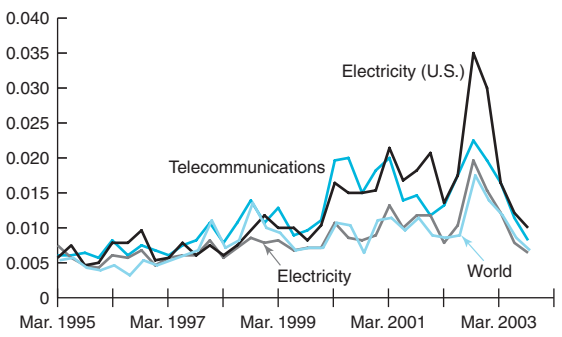
Sources: Moody's Investor Service and World Bank staff estimates.

Figure 6.8 Global annual average of debt financing for infrastructure, 1990–2003



Source: Dealogic Bondware.

Figure 6.9 Risk of investing in telecommunications and electricity, 1995–2003



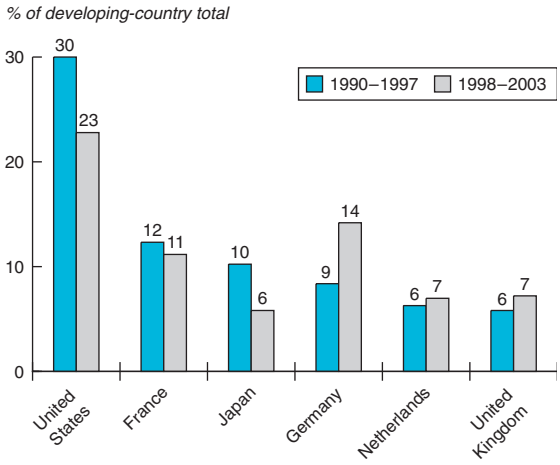
Note: The volatility of the telecommunications and electricity sectors is defined as the standard deviation of the stock price returns measured over the preceding quarter.
Sources: Morgan Stanley and World Bank staff estimates.

- From 1997 to 2000, as capital flows to developing countries declined, the global infrastructure industry remained robust (figure 6.8). Industry risk indicators, as measured by the volatility of their stock market prices relative to world stock market prices, remained stable (figure 6.9).[8] During this period, it appears that investors shifted from investments in developing countries' infrastructure to investments in countries that had opened their infrastructure sectors to new public-private partnership models—notably developed countries in Western Europe.

The susceptibility of infrastructure finance to perceived host-country risks suggests the importance of measures to prevent financial crises and to ensure macroeconomic stability in developing countries, including the pursuit of sound monetary and fiscal policies.

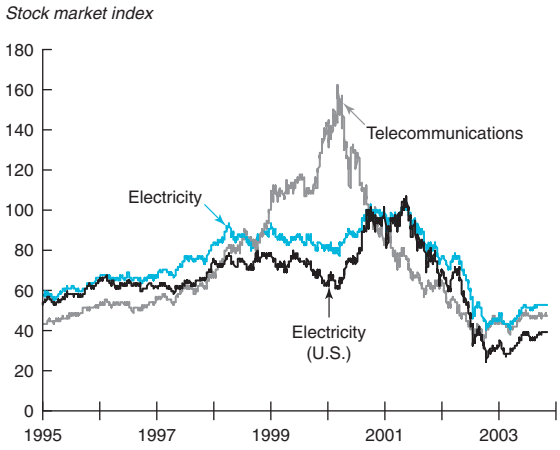
The commercial bank retrenchment from infrastructure finance was part of a more general

Figure 6.10 Share in infrastructure-related bank lending



Sources: Dealogic Loanware and World Bank staff estimates.

Figure 6.11 Stock market behavior of global telecommunications and electricity industries, 1995–2003



Sources: Morgan Stanley and World Bank staff estimates.

retrenchment of banks, particularly U.S. and Japanese banks (figure 6.10), from lending to developing countries, due to increased sensitivity to country risk (see chapter 2).

The decline in infrastructure financing in recent years has been accentuated by weakness in the telecommunications and power sectors. Telecommunications and power both have experienced financial strain, as indicated by a steep decline in share prices (figure 6.11). In power, the companies that drove the 1990s boom in the sector (mainly those in the United States) experienced, on average, an 88 percent fall in stock prices between June 2001 and October 2002, the most seriously affected being AES, Calpine, CMS, El Paso Energy, Enron, Mirant, and Reliant. In telecommunications, share prices of major firms have fallen by some 70 percent since January 2000. Furthermore, the decline in infrastructure financing coincided with a sharp increase in risk measures associated with investments in these sectors, as reflected by the substantial increase in the volatility of stock market price indices (see figure 6.9), and the significant increase in the sensitivity of sector returns to global returns (box 6.5).

Part of the reason for the weakness of the sectors was the revelation of accounting irregularities, with Adephia Communications, Enron, Qwest, and WorldCom now under criminal investigation in the United States. But in telecommunications, technological change also played a part in the decline. While creating new opportunities for large transnational players, rapid change has created new difficulties, particularly in accurately gauging demand and pricing new products. The balance sheets of telecommunications companies were severely hit by two investments—the 100-fold increase in the fiber-optic transmission capacity since 1998 (demand grew four-fold), and the high bids (up to $125 billion) for third-generation mobile licenses in European markets, which have not yet generated significant returns.

Since the middle of 2003, there has been evidence of a recovery in the financial health of the global telecommunications and electricity industries. Stock prices in both sectors have increased slowly, volatility has fallen (dramatically in the third quarter of 2003), balance-sheet consolidation has progressed, and growth has resumed. The telecommunications industry is expected to show growth of 10.1 percent in 2003, reversing declines in 2001 and 2002 (Telecommunications Industry Association 2003). Many electricity firms are seeking a better position in the market through domestic and cross-border mergers and acquisitions.

Regional differences in infrastructure flows

International investment in developing countries' infrastructure is spread unevenly across regions. Over the past decade, most external financing went to East Asia and Latin America. East Asia alone

Box 6.5 Systemic risk associated with investing in telecommunications and electricity

It is possible to test whether systemic risk, referred to as beta risk in the Capital Asset Pricing Model, increased in the telecommunications and electricity sectors during the period of the global downturn, by deploying the following regression model:

Return on a particular sector index
$= a + b^*$return on world index $+ c^*$dummy
$+ d^*$(dummy)*(return on world index)
+ error term.

The model was estimated using daily observations from January 1, 1995, to November 11, 2003. The dummy equals 1 in the period March 1, 2000, to March 1, 2003, and zero otherwise; *b* reflects the beta for each sector between January 1, 1995, and March 1, 2000 (the boom period in global infrastructure finance); and *d* measures the change in beta during the decline. A positive and statistically significant value of *d* indicates an increase in systemic risk during the downturn. The results are summarized in the box table and indicate that the beta significantly increased in both sectors, with the increase in risk in the electricity sector almost entirely driven by U.S.-based companies.

Regression results: Increase in systemic risk during the downturn

		Return telecom index	Return electricity U.S. index	Return electricity index
Constant	a	0.00	0.00	0.00
		(1.40)	(0.19)	(0.09)
Return world index	b	0.94*	0.37*	0.50*
		(34.68)	(8.78)	(20.76)
Dummy	c	0.00*	0.00	0.00
		(−3.11)	(−0.96)	(−1.25)
(Dummy)*(return world index)	d	0.23*	0.35*	0.08*
		(6.21)	(5.96)	(2.29)
R-squared		0.59	0.15	0.32
Number of observations		2,312	2,312	2,312

Note: Figures in parentheses indicate *t*-statistics; * indicates significance at the 5-percent level. Model is estimated using ordinary least squares methodology.
Sources: Morgan Stanley and World Bank staff estimates.

captured about 44 percent of total developing-country infrastructure finance in 1990–96, led by China, Malaysia, and, to a lesser extent, Indonesia, the Philippines, and Thailand. But the region's share was cut in half in 1997–2001 in the wake of the East Asian crisis. Despite a slight recovery in 2002–03, memories of failed projects still block a rapid resumption of foreign investment.

After the East Asian crisis, Latin America became a relatively more important borrower of external infrastructure funds, led by Argentina, Brazil, Chile, and Mexico. The region's share of developing-country infrastructure finance more than doubled, from an average of 24 percent in the early 1990s to 33 percent during 1997–2001. Much of the rise can be ascribed to a sharp increase in privatization-related financing (especially in the telecommunication and electricity sectors) and bank lending. Between 2002 and 2003, however, as new commercial bank deals to infrastructure projects in Latin America plummeted to $3 billion from $11 billion in 2001, the region's share in total infrastructure financing dropped correspondingly. Short-term liquidity became a concern in Chile, while utilities in Brazil struggled with the effects of a 2001 drought that required unprecedented energy conservation measures. In Argentina, many public-service providers of infrastructure services defaulted on their obligations, openly questioning the commercial viability of their enterprises under prevailing political conditions. República Bolivariana de Venezuela suffered the aftershocks of general strikes in late 2002 and 2003, during which capital controls were imposed and demand for electricity fell.

External financing for infrastructure in the Middle East and North Africa, South Asia, and Sub-Saharan Africa was small throughout the 1990s, with most externally financed projects concentrated in just a few countries. However, in the Middle East, the ability of national and regional banks to provide medium- to long-term local funding (including through Islamic financing instruments) has been instrumental in financing an array of desalination and independent water and power projects. These include the Barha project in Oman and the $1.8 billion Umm Al-Nar project in Abu Dhabi.

After 1994, Europe and Central Asia attracted substantial amounts of infrastructure financing, as candidate countries prepared their infrastructure markets for accession to the European Union. In 1997–2003, infrastructure finance to the region more than tripled to an annual average of $10 billion (from $3 billion during 1990–96), reflecting vigorous efforts by the region's governments. The share of the region in total developing-country infrastructure finance increased from 9 percent to 19 percent during the period.

Unlocking the potential of the global capital markets

Viewed from the perspective of their size, depth, sophistication, and range of instruments, global capital markets have the potential to fund all economically viable infrastructure projects in developing countries. In 2003, international lending in medium- and long-term bonds and bank loans amounted to $3.1 trillion (table 6.3). Yet on a global scale, infrastructure on average has attracted only 15 percent of these flows. Flows to developing-country infrastructure are even lower—at their peak in 1997, total private capital flows to developing countries' infrastructure were just 3.6 percent of the global total of new international bond, loan, and equity issuance.

In the current environment, in which developing countries' capital markets are not fully integrated with the global financial system, and where considerable administrative restrictions remain on capital flows, tapping the international capital markets to meet the high demand for infrastructure in developing countries will require solutions on five fronts. First, establishing transparent rules of the game, upon which investors can form expectations of future returns, assess risks, and have the assurance that contracts will be enforced—with legal remedies in the case of default. Second, strengthening the capacity of local capital markets, both as a source of long-term local currency finance and as a hedging instrument against currency risk. Third, developing viable public-private risk-mitigation and financing instruments capable of addressing a host of political, currency, credit, contractual, and regulatory risks. Fourth, facilitating the access of subsovereign public utilities, such as municipal utilities, to these capital markets. And, fifth, supporting public providers of infrastructure services in achieving commercial standards of creditworthiness to access capital markets on a sustainable basis over the long term. All these efforts involve a strategic role for multilaterals, particularly the last three. Seen against the backdrop of an acceleration of domestic growth, past macroeconomic adjustment, and improving creditworthiness in developing countries (see chapters 1 and 2), the time is favorable for scaling up efforts to meet the challenge of financing infrastructure in developing countries.

The importance of investor protection

Typically, private sector participation in infrastructure is governed by sector-specific regulations or long-term concession contracts. Governments often enter into such concessions under national laws (such as concession laws in Argentina and the build-operate-transfer laws in the Republic of Korea and the Philippines) that authorize the government to award concessions to private operators—through competitive public bidding and solicited tenders—to build, finance, and manage infrastructure assets, and to collect tolls and tariffs. Such contracts differ from "private-to-private" contracts in several respects. Acting in its sovereign capacity, governments may abrogate—or derogate from—contractual arrangements by legislative

Table 6.3 Total global international bank lending and bond issuance, 1990–2003

$ billions

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total bank lending	422	403	433	548	812	1,154	1,325	1,601	1,336	1,507	1,910	1,574	1,554	1,489
of which to infrastructure	76	54	68	89	129	221	261	335	277	377	553	385	347	296
Total bond issuance	236	312	352	499	457	496	713	757	912	1,379	1,469	1,716	1,500	1,912
of which to infrastructure	21	28	33	40	29	28	39	41	65	150	157	201	103	128

Note: Data for 2003 are from January through November.
Sources: Dealogic Bondware and Loanware and World Bank staff estimates.

means. Governments also have legitimate public-policy goals and concerns, such as affordability, universal access, and the regulation of monopoly practices. These differences expose the vulnerability of privately financed infrastructure projects to a host of contractual, political, and regulatory risks. Sustainable private financing of infrastructure requires enhancing the credibility of governments' reform and regulatory commitments. This can occur by institutional and legal development, as well as by more transparent procedures for project selection, appraisal, and the awarding of concessions.[9]

The legal documents governing virtually all infrastructure finance projects include provisions requiring the host country to submit to international commercial arbitration—the International Court of Arbitration of the International Chamber of Commerce, the London Court of International Arbitration, or the Arbitration Institute of the Stockholm Chamber of Commerce—as a mechanism of dispute resolution and enforcement. Arbitration is a binding, nonjudicial means of dispute resolution and—because a majority of countries have ratified the New York Convention on the Recognition and Enforcement of Foreign Arbititral Awards of 1958—widely enforceable around the world, in contrast to litigation, which is enforceable only under bilateral treaties (Mattli 2001; Thompson Financial 2004).

For creditors, covenants to mitigate risk and provide contractual protection have gained importance as a mechanism to increase investor interest in developing-country infrastructure. Because debtholders are exposed to the usual problems of agency, moral hazard, and adverse incentives inherent in all debt transactions, well-crafted and enforceable debt covenants are crucial for tapping external markets for financing. They can protect the safety and seniority of debtholders' claims, ensure repayment of principal, and provide legal remedies in the event of default. Covenant provisions are enforced by making their violation an event of default. The specific covenants included in a particular debt agreement, and the extent to which they protect the interests of creditors, will depend on other attributes, such as collateral, the governing law, and the legal and institutional frameworks underpinning contract formation and enforcement. Given that the writing, negotiation, and monitoring of specific provisions are costly, two sets of considerations become relevant—the ease with which the stipulated covenants can be monitored and the scope for potential opportunistic behavior that could lead to a transfer of wealth from bondholders to shareholders. While most infrastructure loans and bonds issued internationally are governed by contracts and covenants based on United States (New York) or United Kingdom (English) law, enforcement of debt terms depends on the legal system of host countries (Esty and Megginson 2000).

For project bondholders, covenants typically offer security that is less stringent than that attached to bank loans but greater than that of corporate bonds. A sample of 27 project bonds for which detailed covenant information was available indicates that project-bond indentures contain provisions, usual in corporate bonds, aimed at mitigating common shareholder-bondholder conflicts.[10] Covenant provisions typically take the form of restrictions on dividends, mergers and acquisition transactions, asset disposals, limitations on indebtedness, requirements of third-party guarantees, maintenance of good regulatory standing, and, in some circumstances, the establishment of offshore and debt-service reserve accounts. In addition, they contain two further categories of clauses that arise from the very specific nature of project finance:

- Incentive provisions for contractors, operators, and sponsors, such as performance targets, mandatory penalties, and equity participation in the project. For instance, if a project operator fails to meet certain performance targets, then the equity holders would have to inject additional funds.
- Institutional environment provisions that, in case of changes in the ambient regulatory, legal, or tax environment, would trigger changes in project control or mandatory redemption of debt. For instance, a material change in the terms of agreement for concessions would trigger early repayment of the project bond.

Increasing local-currency financing

Currency risk, traditionally, has been a critical feature of infrastructure project investment. With the exception of international airports and seaports, most transport infrastructure is domestically oriented, with project revenues generated in local currencies. But servicing foreign debt and equity involves payment in foreign currency. So when

foreign financing flows to projects with only a limited ability to generate such funds, currency risks arise. Hedging can occur, but contracts are usually limited to the short term. Investors are exposed not only to fluctuations in the exchange rate, but also to changes in capital controls, which may affect currency convertibility and profit repatriation.

Recently, however, prospects for currency convertibility and transferability have improved in many developing countries, with the liberalization of capital accounts and the move to more flexible exchange-rate regimes. At the same time, local-currency fixed-income markets have witnessed considerable growth and modernization, particularly in Brazil, Chile, Hungry, India, the Republic of Korea, Malaysia, Mexico, Poland, South Africa, and Turkey. Notably, in countries with a large local institutional investor base (such as Chile, the Republic of Korea, and Malaysia), local debt markets have significantly expanded the domestic capacity to meet needs for long-term infrastructure investment.

A strategic role for multilaterals

As they incorporate the Millennium Development Goals into their targets and strategic vision, multilaterals have come increasingly to view infrastructure financing within the broader context of finance for development. Their strategy is predicated on three points of consensus—the pivotal role of infrastructure in development; its direct and indirect contribution to achieving the Millennium Development Goals[11]; and the recognition that public sector support, including well-targeted government subsidies, will remain crucial in attracting private capital, particularly in sectors such as water and road transport.

At the same time, the unique role of multilaterals in promoting infrastructure finance, including their years of experience, their capacity to provide long-term loans, and their focus on poverty alleviation, is well recognized (Goldin, Dailami, and Wallich 2003). However, lending from multilaterals, particularly the World Bank, fell during the 1990s—decreasing by 47 percent between fiscal year 1993 and fiscal year 2002. Trends in multilateral development bank spending from 1995 are shown in box 6.6.[12]

The strategic agenda to promote infrastructure financing must focus on three elements. First, multilaterals need to expand their current offering of loans and guarantee instruments to facilitate access to global and local capital markets by both private and public providers of infrastructure services. Political, contractual, regulatory, and foreign-exchange risks will have to be dealt with. Political risk mitigation has advanced in recent years and now includes a private political-risk insurance market and new programs by export credit agencies. But instruments to mitigate the other risks remain less developed. The challenge is to achieve an appropriate allocation of risks between the private and public sector, without inducing moral hazard—which implies not having the government or public sector shouldering excessive risk. Apart from infrastructure loans to public and private providers, most multilaterals are able to provide partial credit guarantees, political risk insurance, and partial risk guarantees. Instruments that require further evaluation and development are those relating to local-currency lending and guarantees, and liquidity backstopping to mitigate exchange-devaluation risk.

The second item on the agenda for promoting infrastructure finance is to apply the new financing and risk-mitigation instruments to subsovereign providers of infrastructure services, such as municipal utilities. Facilitating the access of subsovereign entities to capital markets complements the wider economic reform agenda of fiscal decentralization, wherein local entities assume responsibility for providing infrastructure services. However, carefully structured incentives will be required to encourage fiscally responsible behavior by these subsovereign infrastructure providers. Some multilaterals, such as the European Bank for Reconstruction and Development and the Inter-American Development Bank, have been able to engage at the subsovereign level without a government counter-guarantee. The World Bank, including the International Finance Corporation, is working on similar facilities.

The third element is to work with public providers of infrastructure services to fundamentally improve their creditworthiness. Corporate-level reforms in investment planning, financial reporting, and corporate governance will have to be pursued, in addition to enhancing investor protection (as discussed above). Although the focus on improving the creditworthiness of public enterprises is not entirely new, there is a need to renew capabilities to deliver advisory and implementation support to achieve this transformation. Ultimately, the infrastructure financing requirements of most developing

Box 6.6 Multilateral development bank spending on infrastructure in recent years

Throughout the mid- to late 1990s, multilateral spending on infrastructure declined, reaching a trough of $13.8 billion in 1999—mainly because of a reduction in IBRD/IDA lending (boxed table). The major decline in multilateral infrastructure spending was to the energy sector (boxed figure), as the private sector became an increasingly important player, and as multilateral lenders focused on developing an enabling environment for private participants (World Bank 2003). However, over the past few years, there has been a slight recovery in infrastructure spending, with commitments standing at $16.6 billion in 2002.

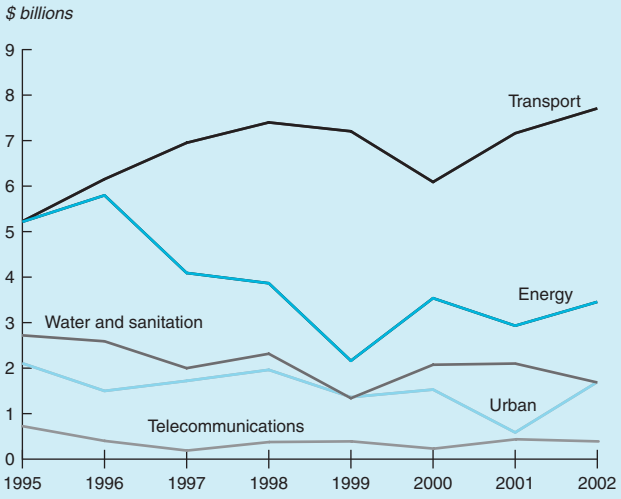
Multilateral development bank commitments to infrastructure sectors, 1995–2002

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002
Total	17.770	18.266	16.612	17.687	13.842	14.957	14.684	16.591
As percentage of total commitments	33.984	24.708	36.130	40.998	31.205	34.147	34.171	38.973
ADB	3.424	2.849	1.903	2.337	1.752	2.655	2.261	2.879
AfDB	0.176	0.087	0.210	0.372	0.277	0.135	0.375	0.463
EBRD	1.404	1.631	1.077	0.874	0.916	0.792	1.164	1.458
EIB	2.465	2.425	3.067	3.483	2.993	3.735	3.552	4.401
IBRD/IDA	7.384	7.954	6.616	6.674	5.278	4.248	4.980	4.599
IDB	2.221	2.666	2.805	3.117	1.782	1.702	0.988	0.998
IFC	0.335	0.358	0.496	0.394	0.289	0.472	0.321	0.486
IsDB	0.219	0.148	0.295	0.260	0.351	0.468	0.475	0.445
MIGA[a]	0.142	0.148	0.143	0.176	0.204	0.749	0.568	0.862

Note: Infrastructure sectors considered are energy (excluding extractive industries), water supply and sanitation (excluding water resource management and irrigation), transport, urban development, and telecommunications (information and communications technologies).
ADB (Asian Development Bank), AfDB (African Development Bank), EBRD (European Bank for Reconstruction and Development), EIB (European Investment Bank), IBRD/IDA (International Bank for Reconstruction and Development/International Development Agency), IDB (Inter-American Development Bank), IFC (International Finance Corporation), IsDB (Islamic Development Bank), MIGA (Multilateral Investment Guarantee Agency).
a. Political risk insurance coverage.
Source: Refer to endnote 12.

Multilateral development bank commitments by sector, 1995–2002



Note: Refer to table above.
Source: Refer to endnote 12.

countries cannot be met without reaching commercially defensible standards of creditworthiness.

Over the longer term, enhancing the access of developing-country infrastructure to the international capital markets will also require developing an international mechanism to deal with cross-border investment regulation, competition rules, and consistency between national regulatory regimes. As technology increasingly interacts with economic pressures to globalize infrastructure industries and open them to international competition, consistency and compatibility of national competition laws and policies will become more important for achieving gains. Where elements of competition and natural monopoly co-exist and are complementary, the regulation of third-party access to essential facilities is vital. In recent years, the issue has generated a considerable amount of academic interest and research.[13] It has found its most immediate practical expression, as well as the most substantial challenges, in the European Union. In the context of implementing the single market, common rules have been prescribed for the progressive liberalization of networked industries in telecommunications and other sectors (Newbery 2001). At the global level, in the telecommunications industry, the World Trade Organization's Agreement on Trade in Telecommunications, reached in 1998, committed 78 nations, representing 90 percent of the global market, to liberalization and open-market policies, providing a necessary international framework. In other sectors, arrangements are less formal,[14] but steady movement toward common regulatory schemes can be detected and is likely to gain speed as globalization proceeds.

Notes

1. Some 1.1 billion people lack access to safe drinking water, 2.4 billion are affected by inadequate sanitation, and 1.4 billion have no power.

2. In the 1990s, an estimated 70 percent of infrastructure investment in developing countries came from governments or public utilities, 22 percent from the private sector, and 8 percent from official development assistance (World Bank staff estimates). Country data on infrastructure investment are scarce and fragmented, but available information reveals considerable variation across countries as well as regions. Infrastructure investment in Mexico in the late 1990s was 1 percent of GDP, for example; in Columbia, 7 percent (Serven and Easterly 2003). In India, it was 4.5 percent in 2000–01 (Reserve Bank of India 2003).

3. In the U.S. electricity sector, this organizational structure came to be known as the "utility consensus" (Hirsch 1999), which prevailed from the 1920s to the 1970s.

4. Data were obtained by analyzing the U.S. Electricity Information Administration's Country Analysis Briefs for 2003 of 54 developing countries in East Asia, Europe and Central Asia, Middle East and North Africa, South Asia, and Latin America and the Caribbean.

5. Between 1984–90 developing countries awarded only eight water and sewerage projects to private companies for a total capital investment of $297 million.

6. The project company, as a separate legal entity, is incorporated under host country company law. The project company has ownership rights over project assets and future cash flows and, typically, is structured as a "bankruptcy remote" special-purpose vehicle. This allows it to enter into a contract with other stakeholders, as well as to raise debt capital in the international and local financial markets.

7. The average regional credit quality is based on Moody's long-term foreign currency credit rating of the countries in the region. The credit qualities of each month are calculated as weighted averages of the credit ratings, with the weight of each country equal to its outstanding foreign-currency debt (composed of long-term, short-term, and IMF credit) relative to the total outstanding foreign-currency debt of the region.

8. The volatility of the telecom and electricity sector is defined as the standard deviation of the stock price returns measured over the preceding quarter. For the telecom sector, the returns of the Morgan Stanley Capital International Inc. (MSCI) sector index are used. For the power sector, because a similar index with a long enough history does not exist, the volatility measure is based on returns to the average stock price of the main global companies in this sector. As private investment in the power sector is concentrated in U.S.-based companies, a separate index has been created for these companies. The following companies are included: the U.S.-based companies American Electric Power, Texas Utility Company, Dynegy, El Paso Energy, AES, Reliant, Williams, Calpine, Enron, Duke Energy, Entergy, Mirant, Allegheny Energy, CMS Energy; and the non-U.S.–based companies British Energy, Scottish & Southern, Scottish Power, EDF, E.ON, RWE, Endesa, Iberdrola, Union FENOSA, Enel, Edison, Electrabel, Electricidade de Portugal, Empresa Nacional de Chile.

9. See Daniels (2003) for a more in-depth discussion of the role of legal instruments in enhancing the stability of private participation in public infrastructure projects.

10. See Dailami and Hauswald (2003) for a more detailed analysis of project bond covenant provisions.

11. Directly, the provision of services such as clean drinking water, sanitation, electricity, and roads are either goals on their own (Goal 7, Ensuring Environmental Sustainability, calls for halving the proportion of people without access to safe drinking water) or have obvious effects on goals such as combating infectious diseases, reducing child mortality, and achieving universal primary education. For example, the distribution of vaccines requires an effective transportation infrastructure, with vaccines such as that against hepatitis A being very sensitive to temperature (World Health Organization 2003). Water-related diseases rank as one of the top killers of children, and roads in rural areas can increase the practicality of children attending

school. Indirectly, infrastructure affects the Millennium Development Goals by enhancing economic growth.

12. The data were collected from various sources.

—ADB: data from ADB annual reports, based on calendar year recording. Exclude private sector loans categorized in the ADB annual reports as "social infrastructure."

—AfDB: data from AfDB annual reports, based on calendar year recording. Conversion rates (1 unit of account [UA]: US$): 1995—1.48649, 1996—1.43796, 1997—1.34925, 1998—1.40803, 1999—1.37095, 2000—1.30291, 2001—1.25673, 2002—1.35952. Data do not include the African Development Fund (ADF) nor the Nigeria Trust Fund (NTF), the concessional and private windows of the AfDB Group. "Energy" includes oil and gas.

—EBRD: Data from EBRD annual reports, based on calendar year recording. Conversion rates (1 Euro/ECU: US$): 1995—1.307, 1996—1.277, 1997—1.164, 1998—1.1115, 1999—1.0845, 2000—0.94785, 2001—0.8937, 2002—0.9343. Figures under "urban" here correspond to EBRD category of "municipal and environmental infrastructure," which includes water supply and sanitation as well. "Energy" here corresponds to EBRD's categories of "energy efficiency" and "power and energy." Similarly, "telecommunications" here corresponds to "telecommunications, informatics, and media." Figures include acquisitions of and investments in private companies.

—EIB: Data from EIB annual reports, based on calendar year recording. The same conversion rate is used as for EBRD. Figures refer to commitments to "(pre)accession and partner countries" only. Figures recorded here under "transport" reflect the broader EIB category of "communications."

—IBRD/IDA: Data from IBRD/IDA central database system, based on fiscal year recording. Do not include IFC/MIGA commitments. "Energy" excludes extractive industries (oil, gas, and mining). "Water supply and sanitation" excludes water resource management and irrigation.

—IDB: Data from IDB annual reports, based on fiscal year recording. "Transport" reflects here the IDB category of "transport and communications," which covers both transport and telecommunications. Data include loans, technical cooperation operations ($1 million and above), and Multilateral Investment Fund operations (when applicable to infrastructure sectors).

—IFC: Data from institutional internal database.

—IsDB: Data from IsDB central database system, adjusted from the lunar calendar. Figures include operations by IsDB and Unit Investment Fund, an IsDB subsidiary. Figures do not include the Emerging Markets Partnership (EMP)–managed IsDB Infrastructure Fund nor the Islamic Bank's Portfolio (IBP), another IsDB subsidiary, which provides both short- and long-term finance. Similarly, figures do not include operations approved by the Islamic Corporation for the Development of the Private Sector (ICD), the private sector arm of the IsDB Group.

13. For a comprehensive review of key issues see Yoo (2002) and Posner (1979); for telecommunications, see Valetti (2003) and Grout (2001); and for water see Hern (2001) and Aitman (2001).

14. In transport, the International Air Transport Association has served as the authority to set fares and terms of service in the international aviation industry (Richards 2001). In water and electricity, outside the European Union, international agreements have been limited to what can be described as "soft legal arrangements," in the terminology of international-relations scholars (Koremenons, Lipson, and Snidal 2001).

References

Aghion, Philippe, and Mark Schankerman. 1999. "Competition, Entry, and the Social Returns to Infrastructure in Transition Economies." *Economics of Transition* (March): 545–76.

Aitman, D. 2001. "Competition Law Constraints on Access Charges in the England and Wales Water Industry." *Utilities Policy* (Denver, Colo.) 10(3–4): 129.

Asian Development Bank. 2002. "PRC: Strengthening Public Infrastructure Investment Policy in China." Manila.

Bain, R., and M. Wilkinson. 2002. "Road Risk." *Project Finance* (September supplement): 2–5.

Camdessus, Michel. 2003. *Financing Water for All*. Report of the World Panel on Financing Water Infrastructure, James Winpenny, ed. World Water Council, Marseilles, France.

Dailami, Mansoor, and Robert Hausewald. 2003. "The Emerging Project Bond Market: Covenant Provisions and Credit Spreads." Policy Research Working Paper 3095. World Bank, Washington, D.C.

Daniels, R. 2003. "Contracting for Infrastructure: Creating Durable Projects and Durable Institutions." Unpublished paper available at http://www.worldbank.org/prospects/gdf2004.

Energy Information Administration. 2001. U.S. Department of Energy. www.eia.doe.gov/pub/international/iealf/table64.xls.

Esty, B. C., and W. L. Megginson. 2000. *Syndicate Structure as a Response to Political Risk in the Project Finance Loan Market*. Harvard Business School, Cambridge, Mass. Processed.

Goldin, Ian, Mansoor Dailami, and Christine Wallich. 2003. "Role of the World Bank Group in Infrastructure." Unpublished paper available at http://www.worldbank.org/prospects/gdf2004.

Grout, Paul A. 2001. "Competition Law in Telecommunications and Its Implications for Common Carriage of Water." *Utilities Policy* (Denver, Colo.) 10(3–4): 137.

Hern, R. 2001. "Competition and Access Pricing in the U.K. Water Industry." *Utilities Policy* (Denver, Colo.) 10(3–4): 117.

Hirsch, Richard F. 1999. "Power Loss: The Origins of Deregulation and Restructuring in the American Electric Utility System." MIT Press, Cambridge, Mass.

International Energy Agency. 2003. *World Energy Investment Outlook*. Paris.

International Road Federation. 2002. *World Road Statistics*. Geneva and Washington, D.C.

Koremenos, Barbara, Charles Lipson, and Duncan Snidal. 2001. "The Rational Design of International Institutions." *International Organization* 55(4): 761.

Mattli, Walter. 2001. "Private Justice in a Global Economy: From Litigation to Arbitration." *International Organization* 55(4): 919.

Nadiri, Ishaq, and Theofanis Mamuneas. 1996. "The Effects of Public Infrastructure and R&D Capital on the Cost Structure and Performance of U.S. Manufacturing Industries." NBER Working Paper 3887.

Newbery, David M. 2001. "Economic Reform in Europe: Integrating and Liberalizing the Market for Services." *Utilities Policy* (Denver, Colo.) 10(2): 85.

Posner, R. A., 1979. "The Chicago School of Antitrust Analysis." *University of Pennsylvania Law Review* 127: 925–52.

Reserve Bank of India. 2003. *RBI Annual Report 2002–03*. Mumbai, India.

Richards, John E. 2001. "Institutions for Flying: How States Built a Market in International Aviation Services." *International Organization* 55(4): 993.

Sader, F. 2000. "Attracting Foreign Direct Investment into Infrastructure: Why Is It So Difficult?" Foreign Investment Advisory Services Occasional Paper 12, World Bank and International Finance Corporation, Washington, D.C.

Serven, Luis, and William R. Easterly, eds. 2003. *The Limits of Stabilization: Infrastructure, Public Deficits, and Growth in Latin America*. Washington, D.C.: World Bank.

Telecommunications Industry Association. 2003. *TIA's 2004 Telecommunications Market Review and Forecast*. Arlington, Virginia.

Thompson Financial. 2004. "English and New York Law Compared." *Project Finance International,* no. 280.

U.S. Energy Information Administration. 2003. Official Energy Statistics. http://www.eia.doe.gov/pub/international/iealf/table64.xls.

Valetti, Tommaso M. 2003. "The Theory of Access Pricing and Its Linkage with Investment Incentives." *Telecommunications Policy* 27 (10–11): 659–68.

World Bank. 1994. *World Development Report*. Washington, D.C.

———. 2003. "Private Sector Development in the Electric Power Sector: A Joint OED/OEG/OEU Review of the World Bank Group's Assistance in the 1990s." Operations Evaluation Department, World Bank, Washington, D.C.

World Health Organization. 2003. "Fact Sheet: Hepatitis A." http://www.who.int/vaccines/en/hepatitisa.

Yoo, Christopher S. 2002. "Vertical Integration and Media Regulation in the New Economy." *Yale Journal of Regulation* 19: 170–300.

Appendix A: Enhancing the Developmental Effect of Workers' Remittances to Developing Countries

Trends in developing countries' remittance receipts

Worker's remittances continued to rise in 2003 to an estimated $93 billion, up from $88.1 billion in 2002, when remittances equaled 5 percent of developing-country imports and 8 percent of domestic investment (table A.1).[1] Remittances remain the second-largest financial flow to developing countries after foreign direct investment, more than double the size of net official finance (figure A.1). In 2002, remittances were larger than both official and private flows in 36 developing countries. Latin America and the Caribbean continued as the region receiving the most remittances—it received $30 billion, nearly a third of remittance flows to all developing countries (table A.2). South Asia and East Asia and Pacific each received $18 billion. Sub-Saharan Africa received $4 billion.

Remittances increased more rapidly than forecast in last year's *Global Development Finance* (World Bank 2003, chapter 7). Weak labor markets and the tightening of border controls in the industrial countries after the terrorist attacks of September 11, 2001, were expected to slow the growth of remittances in 2002 and 2003. Instead, remittances increased by more than 20 percent, especially in the countries that faced heightened security. More remittance flows were diverted from alternative channels to formal channels as a result of efforts to curb money laundering (box A.1). Also, the increased focus on remittances resulted in better reporting of data in many developing countries. And the fear of being deported or investigated may have prompted some migrant workers to remit their entire savings to their home country (box A.2).

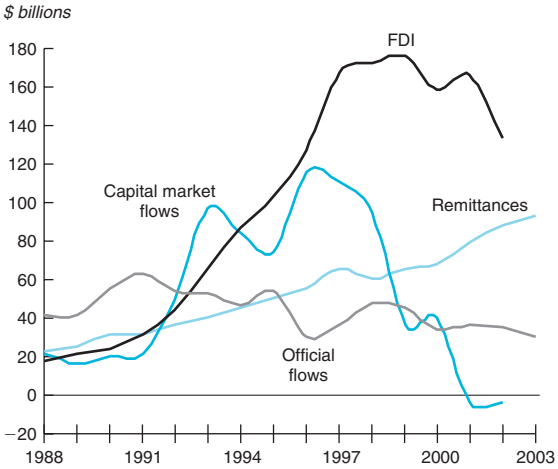
The main sources of remittances were the United States and Saudi Arabia, with 2002 payments of $31.4 and $15.9 billion, respectively. Remittance payments increased sharply from both

Table A.1 Remittances received and paid by developing countries in 2002
$ billions

	All developing	Low-income	Lower-middle-income	Upper-middle-income	High-income
Total remittance receipts	88.1	25.7	44.5	17.9	44.4
as % of GDP	1.5	2.9	1.3	1.0	0.2
as % of imports	5.1	12.1	4.9	3.2	1.2
as % of domestic investment	8.0	14.6	5.9	14.0	35.7
as % of FDI inflows	66.2	388.9	49.2	51.3	8.4
as % of net official finance	250.0	—	—	—	—
Other current transfers[a]	38.0	9.0	22.0	7.0	83.0
Remittance receipts and other current transfers	126.1	40.2	66.6	24.6	127.4
Total remittance payments	28.0	1.5	3.1	23.4	77.2
excluding Saudi Arabia	12.1	1.5	3.1	7.5	77.2

Note: — = not available.
a. Other current transfers include gifts, donations to charities, pensions received by currently retired expatriate workers, and so on. They may also include personal transfers by migrant workers to families back home. See World Bank 2003, chapter 7, data annex.
Sources: IMF 2002 and World Bank 2002 and 2003.

Figure A.1 Resource flows to developing countries, 1988–2003



Sources: IMF, *Balance of Payments Yearbook*, various years, and World Bank staff estimates.

countries from the mid-1970s to the mid-1990s (figure A.2). Since 1995, however, remittances from Saudi Arabia have stagnated, as economic activity has slowed, and also because the country made a decision to slow the growth of the foreign population. By contrast, remittances from the United States since 1995 have nearly doubled, driven by the economic boom and the liberalization of temporary migration (especially in the technology sector, through the H-1B visa).

The impact of remittances

At the individual level, remittances augment the income and reduce the poverty of the recipient (Adams and Page 2003). They are largely altruistic, the goal of the sender being to help the recipient meet financial needs for food and clothing, children's education, medical expenses, and housing. Remittances, therefore, tend to be stable over time and may even rise in times of economic difficulty in the recipient country (Ratha 2003). Remittances are also person-to-person flows, well targeted to meet the needs of the recipient.

At the macro level, remittances are believed to have a favorable effect on growth to the extent that they are used to finance education (Cox Edwards and Ureta 2003) and health expenses. Even when they are used for consumption, remittances generate multiplier effects, especially in poor countries with high unemployment. However, the debate over the macroeconomic effects of remittances is just beginning and will be an important area of future research. Some authors argue that remittances may reduce recipients' motivation to work and thus slow down growth (Chami and others 2003). Others argue that remittances may raise income inequality in the receiving society. Also, as with all foreign-currency inflows, too great a volume of

Table A.2 Regional distribution of remittances, 2001–03

$ billions

Region	2001	2002	2003	Increase during 2001–03 (%)
East Asia & Pacific	13.7	17.0	17.6	28.9
Europe & Central Asia	10.2	10.3	10.4	1.9
Latin America & the Caribbean	22.9	26.8	29.6	29.3
Mid. East & N. Africa	13.2	13.0	13.0	−1.2
South Asia	13.1	16.9	18.2	38.7
Sub-Saharan Africa	3.9	4.1	4.1	3.5
Total	77.1	88.1	93.0	20.7

Source: IMF, *Balance of Payments Yearbook*, various years, and World Bank staff estimates.

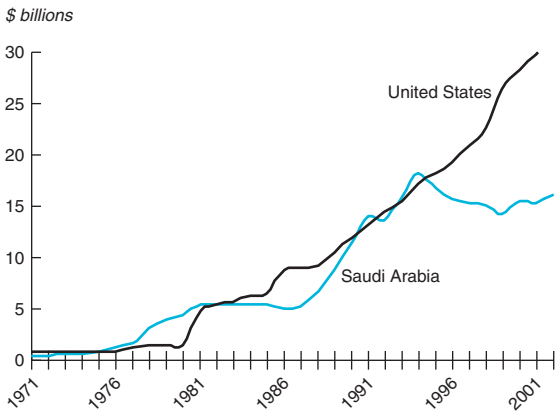
Box A.1 Informal transfers

Because a large share of remittances goes unrecorded, the data reported in the main text, which are based on official statistics, underestimate the actual size of remittance flows. One can only speculate about the size of unrecorded remittances. Officials in major fund-transfer agencies argue, based on the volume of funds flowing through their system, that unrecorded remittances may be larger than recorded remittances. A portion of the rise in remittances over the past two years may reflect a switch to more formal channels due to the tightening of controls on informal transfer agents following the September 11, 2001, attacks on the United States. For example, remittances to Pakistan nearly tripled from the fiscal year ending June 2001 to the fiscal year ending June 2003. Similar increases have occurred in other developing countries.

Box A.2 Remittance behavior

Temporary migrant workers tend to remit a larger proportion of their income than immigrants who plan to settle down in their new country of residence. Ties with families left behind in the home country tend to be stronger for recent migrants and for migrants who are planning to return soon. Also, families or relatives left behind need more financial help in the beginning. The propensity to remit (remittances as a share of income) is believed to decline with time, perhaps as the migrant worker is joined by family. Anecdotal evidence also suggests that the remittance behavior of migrant workers varies with skill and gender. While a skilled worker may earn more and send a larger nominal amount than an unskilled worker, the latter may send a larger share of income. Also, women are believed to remit a larger proportion of income—and more regularly—than men.

Figure A.2 Sources of remittance payments, 1971–2002



Source: IMF, *Balance of Payments Yearbook*, various years.

remittances can result in currency appreciation, which may affect the competitiveness of exports.

Reducing remittance costs

While remittance fees have declined somewhat since 2001, fees charged by money-transfer agents remain high compared to the actual cost of technology, labor, and currency-exchange commission. It is not uncommon, for example, for remittance costs to be as high as 20 percent for small transfers (figure A.3). Developments that may lead to lower remittance costs include:

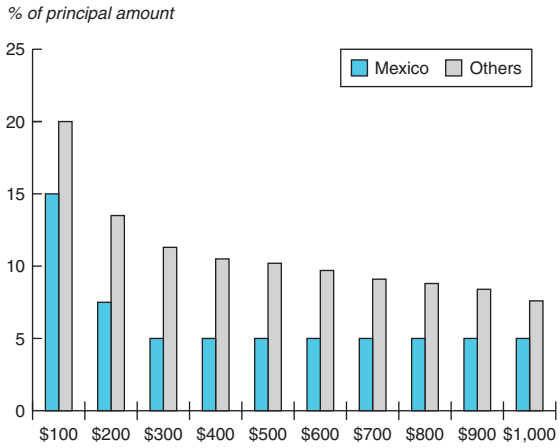
- Greater competition among money-transfer agents
- Better access to banking services for migrant workers in remittance-source countries and households in recipient countries
- Harmonization of the financial infrastructure supporting remittances
- Better investment climate in the remittance receiving country, for example, though removal of foreign-exchange restrictions.

Competition among money-transfer agents

The high costs of remittance reflect the large investments required to enter the formal money-transfer market, including a widespread branch network in both source and recipient countries. High fixed costs impede new entrants to the market, allowing money-transfer agents to charge above the marginal cost of transactions.

Nevertheless, there is some evidence that competitive forces are having an impact on reducing remittance fees. Some nonprofit credit unions affiliated with the World Council of Credit Unions

Figure A.3 Remittance costs from the United States to Mexico and other countries



Source: www.westernunion.com. Fees exclude exchange commission.

and International Remittance Network are able to provide the same service—for example, sending $1,000 to Mexico from the United States—at a substantially lower fixed fee of $10–$15, as opposed to the $50–$76 charged by major commercial money-transfer agents. South Africa's Teba Bank and Canada's Meli Melo Transfert are able to send cross-border transfers at a fixed fee of $3 for amounts up to $400. In Hong Kong, cutthroat competition among money-transfer agents has brought the cost of sending remittances to the Philippines down to a fixed $2.50 per transaction.

This salutary competitive process would be strengthened if smaller firms could enter into agreements with international banks to use their branch networks to remit funds. Although many major international banks lack sufficient branches in the countries receiving remittances, there may be some potential in easing rules in industrial countries that restrict the ability of local money-transfer institutions to cooperate with foreign banks for the purpose of sending remittances.

Scaling up banking access

Increasing access to banking services in developing countries (and for the poor in industrial countries) would help reduce remittance costs by (a) giving senders more choices in terms of the transfer agent they use and (b) permitting some degree of bundling of remittances so that the average remittance cost could be reduced by spreading fixed costs over a larger amount. Bundling may require new credit facilities in sending and receiving countries to ease liquidity constraints faced by individual remitters. Facilitating the use of the banking system for remittances may also encourage more widespread use of other banking services. It is observed, for example, that 14–28 percent of nonmembers who came to credit unions affiliated with the World Council of Credit Unions to transfer funds ended up opening an account (Grace 2003).

Harmonizing electronic transfer systems

Harmonizing electronic funds transfer systems could reduce the cost of remittances. Currently, major transfer agents and banks use their own (costly) proprietary systems to send remittances.[2] If funds were channeled through Fedwire,[3] an electronic transfer system developed and maintained by the U.S. Federal Reserve System, the cost per transaction would drop to around 45 cents per transaction. The SWIFT messaging system used by commercial banks costs less than 15 cents per transaction. If an automated clearinghouse mechanism—similar to the FedACH mechanism agreed to by the United States and Mexico—were arranged between financial institutions, costs of transfers could drop to a few cents per transaction.[4] Use of debit and credit cards and automated teller machines would reduce labor costs.

Removing exchange-rate restrictions

Moving toward a more liberal exchange-rate regime is a powerful way to encourage remitters to use formal channels. The exchange premium resulting from exchange controls can be a major drain on remittances to developing countries. For example, in the case of the República Bolivariana de Venezuela, which currently has dual exchange rates, nationals who remit funds through official channels may lose more than half of the value, compared with one estimate of the market rate.[5] A recent IMF-World Bank study (El Qorchi and others 2003) found that informal transfers had fallen substantially since the 1980s with the dismantling of exchange controls and the disappearance of the premium on black-market currency exchanges.

Notes

1. Following the discussion in *Global Development Finance 2003* (chapter 7), remittances are calculated by combining workers' remittances, compensation of employees, and migrants' transfers. Although some authors argue that remittances should also include local withdrawal of nonresident deposits (Kapur and McHale 2003; Jadhav 2003), we do not include this item in our definition. Also, our definition may not fully capture remittances in kind, for example, when the recipient receives goods instead of cash. See Ndarishikanye (2003) for a description of such remittances from Canada to the Caribbean.

2. Major transfer systems are Western Union, MoneyGram, eBay's PayPal, VIGO, and those used by major banks involved in the remittance business, such as Citibank, Wells Fargo, and Bank of America.

3. There are two difficulties with using the Fedwire for fund transfers. First, it can be accessed only by banks, so migrants without a bank account cannot use it. Second, it is a real-time gross settlement system in which payments are final and irrevocable. That finality raises some thorny issues in the context of cross-border transactions. How can a payment be recalled if by mistake it is delivered to the wrong addressee?

4. The automatic clearing house (ACH) between the United States and Mexico began one-way fund transfers to Mexico in November 2003. Two-way transfers are expected to go into operation in the latter half of 2004. The

Philippines has signed a memorandum of understanding with the United States for a similar arrangement.

5. Morgan Stanley used the rate of 2,483 bolivares per U.S. dollar on November 17, 2003, to calculate the MSCI Standard Venezuela Index. The rate was derived indirectly using the price of CANTV stock in the local market, and the price of its American depository right listed in New York. The official exchange rate on that day was 1,596 bolivares to the dollar.

References

Adams, Richard, and John Page. 2003. "The Impact of International Migration and Remittances on Poverty." Paper presented at the International Conference on Migrant Remittances, London, October 9–10.

Chami, R., C. Fullenkamp, and S. Jahjah. 2003. "Are Migrant Remittance Flows a Source of Capital for Development?" IMF Working Paper, International Monetary Fund, Washington, D.C. August.

Cox Edwards, Alejandra, and Manuelita Ureta. 2003. "International migration, remittances, and schooling: Evidence from El Salvador." *Journal of Development Economics* 72(2): 429–61.

El Qorchi, Mohammed, Samuel Munzele Maimbo, and John F. Wilson. 2003. "Informal Funds Transfer Systems: An Analysis of the Informal Hawala System." A Joint IMF-World Bank Paper. Occasional Paper 222. International Monetary Fund, Washington, D.C.

Grace, David. 2003. "Integrating Financial Sector Services to Support Migrants' Remittances." Presentation at the International Conference on Migrant Remittances, London, October 9–10.

IMF (International Monetary Fund). 2002. *Balance of Payments Yearbook 2002*. Washington, D.C.

Jadhav, Narendra. 2003. "Maximising Developmental Benefits of Migrant Remittances: The Indian Experience." Paper presented at the International Conference on Migrant Remittances, London, October 9–10.

Kapur, Devesh, and John McHale. 2003. "Migration's New Payoff." *Foreign Policy* (November/December).

Ndarishikanye, Barnabe. 2003. "Migrants' Remittances: Background Information and Remittances from Canada to Central America and the Caribbean Countries." Paper presented at the Conference on Migrants' Remittances from Canada: Developmental Impact and Potential, Ottawa.

Ratha, Dilip. 2003. "Workers' Remittances as a Source of Development Finance." Presentation at the Second Coordination Meeting on International Migration, United Nations, New York.

World Bank. 2002. *World Development Indicators 2002*. Washington, D.C.

———. 2003. "Workers' Remittances—An Important and Stable Source of External Development Finance." In *Global Development Finance 2003* (chapter 7). Washington, D.C.: World Bank.

Appendix B: Summary Statistical Tables

THE SUMMARY STATISTICAL TABLES are divided into six sections (see index of tables overleaf for full details):

- **Summary tables**. These tables provide a snapshot of recent history and the outlook for the global economy and each of the six developing country regions (for the full World Bank classification of countries by region and income level, see table B.52).
- **Key macro variables**. These provide detail on growth and inflation indicators by region and (historically) for selected economies. Although detailed country forecasts form the basis for the regional growth and inflation projections, detailed developing country forecasts are not shown separately.
- **Current account tables**. These tables combine data from the IMF's balance of payments statistics, with aid-related data from the OECD's Development Assistance Committee publications, and our own preferred measure of workers' remittances (see appendix A).
- **Capital account tables**. New external financing tables have been developed. They combine the IMF's current account, foreign-exchange reserve, and net inward foreign direct investment data with the World Bank's portfolio equity and debtor reporting system (DRS) data to produce an overall tabulation of how regions finance themselves externally.
- **External liabilities and assets**. These provide a summary of the DRS debt data that is provided on a country-by-country basis in volume 2.
- **Key debt ratios and country classifications**. These tables provide a summary of indicators typically used by country risk analysts to monitor and classify countries. The World Bank's own debt classifications are defined and tabulated. The precise method used to categorize countries as severely, moderately or less indebted is shown by a box in table B.51. The two key ingredients used are the present value of future debt-service streams to (i) gross national income and (ii) to exports of goods and services. These variables are averaged over 2000–2002.

The use of critical values to define the boundaries between indebtedness categories implies that changes in country classifications should be interpreted with caution. If a country has an indicator that is close to the critical value, a small change in the indicator may trigger a change in indebtedness classification even if economic fundamentals have not changed significantly. Moreover, these indicators do not represent an exhaustive set of useful indicators of external debt. They may not, for example, adequately capture the debt servicing capacity of countries in which government budget constraints are key to debt service difficulties. Moreover, rising external debt may not necessarily imply payment difficulties, especially if there is a commensurate increase in the country's debt servicing capacity. Thus, these indicators should be used in the broader context of a country-specific analysis of debt sustainability.

Contents

External liabilities and assets

Key debt ratios and country classifications

Table B.1 Global outlook in summary, 2002–06

% change from previous year, except interest rates and oil price

						GEP 2004 forecasts	
	2002	2003e	2004f	2005f	2006f	2003	2004
Global conditions							
World trade volume (GNFS)	3.5	4.6	8.7	7.9	7.1	4.6	7.9
Consumer prices							
G-7 countries[a,b]	1.3	2.0	1.4	1.7	1.9	1.4	0.9
United States	1.6	2.3	1.5	2.3	2.7	1.9	1.2
Commodity prices ($ terms)							
Non-oil commodities	5.1	10.0	10.4	−2.9	−2.8	6.9	1.0
Oil price (OPEC average, $)	24.9	28.9	26.0	23.0	20.0	26.5	22.0
Oil price (% change)	2.4	16.0	−10.0	−11.5	−13.0	6.3	−17.0
Manufactures unit export value[c]	−1.3	6.5	4.3	−1.7	−0.8	4.0	−0.4
Interest rates							
$, 6-month (%)	1.8	1.2	1.5	3.5	3.7	1.0	2.0
€, 6-month (%)	3.3	2.3	2.0	2.4	3.4	2.1	2.1
Real GDP growth[d]							
World	**1.8**	**2.6**	**3.7**	**3.1**	**3.0**	**2.0**	**3.0**
Memo item: World (PPP weights)[e]	2.9	3.7	4.6	4.1	3.9	3.1	3.9
High-income	**1.4**	**2.1**	**3.3**	**2.6**	**2.5**	**1.5**	**2.5**
OECD countries	1.4	2.0	3.2	2.6	2.4	1.5	2.5
Euro area	0.9	0.4	1.7	2.3	2.3	0.7	1.7
Japan	−0.3	2.7	3.1	1.4	1.2	0.8	1.3
United States	2.2	3.2	4.6	3.2	2.9	2.2	3.4
Non-OECD countries	2.3	2.6	5.0	4.5	4.2	2.1	4.1
Developing countries	**3.4**	**4.8**	**5.4**	**5.2**	**5.0**	**4.0**	**4.9**
East Asia and Pacific[f]	6.7	7.7	7.4	6.7	6.3	6.1	6.7
Europe and Central Asia	4.6	5.5	4.9	4.8	4.7	4.3	4.5
Latin America and the Caribbean	−0.6	1.3	3.8	3.7	3.5	1.8	3.7
Middle East and N. Africa	3.3	5.1	3.7	3.9	4.0	3.3	3.9
South Asia	4.3	6.5	7.2	6.7	6.5	5.4	5.4
Sub-Saharan Africa	3.3	2.4	3.4	4.2	3.9	2.8	3.5
Memo items:							
Developing countries							
Excluding transition countries	3.3	4.6	5.5	5.2	5.0	3.9	4.9
Excluding China and India	2.1	3.4	4.4	4.5	4.2	3.0	4.1

Note: GNFS = goods and nonfactor services; PPP = purchasing power parity; *e* = estimate; *f* = forecast. *GEP 2004* is *Global Economic Prospects and the Developing Countries*, World Bank, August 2003.
a. Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
b. In local currency, aggregated using 1995 GDP weights.
c. Unit value index of manufactured exports from major economies, expressed in U.S. dollars.
d. GDP in 1995 constant dollars; 1995 prices and market exchange rates.
e. GDP measured at 1995 PPP weights.
f. Now excludes the Republic of Korea, which has been reclassified as high-income OECD.

Table B.2 East Asia and Pacific outlook in summary, 1981–2004

Real economy *(% change, unless stated)*	1981–90	1991–2000	1998	1999	2000	2001	2002	2003e	2004f
Real GDP growth	7.3	7.7	0.6	5.6	7.2	5.6	6.7	7.7	7.4
Private consumption per capita	5.6	5.4	−0.6	4.4	6.0	4.2	4.6	5.4	5.4
GDP per capita	5.7	6.3	−0.5	4.6	6.2	4.7	5.8	6.8	6.6
Population	1.6	1.3	1.1	1.0	0.9	0.9	0.9	0.8	0.8
Gross domestic investment/GDP[a]	23.2	28.7	31.7	30.4	31.4	32.7	34.7	38.2	39.5
Inflation[b]	5.5	5.6	9.2	0.0	4.9	2.1	3.6	2.8	3.8
Central gvt. budget balance/GDP	−1.3	−1.2	−1.5	−2.3	−3.3	−3.3	−3.4	−2.9	−3.1
Export market growth[c]	6.7	8.3	−1.6	7.7	14.7	−2.3	4.1	7.0	10.4
Export volume[d]	8.2	11.5	3.2	4.1	22.6	2.4	15.6	21.1	18.3
Terms of trade/GDP[e]	0.1	0.3	0.2	−0.3	−0.3	−0.5	0.1	0.1	−0.3
Current account/GDP	−1.4	0.4	4.5	4.2	3.5	2.4	3.4	2.6	1.7
Workers' remittances ($ billions)	—	9.1	9.8	12.1	12.2	13.7	17.0	17.6	—
Memo item:									
GDP growth: East Asia (excluding China)	5.6	4.6	−9.5	3.1	5.8	2.4	4.4	5.0	5.9

External Financing and Debt *($ billions, unless stated)*	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Net inward FDI	50.8	58.6	62.1	57.7	50.0	44.2	48.2	54.8	56.8
Net inward portfolio equity flows	6.3	9.7	−3.9	−3.4	2.3	4.8	1.0	3.5	4.8
Net inward debt flows	54.1	52.2	44.9	−32.5	−12.2	−17.7	−8.1	−10.9	0.5
From public sources	9.1	3.6	17.3	14.7	12.6	7.0	3.2	−7.8	−8.9
From private sources	45.0	48.6	27.6	−47.1	−24.7	−24.7	−11.3	−3.1	9.4
Gross market-based capital inflows	60.0	71.5	76.2	27.3	28.2	48.3	20.1	40.9	48.5
Total external debt	455.6	490.4	526.3	533.2	538.6	497.3	501.3	497.4	514.7
Medium and long term	346.8	365.3	394.3	447.2	464.8	434.1	410.5	397.9	402.7
Short term	108.8	128.7	132.1	85.9	73.8	63.2	90.8	99.5	112.1
Owed by public sector borrowers	256.7	256.8	272.0	288.6	307.5	284.7	277.7	277.8	287.4
Owed by private sector borrowers	198.9	237.2	254.4	244.6	231.1	212.6	223.6	219.6	227.3
Owed to public sector creditors	160.9	153.7	152.5	179.1	200.3	188.2	180.5	183.3	190.9
Owed to private sector creditors	294.7	340.3	373.8	354.1	338.3	309.1	320.8	314.1	323.8
Gross foreign-exchange reserves	154.5	199.7	212.5	233.2	262.5	272.6	320.3	408.3	544.5

Note: — = not available; *e* = estimate; *f* = forecast.
a. Fixed investment, measured in real terms.
b. Local currency GDP deflator, median.
c. Weighted average growth of import demand in export markets.
d. Goods and non-factor services.
e. Change in terms of trade, measured as a percentage of GDP.

Table B.3 Europe and Central Asia outlook in summary, 1981–2004

Real economy *(% change, unless stated)*	1981–90	1991–2000	1998	1999	2000	2001	2002	2003e	2004f
Real GDP growth	1.6	−1.5	−0.2	2.9	6.8	2.4	4.6	5.5	4.9
Private consumption per capita	0.1	−0.5	0.4	−0.2	4.8	3.5	5.5	6.3	5.5
GDP per capita	0.9	−1.7	−0.2	2.9	6.8	2.4	4.5	5.4	4.9
Population	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross domestic investment/GDP[a]	32.1	24.0	21.8	20.8	21.8	20.6	20.3	21.0	21.5
Inflation[b]	1.1	52.5	10.6	6.5	6.5	5.4	4.3	4.7	5.2
Central gvt. budget balance/GDP	−0.5	−4.4	−4.2	−4.4	−2.5	−3.7	−3.7	−3.8	−3.5
Export market growth[c]	3.3	5.6	4.0	−0.3	13.6	4.9	4.4	9.0	8.1
Export volume[d]	0.1	1.2	5.8	3.9	16.0	6.1	7.1	13.5	10.3
Terms of trade/GDP[e]	−0.3	−0.7	−0.4	−0.5	2.6	−0.4	0.3	0.0	−0.7
Current account/GDP	−0.5	−0.7	−2.5	0.0	1.9	1.9	0.8	0.6	−0.5
Workers' remittances ($ billions)	—	6.2	10.5	9.3	9.7	10.2	10.3	10.4	—
Memo items:									
GDP growth: transition countries	1.2	−2.3	−0.9	4.7	6.7	4.5	3.9	5.6	4.9
Central and Eastern Europe	1.1	0.8	2.8	3.9	3.6	3.0	3.0	4.1	4.3
Commonwealth of Independent States	1.3	−4.2	−3.9	5.4	9.2	5.7	4.7	6.6	5.4

External Financing and Debt *($ billions, unless stated)*	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Net inward FDI	17.4	16.4	22.6	26.2	28.4	29.3	31.8	32.9	26.2
Net inward portfolio equity flows	1.7	4.3	4.0	4.0	2.0	1.2	0.3	−0.4	0.7
Net inward debt flows	23.4	22.9	32.8	41.5	16.1	21.0	2.0	24.9	29.5
From public sources	6.8	8.6	6.6	7.4	−0.7	−0.1	2.0	2.2	−6.5
From private sources	16.7	14.3	26.3	34.1	16.9	21.1	0.1	22.7	36.0
Gross market-based capital inflows	21.9	26.9	51.2	43.4	31.0	41.4	26.6	35.0	58.0
Total external debt	349.0	367.1	387.5	485.2	495.6	503.9	498.9	545.8	577.4
Medium and long term	304.7	315.0	331.6	414.5	423.3	423.5	423.9	468.9	484.2
Short term	44.3	52.1	56.0	70.7	72.3	80.4	75.0	77.0	93.2
Owed by public sector borrowers	286.6	286.8	288.7	320.9	316.1	304.4	292.0	310.6	323.8
Owed by private sector borrowers	62.4	80.3	98.8	164.3	179.5	199.5	206.9	235.2	253.5
Owed to public sector creditors	156.1	160.1	156.1	172.3	171.1	166.4	158.8	165.0	167.9
Owed to private sector creditors	192.9	207.1	231.4	312.9	324.5	337.5	340.0	380.8	409.5
Gross foreign-exchange reserves	81.1	83.4	90.7	95.6	102.8	119.6	130.0	174.9	235.6

Note: — = not available; *e* = estimate; *f* = forecast.
a. Fixed investment, measured in real terms.
b. Local currency GDP deflator, median.
c. Weighted average growth of import demand in export markets.
d. Goods and non-factor services.
e. Change in terms of trade, measured as a percentage of GDP.

Table B.4 Latin America and the Caribbean outlook in summary, 1981–2004

Real economy *(% change, unless stated)*	1981–90	1991–2000	1998	1999	2000	2001	2002	2003e	2004f
Real GDP growth	1.1	3.3	2.0	0.1	3.7	0.3	−0.6	1.3	3.8
Private consumption per capita	−1.0	2.3	−0.1	−1.7	2.2	−0.9	−3.6	−1.6	2.3
GDP per capita	−0.9	1.6	0.4	−1.5	2.1	−1.2	−2.0	−0.1	2.4
Population	2.0	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4
Gross domestic investment/GDP[a]	20.2	20.0	21.4	19.8	19.7	19.2	18.0	17.5	18.1
Inflation[b]	17.3	11.9	8.2	4.6	7.5	5.6	5.8	4.2	4.0
Central gvt. budget balance/GDP	−9.1	−3.3	−5.2	−4.1	−3.0	−2.9	−3.0	−2.4	−1.4
Export market growth[c]	4.4	9.8	7.2	5.6	13.0	−1.4	−0.1	4.8	8.6
Export volume[d]	5.4	8.7	7.9	6.6	10.3	1.1	2.6	5.4	11.2
Terms of trade/GDP[e]	−0.4	0.0	−0.9	0.3	1.1	−0.6	−0.1	−0.3	0.0
Current account/GDP	−1.5	−2.9	−4.5	−3.2	−2.4	−2.8	−0.9	−0.3	−0.6
Workers' remittances ($ billions)	—	12.5	15.2	16.9	19.2	22.9	26.8	29.6	—
Memo items:									
GDP growth: Central America	1.0	4.6	5.9	4.7	3.2	1.9	2.0	3.1	3.1
Caribbean	2.0	3.9	4.2	6.9	5.8	2.7	3.0	0.5	0.8

External Financing and Debt *($ billions, unless stated)*	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Net inward FDI	30.5	44.3	66.7	73.8	88.0	77.0	69.9	44.7	36.6
Net inward portfolio equity flows	4.8	12.2	13.3	−2.2	−3.6	−0.5	2.3	1.5	1.4
Net inward debt flows	61.2	36.5	25.4	38.0	12.1	−9.7	6.3	−7.9	19.5
From public sources	22.0	−10.7	−8.7	10.9	1.5	−11.1	20.4	12.7	10.2
From private sources	39.2	47.2	34.1	27.2	10.6	1.4	−14.1	−20.6	9.3
Gross market-based capital inflows	42.8	84.9	120.6	84.5	75.3	88.4	77.0	43.5	64.3
Total external debt	612.2	633.7	665.8	748.4	770.2	751.9	729.3	727.9	762.1
Medium and long term	488.8	516.7	541.8	632.9	664.0	648.6	639.8	652.2	678.2
Short term	123.4	116.9	124.0	115.5	106.2	103.4	89.5	75.7	84.0
Owed by public sector borrowers	401.4	399.5	379.3	412.7	419.0	403.7	398.8	423.3	454.8
Owed by private sector borrowers	210.8	234.2	286.5	335.6	351.2	348.2	330.5	304.7	307.3
Owed to public sector creditors	187.3	164.0	145.7	160.8	162.9	149.8	162.6	182.6	200.5
Owed to private sector creditors	424.8	469.7	520.1	587.6	607.3	602.1	566.7	545.3	561.6
Gross foreign-exchange reserves	125.1	153.1	166.7	157.5	150.0	152.9	155.9	156.0	188.8

Note: — = not available; *e* = estimate; *f* = forecast.
a. Fixed investment, measured in real terms.
b. Local currency GDP deflator, median.
c. Weighted average growth of import demand in export markets.
d. Goods and non-factor services.
e. Change in terms of trade, measured as a percentage of GDP.

Table B.5 Middle East and North Africa outlook in summary, 1981–2004

Real economy *(% change, unless stated)*	1981–90	1991–2000	1998	1999	2000	2001	2002	2003e	2004f
Real GDP growth	2.4	3.3	3.5	1.9	4.4	3.5	3.3	5.1	3.7
Private consumption per capita	1.5	0.0	1.2	0.3	1.5	3.0	1.4	−0.1	1.3
GDP per capita	−0.6	1.0	1.7	0.1	2.5	1.6	1.4	3.1	1.8
Population	3.1	2.2	1.8	1.8	1.8	1.9	1.9	1.9	2.0
Gross domestic investment/GDP[a]	26.7	21.8	21.5	23.0	22.7	23.2	22.6	23.7	23.7
Inflation[b]	8.4	6.4	−0.4	7.6	10.9	0.9	2.6	1.1	0.8
Central gvt. budget balance/GDP	−3.9	−0.9	−3.2	−2.1	−1.1	−1.9	−2.9	−1.1	−3.3
Export market growth[c]	5.3	7.4	1.0	8.1	14.7	−1.4	4.8	6.1	10.0
Export volume[d]	0.7	5.0	−1.7	3.7	7.8	3.4	−0.4	7.3	6.4
Terms of trade/GDP[e]	−0.6	−0.3	−4.8	0.0	5.8	−1.0	−1.0	−1.9	−2.0
Current account/GDP	−1.7	−1.8	−4.2	1.2	7.2	4.4	4.6	4.5	2.4
Workers' remittances ($ billions)	—	11.2	10.6	10.7	11.0	13.2	13.0	13.0	—
Memo items:									
GDP growth: resource poor, labor abundant	4.5	3.8	5.4	4.3	3.8	4.5	2.9	4.2	3.9
Resource rich, labor abundant	2.8	3.5	3.4	2.3	4.4	4.0	5.7	5.9	5.0
Resource rich, labor importing	−1.3	3.2	0.6	0.3	6.2	2.0	1.1	4.7	2.6

External Financing and Debt *($ billions, unless stated)*	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Net inward FDI	−0.7	0.6	6.3	7.4	2.9	2.4	5.8	2.7	2.0
Net inward portfolio equity flows	0.0	0.2	0.7	0.2	0.6	0.2	−0.1	−0.3	0.0
Net inward debt flows	2.4	−0.9	−2.9	7.1	−1.8	−6.1	0.9	0.9	−7.8
From public sources	−1.1	−0.6	−3.7	−1.5	−2.5	−2.8	−1.1	−2.8	−2.0
From private sources	3.5	−0.3	0.8	8.6	0.6	−3.4	2.0	3.8	−5.7
Gross market-based capital inflows	11.3	4.5	18.7	12.1	13.6	10.3	12.4	14.8	8.2
Total external debt	186.4	180.5	172.6	189.3	193.6	180.7	178.4	189.0	188.1
Medium and long term	154.2	149.1	140.5	152.3	152.6	143.4	141.4	151.1	150.3
Short term	32.2	31.4	32.1	37.0	41.0	37.3	37.1	37.9	37.9
Owed by public sector borrowers	149.0	143.6	134.0	143.7	145.6	136.9	134.8	144.6	144.9
Owed by private sector borrowers	37.4	36.9	38.7	45.6	48.0	43.8	43.6	44.4	43.2
Owed to public sector creditors	107.9	107.5	99.7	104.1	98.5	90.9	88.6	91.5	94.1
Owed to private sector creditors	78.5	73.0	72.9	85.2	95.1	89.8	89.8	97.5	94.1
Gross foreign-exchange reserves	44.9	56.4	63.0	61.6	64.2	76.5	85.2	97.4	106.6

Note: — = not available; *e* = estimate; *f* = forecast.
a. Fixed investment, measured in real terms.
b. Local currency GDP deflator, median.
c. Weighted average growth of import demand in export markets.
d. Goods and non-factor services.
e. Change in terms of trade, measured as a percentage of GDP.

Table B.6 South Asia outlook in summary, 1981–2004

Real economy *(% change, unless stated)*	1981–90	1991–2000	1998	1999	2000	2001	2002	2003	2004f
Real GDP growth	5.8	5.2	5.4	6.4	4.2	4.7	4.3	6.5	7.2
Private consumption per capita	2.3	2.3	2.9	4.0	1.2	3.2	2.1	4.6	4.6
GDP per capita	3.5	3.2	3.6	4.7	2.5	3.0	2.7	4.8	5.5
Population	2.2	2.0	1.8	1.7	1.6	1.6	1.6	1.6	1.5
Gross domestic investment/GDP[a]	20.2	21.6	22.1	22.3	22.5	22.3	23.3	24.4	25.3
Inflation[b]	8.9	8.1	7.3	4.4	3.9	3.8	3.5	4.1	3.6
Central gvt. budget balance/GDP	−12.6	−10.3	−11.4	−12.3	−9.1	−8.5	−9.7	−9.3	−9.1
Export market growth[c]	5.0	7.5	3.0	6.2	13.4	0.1	3.4	5.3	8.2
Export volume[d]	6.4	11.1	9.1	12.5	21.2	7.3	17.3	16.4	11.2
Terms of trade/GDP[e]	0.0	0.1	0.8	−1.2	−0.8	−0.4	−1.1	−0.8	−0.2
Current account/GDP	−2.0	−1.5	−1.8	−0.9	−0.7	0.5	1.4	0.7	0.5
Workers' remittances ($ billions)	—	10.6	13.3	15.1	12.8	13.1	16.9	18.2	—
Memo item:									
GDP growth: South Asia (excluding India)	5.5	4.4	3.7	4.2	5.1	3.1	3.4	5.4	5.9

External Financing and Debt *($ billions, unless stated)*	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Net inward FDI	2.9	3.5	4.9	3.5	3.1	3.4	5.0	4.2	5.1
Net inward portfolio equity flows	1.6	4.1	2.9	−0.6	2.4	2.8	1.9	1.0	7.0
Net inward debt flows	2.5	2.7	0.7	4.7	0.5	3.4	−0.7	0.4	−2.3
From public sources	−1.2	1.0	0.3	2.3	2.5	0.5	2.2	−2.4	−0.6
From private sources	3.7	1.6	0.4	2.4	−2.0	2.9	−2.8	2.8	−1.7
Gross market-based capital inflows	7.4	10.5	12.7	5.1	4.2	4.5	3.3	2.7	6.2
Total external debt	151.7	149.6	149.6	157.6	162.0	159.9	156.3	168.3	171.3
Medium and long term	142.6	139.3	141.4	150.5	154.9	153.9	151.4	161.1	162.9
Short term	9.0	10.3	8.2	7.1	7.0	6.0	4.9	7.2	8.4
Owed by public sector borrowers	134.3	129.9	129.7	139.3	144.6	138.5	137.2	147.2	150.4
Owed by private sector borrowers	17.3	19.8	19.9	18.3	17.4	21.4	19.1	21.1	20.9
Owed to public sector creditors	108.9	104.1	98.9	104.6	113.3	102.8	101.1	106.3	112.1
Owed to private sector creditors	42.8	45.5	50.7	53.0	48.7	57.2	55.2	62.0	59.2
Gross foreign-exchange reserves	24.2	24.8	30.0	32.9	37.9	42.6	52.8	79.8	114.4

Note: — = not available; *e* = estimate; *f* = forecast.
a. Fixed investment, measured in real terms.
b. Local currency GDP deflator, median.
c. Weighted average growth of import demand in export markets.
d. Goods and non-factor services.
e. Change in terms of trade, measured as a percentage of GDP.

Table B.7 Sub-Saharan Africa outlook in summary, 1981–2004

Real economy *(% change, unless stated)*	1981–90	1991–2000	1998	1999	2000	2001	2002	2003e	2004f
Real GDP growth	1.7	2.1	2.2	2.4	3.1	3.1	3.3	2.4	3.4
Private consumption per capita	−0.9	−0.8	−1.5	−0.4	−1.7	1.1	1.4	0.3	0.9
GDP per capita	−1.2	−0.5	−0.5	−0.1	0.7	0.9	1.2	0.4	1.4
Population	2.9	2.7	2.6	2.5	2.4	2.2	2.1	2.1	2.0
Gross domestic investment/GDP[a]	18.6	17.2	18.4	18.2	18.4	19.1	19.7	20.4	20.9
Inflation[b]	9.6	9.5	8.2	6.0	7.8	6.4	5.4	4.2	4.0
Central gvt. budget balance/GDP	−4.5	−4.6	−2.5	−2.2	−0.4	−1.3	−2.3	−2.6	−2.1
Export market growth[c]	4.8	7.5	7.7	7.4	12.1	0.4	2.3	4.3	7.4
Export volume[d]	1.5	4.3	4.0	3.9	5.1	3.2	1.9	1.7	5.1
Terms of trade/GDP[e]	−0.9	0.1	−2.9	1.2	2.9	−0.7	0.9	1.7	−1.4
Current account/GDP	−2.7	−2.3	−5.5	−3.0	−0.6	−3.1	−2.8	−2.6	−3.7
Workers' remittances ($ billions)	—	2.7	3.6	3.5	3.6	3.9	4.1	4.1	—
Memo items:									
GDP growth: Sub-Saharan Africa excluding South Africa and oil-exporters	2.3	2.8	3.8	3.5	2.0	3.8	2.7	2.5	4.6
Oil exporters	1.8	2.1	3.1	1.0	4.0	3.0	4.0	3.8	3.8

External Financing and Debt *($ billions, unless stated)*	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Net inward FDI	4.3	4.2	8.4	6.9	9.3	5.8	14.3	7.8	8.5
Net inward portfolio equity flows	3.0	2.4	5.6	8.7	9.0	4.1	−1.0	−0.4	0.5
Net inward debt flows	7.6	3.1	4.4	−1.3	−1.0	−0.7	−1.8	−0.1	4.9
From public sources	3.5	2.0	1.4	0.4	0.3	0.6	0.2	2.2	1.5
From private sources	4.1	1.2	3.0	−1.8	−1.3	−1.3	−2.0	−2.2	3.4
Gross market-based capital inflows	7.8	7.8	7.9	6.4	10.0	11.6	9.9	9.0	15.3
Total external debt	235.4	231.2	220.7	228.4	214.7	211.2	202.6	210.3	219.7
Medium and long term	194.7	188.6	179.8	186.0	173.7	178.1	170.9	181.2	190.9
Short term	40.6	42.6	40.8	42.4	41.0	33.1	31.7	29.1	28.8
Owed by public sector borrowers	182.9	178.3	171.0	177.7	163.3	166.7	158.5	168.7	174.8
Owed by private sector borrowers	52.4	52.9	49.7	50.7	51.4	44.4	44.1	41.7	44.9
Owed to public sector creditors	146.2	143.9	138.1	145.5	135.0	140.9	134.5	143.3	148.6
Owed to private sector creditors	89.2	87.3	82.6	82.9	79.8	70.2	68.1	67.0	71.1
Gross foreign-exchange reserves	17.9	20.6	28.1	26.8	28.2	34.0	34.3	35.1	37.4

Note: — = not available; *e* = estimate; *f* = forecast.
a. Fixed investment, measured in real terms.
b. Local currency GDP deflator, median.
c. Weighted average growth of import demand in export markets.
d. Goods and non-factor services.
e. Change in terms of trade, measured as a percentage of GDP.

Table B.8 Global real GDP growth, 1981–2004

GDP in 1995 prices and exchange rates, average annual growth (%)

	GDP 2002 (1995 dollars)	Average 1981–90	Average 1991–2000	1998	1999	2000	2001	2002	2003e	2004f
World	**34,418**	**3.1**	**2.7**	**2.1**	**3.0**	**4.0**	**1.4**	**1.8**	**2.6**	**3.7**
High-income	**27,853**	**3.2**	**2.5**	**2.2**	**3.1**	**3.8**	**1.0**	**1.4**	**2.1**	**3.3**
Industrial countries	26,991	3.1	2.5	2.2	3.0	3.6	1.1	1.4	2.0	3.3
European Union (15)	9,601	2.4	2.1	2.9	2.8	3.7	1.7	1.1	0.7	1.9
Japan	5,668	4.1	1.5	−1.2	0.2	2.8	0.4	−0.3	2.7	3.1
United States	9,287	3.2	3.2	4.2	4.4	3.7	0.5	2.2	3.2	4.6
Other high-income	861	4.9	5.6	1.0	4.5	7.6	−1.0	2.3	2.6	5.0
Asian NIEs	640	7.3	6.1	0.9	5.1	7.6	−1.5	3.0	2.7	5.6
Developing countries	**6,565**	**2.6**	**3.1**	**1.7**	**2.9**	**5.2**	**3.0**	**3.4**	**4.8**	**5.4**
Excluding China	5,358	2.1	2.2	0.6	2.1	4.7	2.0	2.4	3.8	4.7
Excluding Central Europe & CIS	5,512	3.0	4.6	2.2	2.6	5.0	2.7	3.3	4.6	5.5
Severely indebted	1,598	1.5	3.3	−0.7	0.0	3.3	0.8	0.2	2.4	4.2
Moderately indebted	1,649	2.8	0.8	−1.8	1.9	6.2	1.8	3.6	4.5	5.2
Less indebted	3,319	3.1	4.6	5.1	5.1	5.8	4.7	4.9	6.1	6.0
Middle-income countries	5,430	2.2	3.1	1.9	2.6	5.4	2.6	3.3	4.6	5.2
Upper-middle-income countries	2,286	0.9	3.1	1.9	0.8	4.1	0.6	−0.1	2.0	4.0
Lower-middle-income countries	3,144	3.4	3.2	2.0	4.2	6.6	4.2	5.9	6.5	6.1
Low-income countries	1,135	4.3	3.1	0.4	4.3	4.2	4.5	4.1	5.4	6.1
East Asia and Pacific	1,833	7.3	7.7	0.6	5.6	7.2	5.6	6.7	7.7	7.4
China	1,208	9.3	10.1	7.8	7.1	8.0	7.5	8.0	9.1	—
Indonesia	225	6.4	4.2	−13.0	0.3	5.3	3.4	3.7	4.0	—
Europe and Central Asia	1,258	1.8	−1.5	−0.2	2.9	6.8	2.4	4.6	5.5	4.9
Russian Federation	469	2.0	−3.9	−5.3	6.4	10.0	5.0	4.3	6.8	—
Turkey	205	5.2	3.6	3.1	−4.7	7.4	−7.5	7.8	5.0	—
Poland	146	−0.3	3.7	4.8	4.1	4.0	1.0	1.4	4.2	—
Latin America and the Caribbean	1,925	1.1	3.3	2.0	0.1	3.7	0.3	−0.6	1.3	3.8
Brazil	812	1.5	2.7	0.1	0.8	4.4	1.4	1.9	−0.2	—
Mexico	376	1.8	3.5	4.9	3.7	6.6	−0.3	1.0	1.2	—
Argentina	250	−1.5	4.5	3.9	−3.4	−0.8	−4.4	−10.9	7.6	—
Middle East and North Africa	509	1.6	3.3	3.5	1.9	4.4	3.5	3.3	5.1	3.7
Saudi Arabia	143	−1.7	2.3	1.7	−0.8	4.9	1.2	1.0	4.8	—
Iran, Islamic Rep. of	118	2.7	4.2	2.0	2.5	5.9	4.8	6.7	6.2	—
Egypt, Arab Rep. of	83	5.5	4.3	4.5	6.3	5.1	3.5	3.0	3.1	—
South Asia	669	5.6	5.2	5.4	6.4	4.2	4.7	4.3	6.5	7.2
India	517	5.8	5.5	6.0	7.1	3.9	5.2	4.6	6.8	—
Sub-Saharan Africa	371	1.7	2.2	2.2	2.4	3.1	3.1	3.3	2.4	3.4
South Africa	183	1.3	1.7	0.8	2.0	3.5	2.7	3.6	1.9	—
Nigeria	34	1.1	2.7	1.9	1.1	4.2	2.2	1.8	3.0	—

Note: — = not available; *e* = estimate; *f* = forecast.

Table B.9 Global inflation, 1991–2003

Consumer price indexes; local currency (% change)[a]

	Weights 1995	Average 1991–2000	1997	1998	1999	2000	2001	2002	2003e
World	**100.0**	**3.3**	**2.6**	**1.9**	**1.7**	**2.6**	**1.5**	**2.0**	**1.8**
High income	**82.6**	**2.2**	**1.8**	**1.2**	**1.3**	**2.1**	**1.0**	**1.7**	**1.3**
Industrial countries	—	2.2	1.7	1.2	1.4	2.1	1.1	1.8	1.3
European Union (15)	—	2.6	1.6	1.0	1.6	2.3	1.9	2.2	1.8
Japan	—	0.7	1.8	0.6	−1.1	−0.4	−1.2	−0.3	−0.4
United States	—	2.7	1.7	1.6	2.7	3.4	1.6	2.4	1.9
Other high income	—	3.0	2.1	0.4	−0.9	0.7	−2.0	0.1	−0.3
Asian NIEs	—	3.0	2.0	0.4	−1.0	0.7	−2.0	0.0	−0.5
Developing countries	**17.3**	**8.4**	**6.7**	**5.6**	**3.3**	**5.1**	**3.9**	**3.4**	**3.9**
Excluding China	—	8.5	6.9	5.6	3.4	5.1	3.9	3.6	4.0
Excluding Central Europe & CIS	—	8.4	6.2	5.9	3.1	5.1	4.0	4.1	4.2
Severely indebted	—	11.3	6.5	5.9	2.8	5.9	3.7	4.4	5.4
Moderately indebted	—	8.4	7.5	4.5	4.2	4.9	4.5	3.9	3.8
Less indebted	—	8.1	6.6	6.6	3.2	4.3	3.5	3.1	3.7
Middle-income countries	—	8.1	6.5	4.7	3.4	4.5	3.9	3.0	3.7
Upper-middle-income countries	—	7.3	5.0	4.7	3.4	4.5	3.2	2.0	2.7
Lower-middle-income countries	—	8.1	6.9	5.2	3.5	4.7	4.5	3.5	4.4
Low-income countries	—	10.1	8.3	6.4	3.2	5.8	3.8	3.9	5.3
East Asia and Pacific	—	3.6	5.6	7.0	1.3	2.8	3.2	3.5	2.8
China	—	7.0	0.4	−1.0	−1.0	0.4	−1.4	−0.1	1.8
Indonesia	—	13.4	10.3	77.6	1.9	9.3	12.6	10.0	5.1
Europe and Central Asia	—	74.3	11.1	5.3	7.0	5.1	3.6	2.1	3.6
Russian Federation	—	—	11.1	84.4	36.5	20.2	18.6	15.1	12.0
Turkey	—	74.3	99.1	69.7	68.8	39.0	68.5	29.7	18.4
Poland	—	24.2	13.0	8.4	9.7	8.7	3.6	0.7	1.7
Latin America and the Caribbean	—	15.0	6.9	7.5	5.0	5.5	4.4	7.1	5.9
Brazil	—	180.2	4.4	2.4	8.4	5.3	9.4	14.7	10.4
Mexico	—	17.5	15.7	18.6	12.3	9.0	4.4	5.7	4.0
Argentina	—	9.2	0.3	0.7	−1.8	−0.7	−1.5	41.0	3.7
Middle East and North Africa	—	5.1	3.9	2.3	1.2	0.1	2.5	1.4	4.3
Saudi Arabia	—	0.7	−0.4	−0.9	−0.2	−1.8	−0.6	0.7	0.6
Iran, Islamic Rep. of	—	24.1	15.8	20.2	19.0	12.8	10.6	16.4	15.5
Egypt, Arab Rep. of	—	8.7	4.3	3.6	3.2	2.3	2.5	3.0	4.5
South Asia	—	8.4	6.3	12.7	0.5	4.9	2.2	3.3	4.2
India	—	8.4	6.3	15.3	0.5	3.5	5.2	3.2	3.1
Sub-Saharan Africa	—	8.0	6.2	4.6	4.1	6.5	4.4	4.3	5.1
South Africa	—	8.5	6.2	9.0	2.2	7.0	4.6	12.4	0.3
Nigeria	—	29.0	10.2	11.9	0.2	14.5	16.5	12.2	20.9

Note: — = not available; *e* = estimate.

a. Developing country aggregates computed using median. Industrial aggregates use 1995 US$ GDP weights. World total is GDP weighted average of developing and high-income total. Inflation is calculated on a December/December basis. Where country CPI series ended before December 2003, estimates were made by extending the index series using the last available y/y change (effectively making the December inflation reading identical with the latest available one). These were then aggregated.

Table B.10 Commodity prices, 1980–2004

Current $

	Unit	1980	1990	1998	1999	2000	2001	2002	2003	2004f
Energy										
Coal, Australia	$/mt	34.16	39.67	29.23	25.89	26.25	32.31	27.06	27.84	40.00
Crude oil, average	$/bbl	36.87	22.88	13.07	18.07	28.23	24.35	24.93	28.90	26.00
Natural gas, Europe	$/mmbtu	3.40	2.55	2.42	2.13	3.86	4.06	3.05	3.91	3.80
Non-energy commodities[a]										
Agriculture										
Beverages										
Cocoa	¢/kg	260.4	126.7	167.6	113.5	90.6	106.9	177.8	175.1	172.0
Coffee, arabica	¢/kg	346.6	197.2	298.1	229.1	192.0	137.3	135.7	141.5	149.9
Coffee, robusta	¢/kg	324.3	118.2	182.3	148.9	91.3	60.7	66.2	81.5	83.8
Food										
Fats and oils										
Palm oil	$/mt	583.7	289.8	671.1	436.0	310.3	285.7	390.3	443.3	500.0
Soybean meal	$/mt	262.4	200.2	170.3	152.2	189.2	181.0	175.2	210.9	240.0
Soybeans	$/mt	296.2	246.8	243.3	201.7	211.8	195.8	212.7	264.0	320.0
Grains										
Maize	$/mt	125.3	109.3	102.0	90.2	88.5	89.6	99.3	105.4	110.0
Rice, Thailand	$/mt	410.7	270.9	304.2	248.4	202.4	172.8	191.9	197.6	205.0
Wheat, U.S.	$/mt	172.7	135.5	126.1	112.0	114.1	126.8	148.1	146.1	155.0
Other food										
Bananas, U.S.	$/mt	377.3	540.9	489.5	373.8	424.0	583.3	528.6	374.8	400.0
Sugar, world	¢/kg	63.16	27.67	19.67	13.81	18.04	19.04	15.18	15.63	15.0
Raw materials										
Cotton	¢/kg	206.2	181.9	144.5	117.1	130.2	105.8	101.9	139.9	145.5
Rubber, Malaysia	¢/kg	142.5	86.5	72.2	62.9	69.1	60.0	77.1	105.6	110.2
Sawnwood, Malaysia	$/cum	396.0	533.0	484.2	600.8	594.7	481.4	526.5	551.0	560.0
Fertilizers										
Triple superphosphate	$/mt	180.3	131.8	173.1	154.5	137.7	126.9	133.1	149.3	160.0
Metals and minerals										
Aluminum	$/mt	1,456	1,639	1,357	1,361	1,549	1,444	1,350	1,431	1,650
Copper	$/mt	2,182	2,661	1,654	1,573	1,813	1,578	1,559	1,779	2,400
Gold	$/toz	607	383	294	278	279	271	310	363	380
Nickel	$/mt	6,519	8,864	4,630	6,011	8,638	5,945	6,772	9,629	14,000
Memo items:										
Deflator Index (MUV 1990 = 100)[a]		78.8	100.0	99.6	99.3	97.2	94.3	93.1	99.2	103.5
Reuters/CRB Commodity Futures Index (1967 = 100)		294.2	234.8	215.2	194.5	218.6	207.3	209.4	240.5	—

Note: MUV = manufacturing unit value; CRB = Commodity Research Bureau; *f* = forecast; bbl = barrel; cum = cubic meter; kg = kilogram; mmbtu = million British thermal units; mt = metric ton; — = not available; toz = troy oz.
a. Unit value index in U.S. dollar terms of manufactures exported from the G-5 countries weighted by exports to developing countries.
Source: World Bank Development Prospects Group. See Web site http://www.worldbank.org/prospects for details of price series and forecasts.

Table B.11 Commodity price indexes, 1980–2004

Weighted index unless indicated otherwise (constant 1990 $)

	Weights[a]	1980	1990	1998	1999	2000	2001	2002	2003	2004f
Energy										
Coal, Australia		109.3	100.0	74.0	65.7	68.1	86.4	73.2	70.8	73.1
Crude oil, average		204.5	100.0	57.3	79.5	127.0	112.8	117.0	127.4	109.8
Natural gas, Europe		169.0	100.0	95.3	84.3	155.7	168.6	128.6	154.5	132.5
Non-energy commodities[a]	**100.0**	**159.2**	**100.0**	**99.5**	**88.6**	**89.4**	**83.7**	**89.1**	**92.1**	**97.4**
Agriculture	**69.1**	**175.2**	**100.0**	**108.2**	**93.5**	**90.3**	**84.6**	**92.8**	**95.3**	**96.0**
Beverages	**16.9**	**230.2**	**100.0**	**141.1**	**108.4**	**90.9**	**76.4**	**90.8**	**87.9**	**86.4**
Cocoa	3.9	260.8	100.0	132.8	90.3	73.6	89.5	150.7	139.4	131.2
Coffee, arabica	8.0	223.0	100.0	151.7	117.0	100.2	73.8	73.9	72.4	73.5
Coffee, robusta	2.8	348.2	100.0	154.8	126.9	79.5	54.5	60.1	69.5	68.5
Food	**29.4**	**176.7**	**100.0**	**105.3**	**88.2**	**87.0**	**91.2**	**96.7**	**97.2**	**100.4**
Fats and oils	**10.1**	**188.6**	**100.0**	**133.3**	**105.8**	**99.0**	**94.4**	**108.7**	**121.6**	**133.9**
Palm oil	2.3	255.6	100.0	232.5	151.6	110.2	104.5	144.6	154.2	166.7
Soybean meal	4.1	166.3	100.0	85.4	76.6	97.2	95.9	94.0	106.2	115.9
Soybeans	2.0	152.3	100.0	99.0	82.3	88.3	84.1	92.5	107.9	125.3
Grains	**6.9**	**170.4**	**100.0**	**101.6**	**87.0**	**81.8**	**82.9**	**94.6**	**90.9**	**91.2**
Maize	1.7	145.4	100.0	93.7	83.2	83.4	87.0	97.5	97.2	97.3
Rice, Thailand	2.9	192.4	100.0	112.7	92.4	76.9	67.7	76.1	73.6	73.1
Wheat, U.S.	1.9	161.7	100.0	93.4	83.3	86.6	99.2	117.3	108.7	110.5
Other food	**12.4**	**170.4**	**100.0**	**84.5**	**74.5**	**80.0**	**93.2**	**88.1**	**80.7**	**78.0**
Bananas, U.S.	2.3	88.5	100.0	90.9	69.6	80.7	114.3	104.9	69.9	71.5
Sugar, world	7.5	289.6	100.0	71.4	50.3	67.1	73.0	58.9	57.0	52.4
Raw materials	**22.8**	**132.7**	**100.0**	**87.6**	**89.2**	**94.0**	**82.0**	**89.4**	**98.3**	**97.4**
Cotton	5.9	143.8	100.0	79.7	64.8	73.7	61.7	60.2	77.5	77.3
Rubber, Malaysia	4.8	209.0	100.0	83.8	73.2	82.2	73.6	95.7	123.1	123.2
Sawnwood, Malaysia	2.9	94.3	100.0	91.2	113.5	114.8	95.7	106.1	104.2	101.5
Fertilizers	**2.7**	**163.5**	**100.0**	**122.6**	**114.9**	**108.8**	**104.7**	**107.9**	**107.0**	**107.5**
Triple superphosphate	0.9	173.5	100.0	131.8	118.0	107.5	102.0	108.4	114.2	117.3
Metals and minerals	**28.2**	**119.5**	**100.0**	**75.8**	**74.2**	**85.4**	**79.6**	**78.1**	**82.7**	**100.0**
Aluminum	7.9	112.7	100.0	83.1	83.6	97.2	93.4	88.4	88.0	97.2
Copper	9.3	104.0	100.0	62.4	59.5	70.1	62.9	62.9	67.4	87.1
Gold[a]	—	201.1	100.0	77.0	73.2	74.9	74.9	86.8	95.6	95.8
Nickel	2.2	93.3	100.0	52.4	68.3	100.3	71.1	82.0	109.5	152.6
Memo item:										
Deflator Index (MUV 1990 = 100)[b]		78.8	100.0	99.6	99.3	97.2	94.3	93.1	99.2	103.5

Note: MUV = manufacturing unit value; — = not available; *f* = forecast.
a. The World Bank primary commodity price indexes are computed from 1988–89 export values in U.S. dollars for low- and middle-income economies, rebased to 1990. Energy and gold prices are not included in the index.
b. Unit value index in U.S. dollar terms of manufactures exported from the G-5 countries weighted by exports to developing countries.
Source: World Bank Development Prospects Group. See Web site http://www.worldbank.org/prospects for details of price series and forecasts.

Table B.12 Global nominal GDP growth, 1981–2004

% change from a year earlier

	Average									
	1981–90	1991–2000	1997	1998	1999	2000	2001	2002	2003e	2004f
World	**9.4**	**6.6**	**6.7**	**4.9**	**4.4**	**6.0**	**3.6**	**3.6**	**3.8**	**4.8**
High-income	**8.4**	**4.6**	**5.5**	**3.6**	**3.4**	**4.8**	**2.4**	**2.5**	**2.9**	**4.0**
Industrial countries	7.9	4.4	5.4	3.6	3.4	4.7	2.5	2.5	2.9	3.9
European Union (15)	8.6	5.0	6.6	5.5	3.4	5.1	4.0	3.4	2.7	3.5
Japan	6.2	1.5	2.1	−1.3	−1.3	0.8	−1.1	−1.5	0.2	0.8
United States	7.6	5.4	6.2	5.3	6.0	5.9	2.9	3.8	4.9	6.2
Other high-income	25.2	9.6	8.7	2.3	3.1	9.4	−2.0	3.1	1.9	5.5
Asian NIEs	12.2	8.5	9.3	2.0	1.5	5.6	−1.9	1.6	0.9	6.4
Developing countries	**15.2**	**15.7**	**12.7**	**11.0**	**9.5**	**11.9**	**9.5**	**8.5**	**8.2**	**9.0**
Excluding China	15.1	15.7	12.7	11.3	9.5	12.0	9.5	8.5	8.1	8.9
Excluding Central Europe & CIS	15.2	13.9	11.3	10.2	9.5	11.0	9.0	7.9	7.9	8.8
Severely indebted	15.2	15.0	11.2	9.3	8.1	11.3	8.8	8.3	8.1	8.9
Moderately indebted	14.9	17.0	14.8	12.3	7.2	12.1	10.6	8.7	7.9	9.2
Less indebted	15.6	14.9	12.9	11.4	11.3	11.9	9.5	8.1	8.3	8.6
Middle-income countries	16.4	15.9	12.8	10.0	8.5	12.3	9.1	8.5	7.5	8.2
Upper-middle-income countries	16.8	15.7	13.4	10.0	7.9	13.1	7.3	7.9	7.4	8.8
Lower-middle-income countries	16.1	16.3	11.9	10.9	8.9	12.2	9.8	9.3	7.8	7.6
Low-income countries	14.3	15.5	12.1	12.1	11.0	9.6	11.0	8.4	9.2	9.8
East Asia and Pacific	13.2	12.1	10.4	6.2	8.9	10.9	9.1	7.8	8.1	10.6
China	15.2	17.0	9.7	5.2	4.8	9.0	8.8	7.7	10.5	—
Indonesia	15.7	19.6	17.9	57.7	13.1	13.0	14.6	11.1	7.7	—
Europe and Central Asia	4.7	48.0	21.6	14.8	11.3	14.5	12.7	11.0	12.2	12.1
Russian Federation	—	99.6	16.5	12.3	83.5	51.5	23.7	20.2	21.0	—
Turkey	54.0	77.9	95.2	81.1	48.2	60.9	43.2	55.0	30.7	—
Poland	71.8	29.0	21.6	17.2	11.3	16.0	5.1	2.8	4.6	—
Latin America and the Caribbean	25.0	17.0	12.4	12.4	6.1	11.1	7.7	6.3	7.2	7.4
Brazil	337.4	214.7	11.8	5.0	6.5	13.1	9.0	12.2	12.7	—
Mexico	66.7	22.2	25.7	21.0	19.5	19.4	5.1	5.9	7.4	—
Argentina	431.4	15.2	7.6	2.1	−5.2	0.2	−5.5	16.3	18.8	—
Middle East and North Africa	12.4	13.0	7.8	6.8	10.0	14.7	5.9	5.3	6.8	5.1
Saudi Arabia	−2.9	6.1	4.6	−11.5	10.4	17.1	−1.2	3.0	−0.8	—
Iran, Islamic Rep. of	18.6	31.9	17.3	18.7	26.8	40.1	14.0	29.7	10.5	—
Egypt, Arab Rep. of	19.3	13.4	12.1	8.2	8.5	12.3	6.6	7.2	1.7	—
South Asia	14.7	13.1	12.7	10.8	9.8	7.9	8.8	7.8	9.2	9.9
India	14.7	13.9	11.3	14.4	11.2	7.9	9.2	8.2	15.9	—
Sub-Saharan Africa	14.1	14.1	11.3	11.5	10.6	11.0	11.2	8.8	9.0	9.3
South Africa	16.5	11.9	11.0	7.8	8.4	11.0	10.7	14.0	6.9	—
Nigeria	17.9	32.3	4.1	−3.8	19.2	26.9	10.2	13.6	18.5	—

Note: — = not available; *e* = estimate; *f* = forecast. Developing countries aggregated using median growth rates. Industrial aggregates use 1995 US$ GDP weights. World total is GDP weighted average of developing and high-income total.

Table B.13 Global goods export growth, 1981–2004

BoP goods exports (current $); average annual growth (%)

	Exports 2002 ($ billions)	Average 1981–90	Average 1991–2000	1998	1999	2000	2001	2002	2003e	2004f
World	**6,314**	**6.4**	**6.8**	**−2.5**	**3.6**	**12.1**	**−3.8**	**5.0**	**15.5**	**14.9**
High-income	**4,491**	**7.4**	**6.0**	**−1.5**	**2.7**	**9.4**	**−4.7**	**3.7**	**14.1**	**16.0**
Industrial countries	3,936	7.1	5.7	−0.4	2.4	7.8	−3.8	3.7	14.3	16.3
European Union (15)	2,200	7.1	5.0	2.3	0.1	3.0	0.2	7.5	18.6	19.5
Japan	395	8.1	5.0	−8.6	7.6	13.8	−16.1	2.8	13.5	13.9
United States	698	6.2	7.2	−1.1	2.3	12.6	−6.5	−4.6	2.8	9.1
Other high-income	555	10.7	8.8	−9.8	5.0	21.6	−10.7	3.3	12.1	13.4
Asian NIEs	459	13.2	9.2	−9.2	4.0	19.0	−11.0	5.2	12.1	14.5
Developing countries	**1,823**	**2.7**	**9.6**	**−6.1**	**7.0**	**23.0**	**−0.9**	**8.5**	**18.9**	**12.3**
Excluding China	1,497	2.2	8.6	−7.3	7.2	22.0	−2.4	5.9	15.7	10.5
Excluding Central Europe & CIS	1,480	3.2	9.7	−6.4	8.9	22.7	−2.3	8.1	17.7	11.9
Severely indebted	220	3.4	6.0	−9.8	0.3	20.3	−2.0	2.8	15.3	8.9
Moderately indebted	668	4.7	9.4	−7.9	6.9	23.5	−5.6	5.6	12.7	10.5
Less indebted	935	1.1	11.1	−3.7	9.2	24.9	2.2	12.1	24.2	14.2
Middle-income countries	1,432	2.5	10.1	−5.4	7.2	23.5	−0.6	8.9	20.3	13.1
Upper-middle-income countries	639	1.5	9.9	−5.0	8.7	23.1	−1.8	4.3	16.9	11.8
Lower-middle-income countries	793	3.6	10.4	−5.7	5.9	23.9	0.5	13.0	23.0	14.2
Low-income countries	391	3.4	6.9	−10.4	5.8	24.1	−6.4	6.8	13.8	9.0
East Asia and Pacific	762	8.4	14.1	−2.4	8.3	22.9	−1.9	12.6	20.0	15.5
China	326	11.8	17.1	0.5	6.1	27.9	6.8	22.4	33.7	—
Indonesia	57	3.3	9.2	−8.8	−0.4	27.6	−9.3	1.4	7.3	—
Europe and Central Asia	383	1.2	9.0	−4.8	−1.6	24.7	3.8	10.8	24.4	14.8
Russian Federation	107	1.0	9.5	−15.9	1.0	39.5	−3.8	5.3	20.8	—
Turkey	40	14.8	9.0	−4.5	−5.9	6.5	11.9	15.8	25.5	—
Poland	47	1.9	8.5	5.6	−7.4	19.4	16.0	12.2	32.1	—
Latin America and the Caribbean	349	5.4	10.1	−1.2	5.7	19.6	−3.6	0.1	15.2	8.6
Brazil	60	4.5	5.8	−3.5	−6.1	14.7	5.7	3.7	21.1	—
Mexico	161	11.2	15.8	6.2	16.0	22.2	−4.8	1.5	18.9	—
Argentina	26	4.4	7.9	0.0	−11.8	13.3	1.0	−3.1	13.9	—
Middle East and North Africa	165	−2.8	5.3	−28.1	29.9	43.0	−4.6	7.2	10.6	4.1
Saudi Arabia	72	−6.9	5.7	−36.1	30.7	52.9	−5.9	5.3	10.2	—
Iran, Islamic Rep. of	28	−1.6	3.9	−28.6	60.3	34.8	−9.9	17.9	6.3	—
Egypt, Arab Rep. of	7	4.5	6.1	−20.3	18.9	34.8	−0.5	1.3	8.7	—
South Asia	74	8.4	8.7	−2.4	6.9	12.6	3.2	11.7	19.1	15.0
India	53	8.4	8.9	−4.6	10.1	14.5	0.7	16.2	19.1	—
Sub-Saharan Africa	91	0.7	3.3	−13.7	7.2	21.1	−3.6	1.5	16.2	−0.3
South Africa	31	−0.7	2.7	−6.1	−2.2	10.5	−3.1	1.2	17.4	—
Nigeria	14	−1.4	3.7	−41.0	43.5	51.4	−10.8	−12.5	16.4	—

Note: — = not available; *e* = estimate; *f* = forecast.

Table B.14 Global goods import growth, 1981–2004

BoP goods imports (current $); average annual growth (%)

	Exports 2002 ($ billions)	Average 1981–90	Average 1991–2000	1998	1999	2000	2001	2002	2003e	2004f
World	**6,264**	**5.9**	**6.9**	**−1.9**	**4.5**	**12.8**	**−3.8**	**4.2**	**15.9**	**15.3**
High-income	**4,662**	**6.6**	**6.5**	**−1.1**	**6.2**	**12.3**	**−5.2**	**3.3**	**14.4**	**14.8**
Industrial countries	4,148	6.4	6.1	0.4	6.3	11.3	−4.5	3.3	14.7	14.7
European Union (15)	2,082	5.9	4.8	3.7	2.3	5.6	−2.1	5.0	19.1	18.7
Japan	302	4.9	5.2	−18.1	11.4	22.2	−8.6	−3.4	14.0	14.7
United States	1,190	7.6	9.5	5.0	12.4	18.8	−6.1	2.0	7.6	7.2
Other high-income	514	9.0	9.3	−11.8	4.9	19.9	−10.9	3.3	12.1	15.5
Asian NIEs	428	11.5	9.6	−13.9	2.6	21.8	−13.0	3.0	11.8	16.5
Developing countries	**1,602**	**2.9**	**8.8**	**−4.6**	**−1.7**	**16.6**	**1.5**	**7.0**	**20.4**	**16.6**
Excluding China	1,320	2.6	7.7	−5.2	−4.1	13.5	0.2	4.4	15.7	14.4
Excluding Central Europe & CIS	1,275	3.4	9.4	−4.7	1.1	18.1	−0.6	6.0	18.9	16.7
Severely indebted	156	0.1	6.9	−7.8	−11.9	8.6	−1.6	−8.5	11.3	17.2
Moderately indebted	551	4.4	6.6	−14.4	−5.5	17.6	−1.7	6.8	15.6	16.3
Less indebted	894	2.9	11.1	4.0	3.8	19.6	4.0	10.4	25.0	16.7
Middle-income countries	1,280	3.0	9.6	−3.5	−1.3	18.4	1.4	7.0	20.9	16.7
Upper-middle-income countries	563	0.9	11.6	1.6	−0.8	15.7	−0.8	0.2	11.8	13.7
Lower-middle-income countries	717	4.6	8.1	−8.1	−1.7	21.3	3.5	13.0	28.0	18.8
Low-income countries	322	2.9	5.2	−10.6	−4.2	12.3	−4.5	7.0	18.5	16.2
East Asia and Pacific	617	8.9	11.9	−17.5	11.2	29.1	1.1	12.7	25.6	22.7
China	281	9.3	17.6	0.3	15.9	35.2	8.1	21.3	42.5	—
Indonesia	31	6.5	4.6	−34.4	−12.2	38.9	−7.1	1.1	7.4	—
Europe and Central Asia	375	1.6	7.3	−4.2	−12.2	16.4	1.7	12.5	27.2	16.8
Russian Federation	61	3.8	0.2	−19.4	−31.9	13.5	19.8	13.4	27.0	—
Turkey	48	11.0	8.9	−5.4	−12.5	35.1	−26.8	23.7	33.1	—
Poland	54	−4.1	14.7	11.7	−0.4	6.8	2.3	9.5	29.2	—
Latin America and the Caribbean	329	1.3	12.6	5.9	−3.8	15.1	−2.0	−6.5	4.2	7.2
Brazil	47	−1.0	10.4	−3.4	−14.6	13.3	−0.5	−15.0	2.3	—
Mexico	169	7.8	15.4	14.0	13.3	22.8	−3.4	0.1	1.4	—
Argentina	9	−8.8	20.4	3.4	−18.4	−1.0	−19.9	−53.1	49.1	—
Middle East and North Africa	112	1.2	2.5	3.5	−2.7	8.1	6.6	6.2	16.6	14.2
Saudi Arabia	30	−3.3	2.6	4.4	−6.6	7.9	3.3	3.5	14.9	—
Iran, Islamic Rep. of	22	7.4	−1.9	1.2	−6.0	13.2	25.5	20.2	24.1	—
Egypt, Arab Rep. of	13	8.9	4.1	3.3	3.7	1.4	−9.2	−7.7	10.8	—
South Asia	91	6.0	7.1	−4.7	3.3	8.7	3.8	8.7	23.4	16.3
India	65	7.7	7.8	−2.0	1.6	9.5	3.5	11.9	26.3	—
Sub-Saharan Africa	79	−1.2	3.7	1.7	−5.1	5.7	−0.2	3.2	17.3	3.6
South Africa	27	−0.9	4.7	−5.7	−9.8	11.3	−6.0	3.3	24.2	—
Nigeria	11	−7.6	5.9	−3.1	−6.8	1.6	5.7	−1.2	12.4	—

Note: — = not available; *e* = estimate; *f* = forecast.

Table B.15 Global goods trade balances, 1996–2004

$ billions

	% of GDP 2002	1996	1997	1998	1999	2000	2001	2002	2003e	2004f
World	**−0.1**	**103.9**	**122.9**	**84.8**	**41.2**	**5.0**	**4.9**	**18.6**	**7.3**	**−14.6**
High income	**−0.7**	**91.1**	**104.4**	**86.1**	**−57.8**	**−191.4**	**−157.0**	**−150.4**	**−190.1**	**−164.1**
Industrial countries	−8.4	88.0	106.0	76.9	−68.0	−212.2	−176.4	−195.2	−239.3	−206.8
European Union (15)	1.4	170.9	175.6	152.3	107.1	57.1	107.2	134.6	147.1	190.5
Japan	2.3	82.8	102.4	122.9	122.7	116.1	71.7	93.1	104.2	116.1
United States	−4.7	−189.9	−196.5	−248.8	−348.5	−457.9	−432.5	−492.6	−563.3	−590.0
Other high income	5.3	3.1	−1.6	9.2	10.2	20.8	19.4	44.8	49.1	42.7
Asian NIEs	5.9	0.5	−9.0	12.7	18.7	11.3	19.4	31.3	36.5	31.9
Developing countries	**2.1**	**12.8**	**18.5**	**−1.3**	**99.0**	**194.0**	**160.8**	**127.0**	**142.7**	**109.2**
Excluding China	1.7	−6.7	−27.7	−47.9	63.1	159.5	126.8	82.8	108.6	90.2
Excluding Central Europe & CIS	2.9	26.6	40.5	21.8	94.6	158.4	135.9	150.8	171.7	139.6
Severely indebted	5.8	8.2	5.3	0.9	23.0	46.4	44.7	61.4	77.1	69.3
Moderately indebted	1.3	−11.8	−16.9	12.8	60.1	94.9	73.2	18.7	12.5	6.0
Less indebted	1.3	16.5	30.1	−14.9	15.9	52.8	41.0	47.0	53.1	33.9
Middle-income countries	2.3	23.9	27.1	6.0	90.2	160.7	136.6	113.1	132.0	106.3
Upper-middle-income countries	5.0	34.5	13.2	−19.7	25.2	67.0	60.0	84.8	130.4	132.4
Lower-middle-income countries	0.8	−10.6	13.9	25.7	65.1	92.9	75.7	28.3	1.6	−26.1
Low-income countries	1.4	−11.0	−8.6	−7.3	8.8	29.6	24.2	13.9	10.6	3.0
East Asia and Pacific	5.2	3.5	46.0	98.2	97.6	99.7	84.9	93.0	89.5	68.4
China	3.5	19.5	46.2	46.6	36.0	34.5	34.0	44.2	34.1	—
Indonesia	14.9	6.9	11.9	21.5	24.7	28.8	25.4	25.8	27.7	—
Europe and Central Asia	−2.9	−24.4	−37.4	−37.4	−6.1	13.7	20.4	−32.1	−45.1	−47.2
Russian Federation	13.5	22.5	17.0	16.9	36.1	60.7	47.8	46.6	61.8	—
Turkey	−4.5	−10.6	−15.4	−14.3	−10.5	−22.4	−4.5	−8.3	−16.1	—
Poland	−3.9	−7.3	−9.8	−12.8	−15.1	−12.3	−7.7	−7.2	−7.9	—
Latin America and the Caribbean	1.2	3.7	−14.6	−36.3	−7.7	4.8	−1.0	19.6	58.8	68.6
Brazil	2.8	−5.6	−6.8	−6.6	−1.3	−0.8	2.7	13.1	24.8	—
Mexico	−1.3	6.4	0.6	−8.0	−5.7	−8.0	−10.0	−7.9	20.2	—
Argentina	16.4	1.8	−2.1	−3.1	−0.8	2.6	7.6	16.7	15.9	—
Middle East and North Africa	9.4	35.8	33.5	−5.3	24.6	67.8	53.3	53.2	52.2	41.1
Saudi Arabia	21.9	35.4	34.4	11.3	25.0	49.8	44.4	42.0	45.0	—
Iran, Islamic Rep. of	5.2	7.4	4.3	−1.2	7.6	13.1	6.5	5.6	2.0	—
Egypt, Arab Rep. of	−6.4	−8.4	−8.6	−10.2	−9.9	−8.3	−6.9	−5.8	−6.5	—
South Asia	−2.7	−17.9	−16.1	−14.0	−12.6	−11.5	−12.4	−16.9	−24.1	−29.2
India	−2.4	−10.1	−10.0	−10.8	−8.0	−6.9	−8.4	−12.4	−19.5	—
Sub-Saharan Africa	3.3	12.1	7.1	−6.4	3.3	16.1	12.7	10.3	11.4	7.6
South Africa	4.0	2.7	2.3	2.1	4.1	4.3	5.0	4.4	3.3	—
Nigeria	5.8	9.7	5.7	−0.2	4.3	10.8	8.2	2.6	3.5	—

Note: — = not available; *e* = estimate; *f* = forecast.

Table B.16 Global trade prices and volumes, 1981–2004

Average annual percent change; prices are in dollar terms unless indicated otherwise

	Average change									
	1981–90	1991–2000	1997	1998	1999	2000	2001	2002	2003e	2004f
Trade prices										
Manufactured goods prices	2.4	−0.3	−7.0	−3.8	−0.3	−2.1	−2.9	−1.3	6.5	4.4
Developing countries' export price (GNFS)	−1.2	1.1	−1.7	−9.6	−1.2	4.8	−3.6	−0.4	4.4	1.2
Oil price	−4.7	2.1	−6.1	−31.8	38.3	56.2	−13.7	2.4	15.9	−10.0
Non-oil commodity prices	−2.2	−1.4	2.2	−15.7	−11.2	−1.3	−9.1	5.1	10.0	10.4
Terms of trade (GNFS)										
World	−0.4	−0.2	−0.3	0.0	−0.4	−0.9	−0.5	0.4	−0.2	−0.4
High-income	0.4	0.0	−0.4	1.0	−0.5	−2.4	−0.1	0.6	0.1	0.1
Developing countries	−2.4	−1.0	0.1	−3.9	−0.3	5.0	−1.8	−0.2	−0.8	−1.5
Severely indebted	−3.5	−0.2	0.6	−6.3	−0.5	5.6	−2.9	−1.4	0.1	−2.8
Moderately indebted	−2.3	−1.1	−1.6	−4.4	0.5	8.0	−3.2	1.6	1.1	−3.2
Less indebted	−2.1	−1.0	1.5	−2.6	0.0	2.7	−0.9	−1.1	−1.9	−0.2
Middle-income countries	−2.3	−1.2	−0.4	−4.2	0.1	5.2	−1.7	0.5	−0.7	−1.4
Upper-middle-income countries	−2.4	−0.1	0.1	−5.8	0.7	6.2	−1.2	0.4	−1.1	−1.6
Lower-middle-income countries	−1.9	−1.7	−0.5	−2.6	−0.4	4.2	−2.0	0.5	−0.3	−1.4
Low-income countries	−2.5	0.4	3.3	−3.4	−1.0	3.3	−2.9	−4.3	−1.8	−2.3
East Asia and Pacific	0.2	1.1	1.2	0.8	−1.1	−0.9	−1.3	0.3	0.4	−0.9
Europe and Central Asia	−1.6	−2.3	−1.2	−1.3	−1.5	7.0	−1.0	0.8	−0.1	−1.7
Latin America and the Caribbean	−2.9	0.0	1.1	−5.2	1.6	5.5	−3.0	−0.6	−1.1	0.0
Middle East and North Africa	−3.4	−1.4	−1.7	−16.9	0.2	23.9	−4.0	−3.6	−6.9	−6.3
South Asia	0.4	0.9	9.6	5.8	−8.8	−5.6	−2.7	−7.1	−5.0	−1.0
Sub-Saharan Africa	−3.6	0.1	−5.3	−9.5	4.0	9.6	−2.1	2.7	4.9	−4.5
Global export volumes (GNFS)										
World	4.8	6.7	10.1	4.2	5.5	13.0	0.4	3.7	4.6	8.7
High-income	5.1	6.8	10.4	4.1	5.6	12.3	−0.4	2.4	2.2	7.4
Developing countries	3.6	6.7	9.3	4.8	5.0	15.4	3.5	8.5	13.5	13.0
Severely indebted	3.2	5.8	7.8	6.3	−5.6	11.2	5.8	4.1	9.1	10.4
Moderately indebted	4.2	4.6	7.7	3.0	6.6	13.1	0.9	5.4	7.4	11.7
Less indebted	3.0	7.8	10.6	5.5	7.1	18.4	4.6	11.7	18.5	14.2
Middle-income countries	3.8	6.7	10.2	4.2	6.5	15.2	3.3	8.5	14.0	13.3
Upper-middle-income countries	3.1	8.9	10.0	7.2	6.1	13.4	0.1	2.2	6.7	12.4
Lower-middle-income countries	4.0	4.6	9.7	2.2	6.4	16.6	5.5	12.5	18.3	13.6
Low-income countries	2.1	7.0	3.8	8.6	−5.1	17.0	5.0	8.4	9.8	10.9
East Asia and Pacific	6.4	11.5	13.9	3.2	4.1	22.6	2.4	15.6	21.1	18.3
Europe and Central Asia	2.6	1.2	8.3	5.8	3.9	16.0	6.1	7.1	13.5	10.3
Latin America and the Caribbean	5.5	8.7	9.9	7.9	6.6	10.3	1.1	2.6	5.4	11.2
Middle East and North Africa	0.9	5.0	2.5	−1.7	3.7	7.8	3.4	−0.4	7.3	6.4
South Asia	5.6	11.1	−0.1	9.1	12.5	21.2	7.3	17.3	16.4	11.2
Sub-Saharan Africa	1.5	4.3	5.0	4.0	3.9	5.1	3.2	1.9	1.7	5.1

Note: GNFS = goods and nonfactor services; *e* = estimate; *f* = forecast.

Table B.17 Global current account balances, 1999–2004

$ billions

	Percent of GDP (2002)									
	Merchandise balance	Services balance	Income balance	Transfers, net	1999	2000	2001	2002	2003e	2004f
World	**0.0**	**0.0**	**−0.3**	**−0.1**	**−139.7**	**−187.3**	**−192.4**	**−137.7**	**−219.9**	**−249.1**
High income	**−0.7**	**0.2**	**0.1**	**−0.5**	**−132.8**	**−243.5**	**−213.5**	**−216.2**	**−295.7**	**−273.4**
Industrial countries	−0.7	0.2	0.1	−0.5	−159.5	−277.4	−245.3	−251.4	−344.3	−319.0
European Union (15)	1.5	0.2	−0.3	−0.7	−21.1	−60.0	−5.1	64.4	16.6	61.7
Japan	2.3	−1.1	1.6	−0.1	114.6	119.7	87.8	112.4	139.1	143.3
United States	−4.6	0.6	0.0	−0.6	−290.9	−411.5	−393.7	−480.9	−557.1	−589.6
Other high income	2.2	2.2	0.1	0.0	26.7	33.9	31.9	35.2	48.6	45.6
Asian NIEs	2.5	3.9	0.3	−0.5	25.5	20.4	26.1	33.1	40.0	37.7
Developing countries	**3.0**	**−0.8**	**−2.0**	**1.5**	**−6.9**	**56.2**	**21.0**	**78.5**	**75.8**	**24.2**
Excluding China	2.8	−0.9	−2.3	1.6	−28.1	35.7	3.6	43.1	49.4	12.6
Excluding Central Europe & CIS	3.1	−0.9	−2.1	1.5	−6.7	30.2	7.8	70.8	60.7	26.7
Severely indebted	6.0	−2.5	−4.3	2.1	−38.7	−23.4	−26.3	5.6	13.2	2.4
Moderately indebted	5.4	−0.6	−2.2	1.1	44.8	70.1	47.1	44.7	48.3	34.0
Less indebted	1.2	−0.4	−1.3	1.4	−13.1	9.5	0.3	28.3	14.4	−12.2
Middle-income countries	3.3	−0.7	−2.0	1.0	1.0	51.3	19.4	70.3	71.7	24.6
Upper-middle-income countries	3.9	−1.1	−2.8	0.0	−59.9	−33.1	−40.1	−2.1	6.9	−2.7
Lower-middle-income countries	3.0	−0.4	−1.4	1.7	60.9	84.4	59.4	72.4	64.8	27.3
Low-income countries	1.2	−1.3	−2.2	3.8	−7.9	4.9	1.6	8.2	4.2	−0.4
East Asia and Pacific	5.3	−1.2	−1.5	0.8	60.0	53.3	39.4	61.0	51.3	38.9
China	3.5	−0.5	−1.2	1.0	21.1	20.5	17.4	35.4	26.4	—
Indonesia	—	—	—	—	5.8	8.0	6.9	7.5	4.0	—
Europe and Central Asia	1.1	0.3	−2.0	1.4	−1.6	16.2	16.6	6.3	7.5	−7.8
Russian Federation	13.5	−3.1	−1.8	0.0	24.6	46.8	33.6	29.9	41.5	—
Turkey	−4.5	4.3	−2.5	1.9	−1.3	−9.8	3.4	−1.5	−7.6	—
Poland	−3.8	0.4	−1.0	1.7	−12.5	−10.0	−5.4	−5.0	−5.0	—
Latin America and the Caribbean	1.4	−0.9	−3.1	1.7	−56.6	−46.8	−54.0	−15.4	−4.4	−10.1
Brazil	2.9	−1.1	−4.0	0.5	−25.4	−24.2	−23.2	−7.7	2.0	—
Mexico	−1.2	−0.8	−1.8	1.6	−14.0	−18.2	−18.1	−14.0	−12.0	—
Argentina	16.9	−1.6	−6.3	0.4	−12.0	−8.9	−4.0	9.6	8.3	—
Middle East and North Africa	9.5	−2.3	−1.1	−0.8	6.1	39.5	24.8	25.7	26.0	14.5
Saudi Arabia	—	—	—	—	0.4	14.3	9.4	11.7	12.5	—
Iran, Islamic Rep. of	—	—	—	—	6.6	12.6	4.1	2.9	0.8	—
Egypt, Arab Rep. of	−6.4	3.0	−0.3	4.4	−1.6	−1.0	−0.4	0.6	1.2	—
South Asia	−2.7	1.0	−1.0	4.1	−5.2	−4.1	2.8	8.9	5.3	4.3
India	−2.4	1.2	−0.8	2.9	−3.2	−2.6	1.8	4.7	1.3	—
Sub-Saharan Africa	4.8	−3.2	−3.8	2.6	−9.7	−1.9	−8.6	−8.0	−9.8	−15.4
South Africa	4.2	−0.8	−2.6	−0.5	−0.6	−0.6	−0.3	0.3	−2.3	—
Nigeria	—	—	—	—	0.5	3.5	−0.3	−2.1	−1.6	—

Note: — = not available; *e* = estimate; *f* = forecast.

Table B.18 Global current account balances, 1981–2004

% of GDP

	Average									
	1981–90	1991–2000	1997	1998	1999	2000	2001	2002	2003e	2004f
World	**−0.5**	**−0.2**	**0.0**	**−0.3**	**−0.5**	**−0.6**	**−0.6**	**−0.5**	**−0.6**	**−0.6**
High-income	**−0.2**	**0.1**	**0.3**	**0.1**	**−0.5**	**−1.0**	**−0.9**	**−0.9**	**−1.0**	**−0.9**
Industrial countries	−0.4	−0.1	0.3	0.0	−0.7	−1.2	−1.0	−1.1	−1.2	−1.0
European Union (15)	0.1	0.2	1.1	0.5	−0.3	−0.8	−0.1	0.6	0.2	0.5
Japan	2.3	2.4	2.2	3.0	2.6	2.5	2.1	2.8	3.2	3.1
United States	−1.9	−1.8	−1.5	−2.3	−3.1	−4.2	−3.9	−4.6	−5.1	−5.1
Other high-income	10.5	4.0	3.1	5.7	6.9	8.0	7.8	8.5	11.1	9.7
Asian NIEs	6.9	5.2	3.4	9.3	10.5	7.9	10.5	13.3	15.9	13.8
Developing countries	**−1.6**	**−1.6**	**−1.4**	**−1.8**	**−0.1**	**1.0**	**0.4**	**1.3**	**1.1**	**0.3**
Excluding China	−1.8	−2.3	−2.4	−2.8	−0.6	0.8	0.1	0.9	0.9	0.2
Excluding Central Europe & CIS	−1.7	−1.6	−1.2	−1.5	−0.1	0.6	0.2	1.4	1.1	0.4
Severely indebted	−2.2	−2.5	−3.5	−4.4	−3.1	−1.8	−2.1	0.5	1.1	0.2
Moderately indebted	−2.0	−1.5	−1.8	0.4	3.9	5.5	3.8	3.4	3.0	1.9
Less indebted	−1.1	−1.2	0.0	−1.4	−0.4	0.3	0.0	0.8	0.3	−0.3
Middle-income countries	−1.3	−1.6	−1.2	−1.6	0.1	1.1	0.4	1.5	1.3	0.4
Upper-middle-income countries	−1.5	−2.9	−3.2	−4.3	−2.8	−1.4	−1.7	−0.1	0.3	−0.1
Lower-middle-income countries	−1.2	−0.2	0.5	1.0	2.7	3.4	2.3	2.7	2.0	0.8
Low-income countries	−2.7	−2.0	−2.2	−2.9	−0.8	0.5	0.1	0.7	0.3	−0.1
East Asia and Pacific	−1.4	0.5	1.2	4.5	4.2	3.5	2.4	3.4	2.6	1.7
China	0.2	1.6	4.1	3.3	2.1	1.9	1.5	2.8	1.9	0.7
Indonesia	−3.1	−0.4	−2.3	4.1	4.1	5.3	4.9	4.3	2.0	2.7
Europe and Central Asia	−0.5	−2.5	−2.5	−2.5	0.0	1.9	1.9	0.8	0.6	−0.5
Russian Federation	—	—	0.0	0.1	12.6	18.0	10.8	8.6	9.8	5.9
Turkey	−1.3	−1.1	−1.4	1.0	−0.7	−4.9	2.3	−0.8	−3.2	−2.0
Poland	−1.4	−3.7	−3.9	−4.4	−8.1	−6.1	−2.9	−2.6	−2.4	−1.4
Latin America and the Caribbean	−1.5	−2.8	−3.3	−4.5	−3.2	−2.4	−2.8	−0.9	−0.3	−0.5
Brazil	−1.1	−2.1	−3.8	−4.3	−4.7	−4.0	−4.6	−1.7	0.4	−0.7
Mexico	−0.8	−3.7	−1.9	−3.8	−2.9	−3.1	−2.9	−2.2	−2.0	−2.3
Argentina	−2.2	−3.1	−4.2	−4.9	−4.2	−3.1	−1.5	9.4	6.5	4.8
Middle East and North Africa	−1.7	−2.0	1.0	−4.2	1.2	7.2	4.4	4.6	4.6	2.5
Saudi Arabia	−7.3	−6.6	0.2	−9.0	0.3	7.6	5.0	6.1	6.6	4.6
Iran, Islamic Rep. of	−0.4	1.9	2.2	−2.1	6.6	12.5	3.6	2.7	0.7	−3.1
Egypt, Arab Rep. of	−3.4	1.5	−0.9	−3.1	−1.8	−1.0	−0.4	0.7	1.7	2.1
South Asia	−2.0	−1.5	−1.0	−1.8	−0.9	−0.7	0.5	1.4	0.7	0.5
India	−1.7	−1.2	−0.7	−1.7	−0.7	−0.6	0.4	0.9	0.2	0.0
Sub-Saharan Africa	−2.7	−2.0	−2.2	−5.5	−3.0	−0.6	−3.1	−2.8	−2.6	−3.7
South Africa	0.4	−0.2	−1.5	−1.7	−0.5	−0.5	−0.3	0.3	−1.4	−1.4
Nigeria	−0.7	0.4	1.5	−13.2	1.4	8.4	−0.6	−4.6	−3.2	−6.8

Note: — = not available; *e* = estimate; *f* = forecast.

Table B.19 Workers' remittances received by developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**51.1**	**56.0**	**66.1**	**62.9**	**67.6**	**68.4**	**77.0**	**88.1**	**93.0**
East Asia and Pacific	9.9	11.4	15.9	9.8	12.1	12.2	13.7	17.0	17.6
China	0.4	1.7	4.6	0.3	0.5	0.8	1.2	2.4	2.4
Indonesia	0.4	0.8	0.7	1.0	1.1	1.2	1.0	1.3	1.3
Malaysia	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4
Philippines	5.4	4.9	6.8	5.1	6.9	6.2	6.2	7.4	8.0
Thailand	3.4	3.6	3.3	2.8	2.9	3.4	2.5	2.8	2.8
Europe and Central Asia	5.6	6.3	7.3	10.5	9.3	9.7	10.2	10.3	10.4
Albania	0.4	0.6	0.3	0.5	0.4	0.6	0.7	0.7	0.7
Croatia	0.5	0.7	0.6	0.6	0.5	0.6	0.7	0.8	0.8
Poland	0.7	0.8	0.8	1.1	0.8	0.8	1.1	1.4	1.4
Russian Federation	0.2	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.8
Turkey	3.3	3.5	4.2	5.4	4.5	4.6	2.8	1.9	1.9
Latin America and the Caribbean	12.9	12.9	13.8	15.2	16.9	19.2	22.9	26.8	29.6
Brazil	3.0	2.1	1.6	1.2	1.5	1.3	1.4	2.0	2.0
Colombia	0.8	0.8	0.8	0.8	1.3	1.6	2.0	2.4	2.5
Dominican Republic	0.8	1.0	1.1	1.4	1.6	1.8	2.0	2.2	2.2
El Salvador	1.1	1.1	1.2	1.3	1.4	1.8	1.9	2.0	2.1
Mexico	4.4	5.0	5.5	6.5	6.6	7.6	9.9	11.0	13.2
Middle East and North Africa	10.0	10.5	10.8	10.6	10.7	11.0	13.2	13.0	13.0
Egypt, Arab Rep. of	3.2	3.1	3.7	3.4	3.2	2.9	2.9	2.9	2.9
Jordan	1.2	1.5	1.7	1.5	1.7	1.8	2.0	2.1	2.0
Lebanon	1.2	1.2	1.2	1.2	1.4	1.6	2.3	2.3	2.1
Morocco	2.0	2.2	1.9	2.0	1.9	2.2	3.3	2.9	3.2
South Asia	10.0	12.3	14.6	13.3	15.1	12.8	13.1	16.9	18.2
Bangladesh	1.2	1.3	1.5	1.6	1.8	2.0	2.1	2.9	3.2
India	6.2	8.8	10.3	9.5	11.1	8.5	8.2	8.4	8.4
Pakistan	1.7	1.3	1.7	1.2	1.0	1.1	1.5	3.6	4.2
Sri Lanka	0.8	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.5
Sub-Saharan Africa	2.7	2.7	3.7	3.6	3.5	3.5	3.9	4.1	4.1
Lesotho	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2
Nigeria	0.8	0.9	1.9	1.6	1.3	1.3	1.3	1.3	1.3
Senegal	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Sudan	0.3	0.2	0.4	0.7	0.7	0.6	0.7	1.0	1.0

Note: e = estimate.

Table B.20 Net official development assistance from DAC countries, 1995–2002

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002
Total ODA	**58.9**	**55.6**	**48.5**	**52.1**	**56.4**	**53.7**	**52.3**	**58.3**
Australia	1.2	1.1	1.1	1.0	1.0	1.0	0.9	1.0
Austria	0.8	0.6	0.5	0.5	0.5	0.4	0.5	0.5
Belgium	1.0	0.9	0.8	0.9	0.8	0.8	0.9	1.1
Canada	2.1	1.8	2.0	1.7	1.7	1.7	1.5	2.0
Denmark	1.6	1.8	1.6	1.7	1.7	1.7	1.6	1.6
Finland	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
France	8.4	7.5	6.3	5.7	5.6	4.1	4.2	5.5
Germany	7.5	7.6	5.9	5.6	5.5	5.0	5.0	5.3
Greece	—	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Ireland	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4
Italy	1.6	2.4	1.3	2.3	1.8	1.4	1.6	2.3
Japan	14.5	9.4	9.4	10.6	15.3	13.5	9.8	9.3
Luxembourg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands	3.2	3.2	2.9	3.0	3.1	3.1	3.2	3.3
New Zealand	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Norway	1.2	1.3	1.3	1.3	1.4	1.3	1.3	1.7
Portugal	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Spain	1.3	1.3	1.2	1.4	1.4	1.2	1.7	1.7
Sweden	1.7	2.0	1.7	1.6	1.6	1.8	1.7	2.0
Switzerland	1.1	1.0	0.9	0.9	1.0	0.9	0.9	0.9
United Kingdom	3.2	3.2	3.4	3.9	3.4	4.5	4.6	4.9
United States	7.4	9.4	6.9	8.8	9.1	10.0	11.4	13.3

Note: — = not available.

Table B.21 External financing: all developing countries, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	−83.7	−102.4	−6.9	56.2	21.0	78.5	75.8
as % GDP	−1.4	−1.8	−0.1	1.0	0.4	1.3	1.1
Financed by:							
Net equity flows	193.7	182.1	194.4	174.8	179.4	152.0	149.5
Net FDI inflows	171.1	175.6	181.7	162.2	175.0	147.1	135.2
Net portfolio equity inflows	22.6	6.6	12.6	12.6	4.4	4.9	14.3
Net debt flows	105.3	57.6	13.8	−9.8	−1.2	7.3	44.3
Official creditors	13.2	34.2	13.7	−5.9	26.9	4.1	−6.3
World Bank	9.2	8.7	8.8	7.9	7.5	−0.2	−1.9
IMF	3.4	14.1	−2.2	−10.6	19.5	14.0	8.0
Others	0.6	11.4	7.1	−3.1	−0.1	−9.7	−12.4
Private creditors	92.2	23.4	0.1	−3.9	−28.1	3.2	50.6
Net medium- and long-term debt flows	84.2	87.0	22.4	5.2	−5.3	1.8	18.6
Bonds	38.2	39.7	29.8	16.5	12.2	12.7	33.1
Banks	43.9	52.4	−5.1	−5.8	−10.2	−3.9	−6.6
Others	2.0	−5.1	−2.3	−5.5	−7.3	−7.0	−7.9
Net short-term debt flows	8.0	−63.6	−22.3	−9.1	−22.9	1.4	32.0
Balancing item[a]	−162.5	−120.7	−163.1	−168.6	−119.0	−65.0	6.3
Change in reserves (− = increase)	−52.8	−16.6	−38.1	−52.6	−80.2	−172.9	−276.0
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	25.3	26.7	28.5	28.7	27.9	31.2	34.3
Net private flows (debt + equity)	285.8	205.5	194.5	170.9	151.3	155.3	200.2
Net official flows (aid + debt)	38.4	60.9	42.2	22.8	54.8	35.3	28.0
Workers' remittances	66.1	62.9	67.6	68.4	77.0	88.1	93.0

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.22 External financing: East Asia and Pacific, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	17.0	59.4	60.0	53.3	39.4	61.0	51.3
as % GDP	1.2	4.5	4.2	3.5	2.4	3.4	2.6
Financed by:							
Net equity flows	58.2	54.2	52.3	49.0	49.2	58.3	61.6
Net FDI inflows	62.1	57.7	50.0	44.2	48.2	54.8	56.8
Net portfolio equity inflows	−3.9	−3.4	2.3	4.8	1.0	3.5	4.8
Net debt flows	44.9	−32.5	−12.2	−17.7	−8.1	−10.9	0.5
Official creditors	17.3	14.7	12.6	7.0	3.2	−7.8	−8.9
World Bank	2.0	2.8	2.4	1.8	0.9	−1.7	−1.5
IMF	5.9	7.0	1.9	1.2	−2.5	−2.7	−0.5
Others	9.3	4.8	8.2	3.9	4.8	−3.4	−6.9
Private creditors	27.6	−47.1	−24.7	−24.7	−11.3	−3.1	9.4
Net medium- and long-term debt flows	22.9	−3.8	−10.9	−14.6	−12.0	−10.8	−2.7
Bonds	13.3	0.7	0.9	−1.6	0.7	0.8	5.8
Banks	4.0	−4.8	−11.4	−11.6	−10.9	−9.4	−4.9
Others	5.7	0.3	−0.4	−1.3	−1.8	−2.2	−3.5
Net short-term debt flows	4.7	−43.3	−13.9	−10.1	0.7	7.7	12.1
Balancing item[a]	−107.3	−60.5	−70.8	−74.5	−32.9	−20.4	22.8
Change in reserves (− = increase)	−12.8	−20.7	−29.3	−10.1	−47.7	−88.0	−136.2
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	2.4	2.5	2.5	2.5	2.2	2.2	2.2
Net private flows (debt + equity)	85.8	7.1	27.5	24.3	38.0	55.2	71.0
Net official flows (aid + debt)	19.6	17.1	15.1	9.5	5.4	−5.6	−6.7
Workers' remittances	15.9	9.8	12.1	12.2	13.7	17.0	17.6

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.23 External financing: Europe and Central Asia, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	−26.8	−25.1	−1.6	16.2	16.6	6.3	7.5
as % GDP	−2.5	−2.5	0.0	1.9	1.9	0.8	0.6
Financed by:							
Net equity flows	26.7	30.1	30.4	30.5	32.1	32.5	26.9
Net FDI inflows	22.6	26.2	28.4	29.3	31.8	32.9	26.2
Net portfolio equity inflows	4.0	4.0	2.0	1.2	0.3	−0.4	0.7
Net debt flows	32.8	41.5	16.1	21.0	2.0	24.9	29.5
Official creditors	6.6	7.4	−0.7	−0.1	2.0	2.2	−6.5
World Bank	3.9	1.5	1.9	2.1	2.1	1.0	−0.7
IMF	2.4	5.3	−3.1	−0.7	6.1	4.6	−2.1
Others	0.3	0.6	0.5	−1.5	−6.2	−3.4	−3.7
Private creditors	26.3	34.1	16.9	21.1	0.1	22.7	36.0
Net medium- and long-term debt flows	17.7	29.7	17.9	11.6	6.8	21.2	18.9
Bonds	9.2	16.0	8.2	5.3	1.6	4.1	13.9
Banks	8.4	14.8	10.6	8.0	7.4	18.7	7.1
Others	0.1	−1.1	−0.9	−1.7	−2.1	−1.6	−2.0
Net short-term debt flows	8.5	4.4	−1.0	9.5	−6.8	1.4	17.1
Balancing item[a]	−25.4	−41.7	−37.7	−50.9	−40.4	−18.8	−3.1
Change in reserves (− = increase)	−7.3	−4.9	−7.2	−16.8	−10.3	−44.9	−60.7
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	5.4	5.4	8.2	8.6	7.1	8.5	9.1
Net private flows (debt + equity)	52.9	64.2	47.2	51.5	32.2	55.2	62.9
Net official flows (aid + debt)	12.0	12.8	7.5	8.5	9.1	10.7	2.5
Workers' remittances	7.3	10.5	9.3	9.7	10.2	10.3	10.4

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.24 External financing: Latin America and the Caribbean, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	−66.0	−90.3	−56.6	−46.8	−54.0	−15.4	−4.4
as % GDP	−3.3	−4.5	−3.2	−2.4	−2.8	−0.9	−0.3
Financed by:							
Net equity flows	80.0	71.7	84.4	76.5	72.2	46.2	38.0
Net FDI inflows	66.7	73.8	88.0	77.0	69.9	44.7	36.6
Net portfolio equity inflows	13.3	−2.2	−3.6	−0.5	2.3	1.5	1.4
Net debt flows	25.4	38.0	12.1	−9.7	6.3	−7.9	19.5
Official creditors	−8.7	10.9	1.5	−11.1	20.4	12.7	10.2
World Bank	0.8	2.4	2.1	2.0	1.3	−0.3	−0.5
IMF	−3.9	2.5	−0.9	−10.7	15.6	11.9	11.4
Others	−5.5	5.9	0.3	−2.4	3.5	1.2	−0.7
Private creditors	34.1	27.2	10.6	1.4	−14.1	−20.6	9.3
Net medium- and long-term debt flows	41.7	54.7	18.5	4.0	−0.7	−11.6	6.7
Bonds	10.8	17.3	19.3	5.2	3.6	0.5	13.2
Banks	31.9	39.1	−1.5	−0.3	−2.7	−10.3	−5.8
Others	−1.0	−1.7	0.8	−0.9	−1.7	−1.8	−0.7
Net short-term debt flows	−7.7	−27.6	−7.9	−2.6	−13.4	−9.0	2.6
Balancing item[a]	−25.9	−28.6	−47.4	−17.1	−21.6	−22.8	−20.2
Change in reserves (− = increase)	−13.5	9.2	7.5	−2.9	−2.9	−0.1	−32.9
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	2.7	3.2	2.9	2.5	3.2	2.7	2.9
Net private flows (debt + equity)	114.1	98.8	95.0	78.0	58.1	25.6	47.3
Net official flows (aid + debt)	−6.0	14.0	4.4	−8.7	23.6	15.5	13.1
Workers' remittances	13.8	15.2	16.9	19.2	22.9	26.8	29.6

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.25 External financing: Middle East and North Africa, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	5.1	−19.8	6.1	39.5	24.8	25.7	26.0
as % GDP	1.0	−4.2	1.2	7.2	4.4	4.6	4.6
Financed by:							
Net equity flows	7.0	7.6	3.6	2.7	5.7	2.4	2.0
Net FDI inflows	6.3	7.4	2.9	2.4	5.8	2.7	2.0
Net portfolio equity inflows	0.7	0.2	0.6	0.2	−0.1	−0.3	0.0
Net debt flows	−2.9	7.1	−1.8	−6.1	0.9	0.9	−7.8
Official creditors	−3.7	−1.5	−2.5	−2.8	−1.1	−2.8	−2.0
World Bank	−0.3	−0.2	0.2	−0.3	−0.1	−0.3	−0.3
IMF	0.3	0.0	0.0	−0.2	−0.1	−0.3	−0.5
Others	−3.8	−1.3	−2.7	−2.3	−0.9	−2.3	−1.2
Private creditors	0.8	8.6	0.6	−3.4	2.0	3.8	−5.7
Net medium- and long-term debt flows	−0.2	3.9	−0.4	0.5	2.3	3.0	−5.7
Bonds	1.5	1.3	1.4	1.2	4.4	5.0	−0.8
Banks	−0.1	3.8	−0.6	0.9	−1.1	−1.5	−4.2
Others	−1.7	−1.3	−1.2	−1.6	−1.0	−0.5	−0.7
Net short-term debt flows	1.1	4.7	1.0	−3.9	−0.3	0.8	−0.1
Balancing item[a]	−2.5	3.6	−5.2	−23.8	−22.6	−16.8	−11.0
Change in reserves (− = increase)	−6.6	1.5	−2.6	−12.2	−8.8	−12.2	−9.2
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	3.0	3.5	2.7	3.1	2.2	2.4	3.6
Net private flows (debt + equity)	7.8	16.3	4.2	−0.7	7.7	6.1	−3.8
Net official flows (aid + debt)	−0.7	1.9	0.2	0.3	1.1	−0.4	1.6
Workers' remittances	10.8	10.6	10.7	11.0	13.2	13.0	13.0

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.26 External financing: South Asia, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	−5.4	−9.4	−5.2	−4.1	2.8	8.9	5.3
as % GDP	−1.0	−1.8	−0.9	−0.7	0.5	1.4	0.7
Financed by:							
Net equity flows	7.8	2.9	5.5	6.2	6.9	5.2	12.1
Net FDI inflows	4.9	3.5	3.1	3.4	5.0	4.2	5.1
Net portfolio equity inflows	2.9	−0.6	2.4	2.8	1.9	1.0	7.0
Net debt flows	0.7	4.7	0.5	3.4	−0.7	0.4	−2.3
Official creditors	0.3	2.3	2.5	0.5	2.2	−2.4	−0.6
World Bank	1.1	0.8	1.0	0.7	1.5	−1.0	−0.8
IMF	−0.8	−0.4	−0.1	−0.3	0.3	0.1	−0.2
Others	0.0	2.0	1.6	0.1	0.4	−1.4	0.4
Private creditors	0.4	2.4	−2.0	2.9	−2.8	2.8	−1.7
Net medium- and long-term debt flows	2.5	3.7	−2.1	3.9	−1.8	0.5	−2.9
Bonds	2.3	4.2	−1.2	5.4	0.0	−0.5	−4.1
Banks	1.3	0.7	−0.5	−2.0	−1.4	1.0	1.1
Others	−1.1	−1.1	−0.4	0.5	−0.3	−0.1	0.2
Net short-term debt flows	−2.1	−1.3	0.1	−1.0	−1.1	2.3	1.2
Balancing item[a]	2.1	4.8	4.2	−0.9	1.2	12.4	19.5
Change in reserves (− = increase)	−5.2	−3.0	−5.0	−4.7	−10.2	−27.0	−34.6
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	2.1	2.1	2.3	2.1	3.2	2.5	2.6
Net private flows (debt + equity)	8.2	5.3	3.5	9.2	4.0	8.0	10.4
Net official flows (aid + debt)	2.4	4.5	4.8	2.6	5.3	0.1	2.0
Workers' remittances	14.6	13.3	15.1	12.8	13.1	16.9	18.2

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.27 External financing: Sub-Saharan Africa, 1997–2003

$ billions

	1997	1998	1999	2000	2001	2002	2003e
Current account balance	−7.6	−17.3	−9.7	−1.9	−8.6	−8.0	−9.8
as % GDP	−2.2	−5.5	−3.0	−0.6	−3.1	−2.8	−2.6
Financed by:							
Net equity flows	14.0	15.6	18.3	9.9	13.3	7.4	9.0
Net FDI inflows	8.4	6.9	9.3	5.8	14.3	7.8	8.5
Net portfolio equity inflows	5.6	8.7	9.0	4.1	−1.0	−0.4	0.5
Net debt flows	4.4	−1.3	−1.0	−0.7	−1.8	−0.1	4.9
Official creditors	1.4	0.4	0.3	0.6	0.2	2.2	1.5
World Bank	1.7	1.3	1.1	1.5	1.8	2.2	1.9
IMF	−0.5	−0.3	0.0	0.1	0.1	0.5	−0.2
Others	0.3	−0.6	−0.8	−1.0	−1.7	−0.5	−0.3
Private creditors	3.0	−1.8	−1.3	−1.3	−2.0	−2.2	3.4
Net medium- and long-term debt flows	−0.4	−1.3	−0.6	−0.2	0.1	−0.5	4.3
Bonds	1.0	0.3	1.2	1.0	1.9	2.7	5.2
Banks	−1.7	−1.2	−1.6	−0.8	−1.5	−2.4	0.1
Others	0.2	−0.3	−0.2	−0.5	−0.3	−0.8	−1.1
Net short-term debt flows	3.5	−0.5	−0.6	−1.0	−2.0	−1.8	−0.9
Balancing item[a]	−3.4	1.6	−6.1	−1.5	−2.7	1.4	−1.7
Change in reserves (− = increase)	−7.5	1.4	−1.5	−5.8	−0.3	−0.7	−2.4
Memo items:							
Bilateral aid grants (excluding technical cooperation grants)	9.6	10.1	9.9	10.0	10.0	13.0	13.9
Net private flows (debt + equity)	17.0	13.8	17.0	8.6	11.3	5.2	12.4
Net official flows (aid + debt)	11.0	10.6	10.2	10.6	10.3	15.1	15.4
Workers' remittances	3.7	3.6	3.5	3.5	3.9	4.1	4.1

Note: e = estimate.
a. Combination of errors and omissions and net acquisition of foreign assets (including FDI) by developing countries.

Table B.28 Net inward foreign direct investment, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**105.3**	**127.6**	**171.1**	**175.6**	**181.7**	**162.2**	**175.0**	**147.1**	**135.2**
East Asia and Pacific	50.8	58.6	62.1	57.7	50.0	44.2	48.2	54.8	56.8
China	35.8	40.2	44.2	43.8	38.8	38.4	44.2	49.3	53.5
Malaysia	4.2	5.1	5.1	2.2	3.9	3.8	0.6	3.2	1.6
Philippines	1.5	1.5	1.2	2.3	1.7	1.3	1.0	1.1	0.4
Thailand	2.1	2.3	3.9	7.3	6.1	3.4	3.8	0.9	1.5
Vietnam	1.8	2.4	2.2	1.7	1.4	1.3	1.3	1.4	1.3
Europe and Central Asia	17.4	16.4	22.6	26.2	28.4	29.3	31.8	32.9	26.2
Czech Republic	2.6	1.4	1.3	3.7	6.3	5.0	5.6	9.3	3.5
Hungary	4.9	2.4	2.2	2.1	2.0	1.7	2.6	0.9	0.0
Poland	3.7	4.5	4.9	6.4	7.3	9.3	5.7	4.1	4.0
Russian Federation	2.1	2.6	4.9	2.8	3.3	2.7	2.5	3.0	4.1
Slovak Republic	0.2	0.4	0.2	0.6	0.4	2.1	1.6	4.0	1.1
Latin America and the Caribbean	30.5	44.3	66.7	73.8	88.0	77.0	69.9	44.7	36.6
Argentina	5.6	6.9	9.2	7.3	24.0	10.4	2.2	0.8	0.4
Brazil	4.9	11.2	19.7	31.9	28.6	32.8	22.5	16.6	10.1
Chile	3.0	5.0	5.3	4.8	9.0	3.6	4.5	1.7	2.4
Mexico	9.5	9.2	12.8	11.9	13.1	16.1	26.2	14.6	11.5
Venezuela, R. B. de	1.0	2.2	6.2	5.0	2.9	4.7	3.7	0.7	2.5
Middle East and North Africa	−0.7	0.6	6.3	7.4	2.9	2.4	5.8	2.7	2.0
Algeria	0.0	0.3	0.3	0.5	0.5	0.4	1.2	1.1	1.0
Egypt, Arab Rep. of	0.6	0.6	0.9	1.1	1.1	1.2	0.5	0.6	0.5
Morocco	0.3	0.3	1.2	0.4	1.4	0.4	2.8	0.4	0.4
South Asia	2.9	3.5	4.9	3.5	3.1	3.4	5.0	4.2	5.1
India	2.1	2.4	3.6	2.6	2.2	2.7	4.3	3.0	4.1
Pakistan	0.7	0.9	0.7	0.5	0.5	0.3	0.4	0.8	0.7
Sri Lanka	0.1	0.1	0.4	0.2	0.2	0.2	0.2	0.2	0.2
Sub-Saharan Africa	4.3	4.2	8.4	6.9	9.3	5.8	14.3	7.8	8.5
Angola	0.5	0.2	0.4	1.1	2.5	0.9	2.1	1.3	1.7
Nigeria	1.1	1.6	1.5	1.1	1.0	0.9	1.1	1.3	1.3
South Africa	1.2	0.8	3.8	0.6	1.5	1.0	7.3	0.7	0.6

Note: e = estimate.

Table B.29 Net inward portfolio equity flows, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**17.3**	**32.9**	**22.6**	**6.6**	**12.6**	**12.6**	**4.4**	**4.9**	**14.3**
East Asia and Pacific	6.3	9.7	−3.9	−3.4	2.3	4.8	1.0	3.5	4.8
China	0.4	1.9	5.7	0.8	0.6	6.9	0.8	2.2	3.0
Indonesia	1.5	1.8	−5.0	−4.4	−0.8	−1.0	0.4	0.9	1.0
Malaysia	2.2	2.7	−8.0	−0.4	0.1	−1.8	−0.7	−0.3	−0.1
Philippines	—	2.1	−0.4	0.3	1.4	−0.2	0.4	0.4	0.4
Thailand	2.1	1.2	3.9	0.3	0.9	0.9	0.0	0.2	0.5
Europe and Central Asia	1.7	4.3	4.0	4.0	2.0	1.2	0.3	−0.4	0.7
Czech Republic	1.2	0.6	0.4	1.1	0.1	0.6	0.6	−0.3	−0.2
Hungary	—	0.4	1.0	0.6	1.2	−0.4	0.1	−0.1	0.2
Poland	0.2	0.7	0.6	1.7	0.0	0.4	−0.3	−0.8	0.4
Russian Federation	0.0	2.2	1.3	0.7	−0.3	0.2	0.5	2.6	0.8
Turkey	0.2	0.2	0.0	−0.5	0.4	0.5	−0.1	0.0	1.0
Latin America and the Caribbean	4.8	12.2	13.3	−2.2	−3.6	−0.5	2.3	1.5	1.4
Argentina	1.1	1.0	1.4	−0.2	−10.8	−3.2	−0.1	−0.1	0.3
Brazil	2.8	5.8	5.1	−1.8	2.6	3.1	2.5	2.0	2.2
Chile	−0.2	−0.7	1.7	0.6	0.5	−0.4	−0.2	−0.3	0.3
Mexico	0.5	2.8	3.2	−0.7	3.8	0.4	0.2	−0.1	−0.5
Venezuela, R. B. de	0.3	1.3	1.4	0.0	0.4	−0.5	−0.1	0.1	−1.0
Middle East and North Africa	0.0	0.2	0.7	0.2	0.6	0.2	−0.1	−0.3	0.0
Egypt, Arab Rep. of	0.0	0.0	0.5	−0.2	0.7	0.3	0.0	−0.2	0.0
South Asia	1.6	4.1	2.9	−0.6	2.4	2.8	1.9	1.0	7.0
India	1.6	4.0	2.6	−0.6	2.3	2.8	2.0	1.0	7.0
Sub-Saharan Africa	3.0	2.4	5.6	8.7	9.0	4.1	−1.0	−0.4	0.5
South Africa	2.9	2.3	5.5	8.6	9.0	4.2	−1.0	−0.4	0.5

Note: — = not available; *e* = estimate.

Table B.30 Net inward debt flows to developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**151.3**	**116.5**	**105.3**	**57.6**	**13.8**	**−9.8**	**−1.2**	**7.3**	**44.3**
East Asia and Pacific	54.1	52.2	44.9	−32.5	−12.2	−17.7	−8.1	−10.9	0.5
China	17.8	13.9	18.5	−14.2	−1.6	−5.3	0.0	0.6	—
Indonesia	9.9	12.3	10.1	−4.6	−3.8	−0.7	−6.0	−7.0	—
Malaysia	5.1	6.4	8.4	−3.6	−0.7	0.4	4.7	3.7	—
Philippines	−0.7	4.5	7.6	−3.1	3.1	0.8	2.7	1.1	—
Thailand	21.2	13.9	−1.3	−7.9	−9.4	−13.7	−10.0	−9.9	—
Europe and Central Asia	23.4	22.9	32.8	41.5	16.1	21.0	2.0	24.9	29.5
Bulgaria	−0.2	0.0	0.0	0.1	0.7	0.4	0.0	0.5	—
Czech Republic	4.8	4.1	3.2	1.4	−0.2	−1.7	0.3	1.0	—
Hungary	2.8	−2.0	−1.4	2.7	2.0	0.4	1.7	0.5	—
Poland	0.3	1.0	2.5	4.2	1.7	3.5	1.0	1.2	—
Russian Federation	4.9	7.3	7.6	21.9	−4.2	−2.8	−3.9	−2.7	—
Turkey	4.4	3.1	4.2	5.5	10.9	18.3	−4.5	12.1	—
Latin America and the Caribbean	61.2	36.5	25.4	38.0	12.1	−9.7	6.3	−7.9	19.5
Argentina	22.0	14.1	17.1	11.7	6.3	4.3	−4.7	−1.8	—
Brazil	8.8	19.2	−1.3	6.7	−5.9	−4.2	5.2	−1.4	—
Chile	−0.3	1.2	2.0	4.8	2.1	2.4	1.4	2.3	—
Colombia	2.9	4.4	3.6	0.8	1.3	−0.2	3.3	−1.2	—
Mexico	25.6	−4.9	−4.9	9.0	6.9	−16.4	−3.2	−8.7	—
Venezuela, R. B. de	−1.7	−0.2	2.6	1.7	0.2	0.9	−2.2	−3.1	—
Middle East and North Africa	2.4	−0.9	−2.9	7.1	−1.8	−6.1	0.9	0.9	−7.8
Algeria	1.4	1.6	−0.4	−1.6	−1.9	−1.6	−2.0	−1.5	—
Egypt, Arab Rep. of	0.1	−0.5	0.6	1.1	−0.6	−0.7	0.1	−0.6	—
Lebanon	0.8	1.1	1.1	1.7	1.5	1.8	2.7	4.4	—
South Asia	2.5	2.7	0.7	4.7	0.5	3.4	−0.7	0.4	−2.3
India	−0.7	0.7	−1.6	3.0	−1.1	3.4	−1.9	−0.9	—
Pakistan	2.6	1.1	1.6	0.7	0.7	−0.3	0.4	0.5	—
Sub-Saharan Africa	7.6	3.1	4.4	−1.3	−1.0	−0.7	−1.8	−0.1	4.9
South Africa	3.4	0.7	−0.4	−0.3	−0.7	1.2	−0.8	−0.5	—

Note: — = not available; *e* = estimate.

Table B.31 Net inward short-term debt flows to developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**58.3**	**30.8**	**8.0**	**−63.6**	**−22.3**	**−9.1**	**−22.9**	**1.4**	**32.0**
East Asia and Pacific	27.2	19.6	4.7	−43.3	−13.9	−10.1	0.7	7.7	12.1
China	4.8	3.1	6.1	−14.1	−2.2	−2.1	1.8	6.3	—
Indonesia	6.5	6.3	0.6	−9.7	−1.6	1.5	−1.0	0.7	—
Malaysia	1.1	3.8	3.9	−6.5	−2.5	−1.4	1.7	2.1	—
Philippines	−0.4	2.7	3.8	−4.6	−1.4	0.2	0.1	−0.5	—
Thailand	14.9	3.6	−9.9	−8.2	−6.2	−8.5	−1.7	−1.3	—
Europe and Central Asia	9.0	6.7	8.5	4.4	−1.0	9.5	−6.8	1.4	17.1
Bulgaria	0.1	0.3	−0.2	−0.3	0.1	0.1	−0.1	0.5	—
Czech Republic	2.2	0.7	2.4	−0.5	1.1	0.2	0.6	−0.3	—
Hungary	0.8	0.2	0.0	1.4	−1.2	0.6	0.5	1.0	—
Poland	1.3	0.6	1.1	2.4	−0.2	1.0	0.0	0.4	—
Russian Federation	−0.4	0.3	−1.4	−0.5	−1.0	2.0	2.5	−1.6	—
Turkey	4.4	1.6	0.6	3.2	2.3	5.4	−12.6	−1.2	—
Latin America and the Caribbean	14.7	0.2	−7.7	−27.6	−7.9	−2.6	−13.4	−9.0	2.6
Argentina	14.2	2.1	8.5	−1.0	−1.5	−1.1	−8.3	−0.4	—
Brazil	−0.4	4.3	−16.0	−24.0	0.7	1.8	−2.5	−4.9	—
Chile	−0.4	−0.8	−1.3	0.3	−0.4	1.4	0.0	1.2	—
Colombia	1.1	0.3	−0.1	0.5	−2.3	−1.1	0.9	0.1	—
Mexico	−2.0	−7.5	−2.0	−1.5	−2.3	−5.1	−4.4	−4.7	—
Venezuela, R. B. de	−0.6	−0.2	1.5	−2.0	−0.1	2.0	−0.3	0.0	—
Middle East and North Africa	2.4	0.7	1.1	4.7	1.0	−3.9	−0.3	0.8	−0.1
Algeria	−0.4	0.1	−0.2	0.0	0.0	0.0	0.0	−0.1	—
Egypt, Arab Rep. of	0.4	0.0	0.6	1.3	0.0	−0.2	−0.7	0.1	—
Lebanon	0.0	0.3	0.1	0.2	0.2	0.3	0.1	−0.1	—
South Asia	2.0	1.2	−2.1	−1.3	0.1	−1.0	−1.1	2.3	1.2
India	0.8	1.7	−1.7	−0.7	−0.4	−0.5	−0.7	1.8	—
Pakistan	1.3	−0.4	−0.3	−0.5	−0.1	−0.3	−0.2	0.2	—
Sub-Saharan Africa	3.0	2.4	3.5	−0.5	−0.6	−1.0	−2.0	−1.8	−0.9
South Africa	1.9	1.2	0.1	0.5	−0.6	0.3	−1.2	−1.0	—

Note: — = not available; *e* = estimate.

Table B.32 Net inward debt flows to public sector and publicly guaranteed borrowers, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**61.9**	**38.4**	**41.4**	**70.3**	**30.8**	**2.7**	**19.2**	**3.9**	**−0.6**
East Asia and Pacific	16.2	12.8	29.0	18.8	11.2	3.2	0.3	−10.3	−9.8
China	12.4	10.7	11.1	2.5	1.6	−1.1	0.0	−5.3	—
Indonesia	1.0	−0.6	3.6	9.0	2.0	0.9	−2.2	−3.1	—
Malaysia	2.4	0.3	1.7	0.5	0.9	1.4	3.1	1.8	—
Philippines	−1.1	0.3	1.8	1.3	4.6	1.6	1.3	2.2	—
Thailand	0.9	1.3	9.4	4.6	1.9	−0.2	−2.7	−6.1	—
Europe and Central Asia	10.6	11.7	15.5	21.8	6.9	5.1	−1.7	3.0	−1.2
Bulgaria	−0.3	−0.4	0.2	0.3	0.4	0.2	−0.1	−0.3	—
Czech Republic	2.0	2.8	0.9	1.0	−1.0	−1.0	−0.9	0.0	—
Hungary	0.3	−3.1	−1.8	−0.4	1.5	−1.4	−0.8	−0.8	—
Poland	−1.1	0.2	0.5	−0.1	−0.3	−1.4	−3.3	0.1	—
Russian Federation	5.3	7.0	7.1	16.2	−3.5	−3.9	−7.0	−4.3	—
Turkey	−0.8	0.5	2.5	−1.0	4.6	11.4	9.2	7.6	—
Latin America and the Caribbean	31.7	13.7	−2.0	24.6	11.4	−6.9	19.3	9.5	17.9
Argentina	6.7	10.1	4.9	8.3	8.7	6.4	7.6	−1.4	—
Brazil	1.5	2.7	−0.3	12.1	0.5	−6.7	9.3	10.8	—
Chile	−2.2	−2.0	−0.3	0.6	0.6	−0.4	0.4	1.1	—
Colombia	−0.6	1.4	1.1	1.0	3.4	0.9	2.5	−1.3	—
Mexico	26.4	0.6	−9.9	0.7	−3.7	−9.8	−3.3	−2.4	—
Venezuela, R. B. de	−0.6	0.2	0.4	0.2	−0.6	−0.5	−1.7	−2.6	—
Middle East and North Africa	−0.7	−2.0	−4.7	0.1	−1.8	−2.9	0.8	0.4	−6.7
Algeria	1.7	1.5	−0.3	−1.6	−2.0	−1.6	−1.9	−1.4	—
Egypt, Arab Rep. of	−0.3	−0.2	−0.1	−0.5	−0.7	−0.6	0.8	−0.8	—
Lebanon	0.8	0.4	0.5	1.7	1.4	1.4	2.5	4.7	—
South Asia	−1.0	0.5	0.8	5.5	1.4	4.5	0.7	−1.7	−3.1
India	−2.5	−1.5	−1.5	3.6	−0.1	3.8	−1.2	−2.6	—
Pakistan	0.9	1.1	1.6	0.9	1.2	0.3	0.9	0.4	—
Sub-Saharan Africa	5.1	1.5	2.9	−0.4	1.7	−0.4	−0.2	3.0	2.2
South Africa	2.0	0.6	1.1	−1.0	1.6	0.0	−0.4	1.4	—

Note: — = not available; *e* = estimate.

Table B.33 Net inward debt flows to private sector borrowers, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**89.3**	**78.1**	**63.9**	**−12.7**	**−17.0**	**−12.5**	**−20.4**	**3.4**	**44.9**
East Asia and Pacific	37.9	39.3	15.9	−51.3	−23.4	−20.9	−8.4	−0.6	10.3
China	5.4	3.2	7.4	−16.7	−3.2	−4.1	−0.1	5.9	—
Indonesia	9.0	12.9	6.5	−13.6	−5.8	−1.6	−3.8	−3.9	—
Malaysia	2.7	6.1	6.7	−4.0	−1.6	−1.0	1.6	1.9	—
Philippines	0.4	4.2	5.8	−4.3	−1.4	−0.8	1.4	−1.1	—
Thailand	20.4	12.6	−10.7	−12.5	−11.3	−13.5	−7.3	−3.7	—
Europe and Central Asia	12.8	11.2	17.4	19.8	9.3	15.8	3.7	21.9	30.7
Bulgaria	0.1	0.4	−0.2	−0.2	0.3	0.2	0.1	0.8	—
Czech Republic	2.8	1.3	2.3	0.4	0.8	−0.6	1.2	1.0	—
Hungary	2.5	1.1	0.5	3.1	0.5	1.8	2.5	1.3	—
Poland	1.5	0.8	2.0	4.3	2.1	4.9	4.3	1.0	—
Russian Federation	−0.4	0.3	0.5	2.4	−0.7	1.1	3.1	1.5	—
Turkey	5.1	2.7	1.8	6.5	6.3	6.8	−13.7	4.5	—
Latin America and the Caribbean	29.5	22.7	27.4	13.5	0.7	−2.8	−13.0	−17.4	1.6
Argentina	15.3	3.9	12.3	3.4	−2.4	−2.1	−12.3	−0.5	—
Brazil	7.3	16.5	−1.0	−5.3	−6.4	2.4	−4.2	−12.2	—
Chile	2.0	3.2	2.3	4.2	1.5	2.8	1.0	1.1	—
Colombia	3.5	3.0	2.5	−0.2	−2.1	−1.1	0.7	0.1	—
Mexico	−0.8	−5.5	5.0	8.3	10.5	−6.6	0.1	−6.2	—
Venezuela, R. B. de	−1.1	−0.4	2.2	1.5	0.7	1.4	−0.4	−0.4	—
Middle East and North Africa	3.1	1.1	1.8	7.0	0.0	−3.2	0.1	0.5	−1.1
Algeria	−0.4	0.1	−0.2	0.0	0.0	0.0	0.0	−0.1	—
Egypt, Arab Rep. of	0.4	−0.2	0.6	1.5	0.1	−0.1	−0.7	0.1	—
Lebanon	0.1	0.7	0.6	0.1	0.1	0.4	0.2	−0.2	—
South Asia	3.5	2.1	−0.1	−0.8	−0.9	−1.1	−1.4	2.1	0.8
India	1.8	2.2	−0.1	−0.5	−1.0	−0.4	−0.7	1.7	—
Pakistan	1.7	0.0	0.0	−0.2	−0.5	−0.6	−0.5	0.1	—
Sub-Saharan Africa	2.5	1.6	1.6	−0.9	−2.7	−0.3	−1.5	−3.1	2.6
South Africa	1.4	0.1	−1.5	0.7	−2.3	1.3	−0.4	−1.9	—

Note: — = not available; *e* = estimate.

Table B.34 Net inward debt flows from public sector creditors, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**39.2**	**3.9**	**13.2**	**34.2**	**13.7**	**−5.9**	**26.9**	**4.1**	**−6.3**
East Asia and Pacific	9.1	3.6	17.3	14.7	12.6	7.0	3.2	−7.8	−8.9
China	7.9	4.4	4.3	2.3	3.4	1.5	2.2	−1.2	—
Indonesia	1.1	−0.8	3.6	8.5	4.8	2.9	−0.8	−1.4	—
Malaysia	0.4	−0.8	−0.2	0.2	0.6	0.6	2.1	−0.2	—
Philippines	−1.1	−0.3	0.6	0.7	0.2	0.3	−0.3	−0.4	—
Thailand	0.5	0.4	8.4	1.8	2.5	0.3	−1.4	−5.5	—
Europe and Central Asia	6.8	8.6	6.6	7.4	−0.7	−0.1	2.0	2.2	−6.5
Bulgaria	−0.2	−0.1	0.3	0.3	0.3	0.2	−0.3	−0.3	—
Czech Republic	0.0	0.1	−0.1	0.0	0.0	0.1	0.2	0.0	—
Hungary	−0.9	−0.9	−0.1	−1.1	0.2	−0.2	−0.2	0.0	—
Poland	−1.5	0.2	−0.1	−0.5	−0.4	−0.5	−4.1	−1.1	—
Russian Federation	5.6	6.8	4.2	6.3	−3.0	−3.3	−4.8	−3.5	—
Turkey	−0.8	−0.8	−0.2	−0.4	−0.1	4.4	10.4	6.7	—
Latin America and the Caribbean	22.0	−10.7	−8.7	10.9	1.5	−11.1	20.4	12.7	10.2
Argentina	3.3	0.4	−0.1	1.0	−0.1	0.9	10.3	−1.4	—
Brazil	−1.8	−0.8	−1.2	9.5	4.5	−8.5	9.5	12.2	—
Chile	−2.1	−0.6	−0.4	−0.1	−0.1	−0.1	−0.1	−0.3	—
Colombia	−0.4	−0.1	−0.5	0.2	1.0	0.1	1.1	−0.2	—
Mexico	22.5	−9.6	−8.0	−1.9	−5.4	−4.8	−0.7	0.2	—
Venezuela, R. B. de	−0.3	−0.1	−0.3	1.0	−0.1	−0.3	−1.1	−0.6	—
Middle East and North Africa	−1.1	−0.6	−3.7	−1.5	−2.5	−2.8	−1.1	−2.8	−2.0
Algeria	1.2	1.5	0.3	−0.3	−0.4	−0.4	−1.0	−1.4	—
Egypt, Arab Rep. of	0.0	0.0	0.0	−0.2	−0.5	−0.6	−0.7	−0.7	—
Lebanon	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.0	—
South Asia	−1.2	1.0	0.3	2.3	2.5	0.5	2.2	−2.4	−0.6
India	−2.8	−0.8	−1.0	0.6	0.8	−0.3	0.4	−3.7	—
Pakistan	1.0	0.9	0.7	0.9	1.2	0.3	1.1	0.8	—
Sub-Saharan Africa	3.5	2.0	1.4	0.4	0.3	0.6	0.2	2.2	1.5
South Africa	0.0	0.0	−0.4	−0.4	0.0	0.1	0.0	0.0	—

Note: — = not available; *e* = estimate.

Table B.35 Net inward debt flows from private sector creditors, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**112.1**	**112.5**	**92.2**	**23.4**	**0.1**	**−3.9**	**−28.1**	**3.2**	**50.6**
East Asia and Pacific	45.0	48.6	27.6	−47.1	−24.7	−24.7	−11.3	−3.1	9.4
China	9.9	9.5	14.2	−16.5	−5.0	−6.8	−2.2	1.8	—
Indonesia	8.8	13.1	6.5	−13.0	−8.6	−3.6	−5.2	−5.6	—
Malaysia	4.8	7.2	8.6	−3.8	−1.3	−0.2	2.6	3.9	—
Philippines	0.5	4.9	7.0	−3.7	2.9	0.4	3.0	1.5	—
Thailand	20.7	13.4	−9.7	−9.6	−11.9	−14.0	−8.6	−4.4	—
Europe and Central Asia	16.7	14.3	26.3	34.1	16.9	21.1	0.1	22.7	36.0
Bulgaria	0.0	0.0	−0.3	−0.3	0.4	0.1	0.3	0.7	—
Czech Republic	4.8	4.0	3.2	1.4	−0.2	−1.7	0.1	1.0	—
Hungary	3.7	−1.1	−1.3	3.8	1.8	0.7	1.9	0.6	—
Poland	1.8	0.7	2.6	4.7	2.2	4.0	5.1	2.2	—
Russian Federation	−0.7	0.5	3.4	12.3	−1.2	0.5	0.9	0.8	—
Turkey	5.2	4.0	4.4	5.9	11.0	13.8	−14.9	5.4	—
Latin America and the Caribbean	39.2	47.2	34.1	27.2	10.6	1.4	−14.1	−20.6	9.3
Argentina	18.7	13.7	17.3	10.7	6.4	3.4	−15.0	−0.4	—
Brazil	10.6	20.1	−0.1	−2.7	−10.4	4.3	−4.3	−13.6	—
Chile	1.8	1.8	2.4	4.8	2.2	2.5	1.5	2.6	—
Colombia	3.3	4.5	4.1	0.6	0.2	−0.3	2.2	−1.0	—
Mexico	3.1	4.8	3.1	10.8	12.2	−11.6	−2.5	−8.9	—
Venezuela, R. B. de	−1.4	0.0	2.9	0.7	0.3	1.2	−1.1	−2.4	—
Middle East and North Africa	3.5	−0.3	0.8	8.6	0.6	−3.4	2.0	3.8	−5.7
Algeria	0.1	0.1	−0.7	−1.3	−1.5	−1.2	−1.0	−0.1	—
Egypt, Arab Rep. of	0.1	−0.4	0.6	1.3	−0.1	−0.1	0.8	0.1	—
Lebanon	0.7	0.8	1.0	1.6	1.4	1.7	2.6	4.4	—
South Asia	3.7	1.6	0.4	2.4	−2.0	2.9	−2.8	2.8	−1.7
India	2.0	1.5	−0.6	2.5	−1.9	3.6	−2.3	2.8	—
Pakistan	1.6	0.1	0.9	−0.2	−0.6	−0.7	−0.7	−0.3	—
Sub-Saharan Africa	4.1	1.2	3.0	−1.8	−1.3	−1.3	−2.0	−2.2	3.4
South Africa	3.4	0.7	0.0	0.1	−0.7	1.2	−0.8	−0.5	—

Note: — = not available; *e* = estimate.

Table B.36 Gross market-based capital flows to developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003
All developing countries	**151.2**	**206.1**	**287.3**	**178.6**	**162.4**	**204.5**	**149.1**	**145.9**	**200.5**
East Asia and Pacific	60.0	71.5	76.2	27.3	28.2	48.3	20.1	40.9	48.5
China	15.2	16.1	26.4	10.1	8.7	29.0	6.7	16.0	24.1
Indonesia	17.5	24.2	21.1	1.2	2.8	0.9	1.0	1.5	6.6
Malaysia	10.4	10.9	11.9	3.4	6.8	6.9	5.4	12.8	7.4
Philippines	3.3	5.6	7.7	5.7	7.3	6.8	4.8	6.3	6.5
Thailand	12.5	14.1	8.9	6.7	2.2	4.3	2.3	3.7	3.9
Europe and Central Asia	21.9	26.9	51.2	43.4	31.0	41.4	26.6	35.0	58.0
Czech Republic	1.6	3.2	4.4	3.6	8.5	3.9	3.1	4.6	7.1
Hungary	5.2	3.5	4.2	4.0	3.9	2.1	3.1	1.9	6.8
Poland	1.5	0.9	4.5	4.6	5.0	4.5	5.4	6.6	10.2
Russian Federation	4.0	5.8	20.0	13.3	0.7	5.2	4.7	10.8	17.7
Turkey	7.1	8.6	10.3	9.8	12.9	22.1	6.9	7.3	10.3
Latin America and the Caribbean	42.8	84.9	120.6	84.5	75.3	88.4	77.0	43.5	64.3
Argentina	9.4	24.1	28.6	26.7	21.0	19.3	6.5	2.1	0.7
Brazil	7.1	14.5	32.3	18.0	14.6	28.0	23.6	14.5	18.4
Chile	2.6	5.5	8.9	4.8	8.6	5.9	5.3	4.1	5.1
Mexico	15.1	29.3	30.4	19.9	18.4	21.3	19.9	14.8	28.7
Venezuela, R. B. de	1.9	2.9	7.5	7.8	2.0	3.0	4.8	0.8	4.1
Middle East and North Africa	11.3	4.5	18.7	12.1	13.6	10.3	12.4	14.8	8.2
Egypt, Arab Rep. of	0.3	0.2	1.5	1.7	4.4	1.1	2.6	0.6	1.1
Lebanon	0.7	0.9	1.5	1.9	1.4	1.9	3.3	1.0	0.2
Saudi Arabia	3.1	0.8	9.7	6.5	4.1	2.4	1.9	5.7	0.8
South Asia	7.4	10.5	12.7	5.1	4.2	4.5	3.3	2.7	6.2
India	5.3	6.7	10.7	4.0	3.8	4.4	2.6	2.2	5.2
Pakistan	2.0	3.1	1.7	0.9	0.0	0.0	0.2	0.4	1.1
Sub-Saharan Africa	7.8	7.8	7.9	6.4	10.0	11.6	9.9	9.0	15.3
South Africa	4.2	5.8	5.7	3.0	7.8	9.2	6.9	5.4	10.7

Table B.37 Gross international equity issuance by developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003
All developing countries	**6.4**	**12.6**	**21.4**	**8.0**	**13.5**	**34.3**	**5.7**	**10.9**	**19.0**
East Asia and Pacific	4.1	5.2	10.7	4.0	6.2	22.1	3.5	7.2	12.9
China	0.8	2.1	9.1	1.2	3.7	21.9	2.9	5.5	9.4
Indonesia	1.4	1.3	0.9	0.0	1.2	0.0	0.3	0.3	1.2
Malaysia	0.6	0.6	0.4	0.2	0.0	0.0	0.0	1.2	0.6
Philippines	0.7	1.0	0.3	0.4	0.2	0.2	0.0	0.0	0.1
Thailand	0.5	0.2	0.0	2.2	1.0	0.0	0.2	0.1	1.5
Europe and Central Asia	0.6	1.3	3.1	2.6	1.4	3.4	0.3	1.6	2.4
Hungary	0.3	0.4	1.7	0.4	0.5	0.0	0.0	0.0	0.0
Poland	0.1	0.0	0.7	1.0	0.7	0.4	0.0	0.2	0.6
Russian Federation	0.0	0.8	0.1	0.0	0.0	0.4	0.2	1.3	0.6
Turkey	0.1	0.0	0.4	0.8	0.0	2.4	0.0	0.1	0.1
Latin America and the Caribbean	0.9	3.6	4.9	0.3	0.8	6.8	1.2	1.1	1.2
Argentina	0.0	0.4	1.1	0.0	0.3	0.4	0.0	0.0	0.0
Brazil	0.2	0.4	2.4	0.1	0.2	3.1	1.1	1.1	0.6
Chile	0.2	0.1	0.6	0.1	0.0	0.0	0.0	0.0	0.1
Mexico	0.0	0.7	0.8	0.0	0.2	3.3	0.0	0.0	0.5
Middle East and North Africa	0.0	0.4	0.7	0.4	0.1	0.4	0.0	0.0	0.0
Egypt, Arab Rep. of	0.0	0.2	0.3	0.1	0.1	0.3	0.0	0.0	0.0
Morocco	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
South Asia	0.3	1.3	1.1	0.1	0.9	0.9	0.5	0.3	1.3
India	0.3	1.3	1.0	0.1	0.9	0.9	0.5	0.3	1.3
Sub-Saharan Africa	0.4	0.8	1.0	0.7	4.2	0.6	0.3	0.7	1.3
South Africa	0.3	0.6	1.0	0.7	4.2	0.6	0.3	0.7	1.3

Table B.38 Gross international bond issues in developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003
All developing countries	**39.4**	**78.1**	**99.2**	**65.4**	**63.2**	**59.5**	**63.3**	**55.7**	**86.2**
East Asia and Pacific	9.9	20.8	20.2	4.5	8.6	5.1	7.1	12.5	11.2
China	1.6	4.1	6.1	1.8	1.7	1.3	2.6	0.9	3.2
Indonesia	2.5	5.5	5.6	0.5	0.0	0.0	0.1	0.9	1.5
Malaysia	2.8	2.5	3.1	0.0	2.2	1.4	2.4	6.0	1.3
Philippines	0.8	3.3	3.0	1.9	4.5	2.4	1.8	4.8	5.0
Thailand	2.2	5.1	2.4	0.3	0.0	0.0	0.3	0.0	0.3
Europe and Central Asia	6.5	6.8	15.7	21.7	13.6	15.0	10.8	16.3	26.4
Croatia	0.1	0.1	0.5	0.1	0.6	0.9	0.9	0.8	1.0
Hungary	3.3	0.3	0.4	1.8	2.4	0.5	1.2	0.1	2.2
Poland	0.3	0.3	1.2	1.9	1.7	1.6	2.8	2.7	4.7
Russian Federation	0.3	1.2	7.0	10.5	0.0	0.1	1.4	3.6	8.3
Turkey	2.4	2.9	4.2	3.4	5.8	8.5	2.2	3.5	5.5
Latin America and the Caribbean	19.8	46.8	57.4	36.6	37.3	35.6	37.8	22.2	40.8
Argentina	5.5	13.7	16.0	15.0	13.5	12.2	1.5	0.0	0.0
Brazil	4.7	10.9	15.0	6.5	7.6	11.2	11.9	7.0	14.1
Colombia	1.2	1.9	1.3	1.4	1.7	1.5	4.3	1.0	1.8
Mexico	6.9	18.0	14.9	8.4	9.5	7.2	8.2	7.4	15.2
Venezuela, R. B. de	0.7	1.0	5.9	3.3	2.2	0.5	1.7	0.0	3.7
Middle East and North Africa	1.0	1.0	2.1	1.5	1.9	2.4	5.3	2.7	1.0
Egypt, Arab Rep. of	0.0	0.0	0.0	0.0	0.1	0.0	1.5	0.0	0.0
Lebanon	0.4	0.5	1.3	1.5	1.4	1.9	3.3	1.0	0.2
Tunisia	0.6	0.1	0.5	0.0	0.2	0.5	0.5	0.7	0.4
South Asia	0.8	1.4	2.7	0.1	0.1	0.0	0.1	0.2	0.5
India	0.8	1.1	2.2	0.0	0.1	0.0	0.1	0.1	0.5
Pakistan	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Sub-Saharan Africa	1.5	1.3	1.1	1.0	1.7	1.5	2.2	1.9	6.4
South Africa	1.3	1.0	1.1	1.0	1.7	1.5	2.2	1.9	6.4

Table B.39 Gross international bank lending to developing-country borrower, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003
All developing countries	**105.4**	**115.4**	**166.6**	**105.2**	**85.7**	**110.7**	**80.1**	**79.3**	**95.3**
East Asia and Pacific	46.0	45.5	45.3	18.8	13.4	21.1	9.5	21.3	24.4
China	12.7	9.8	11.1	7.0	3.4	5.8	1.3	9.6	11.5
Indonesia	13.6	17.3	14.7	0.7	1.6	0.9	0.5	0.3	4.0
Malaysia	7.0	7.8	8.3	3.2	4.6	5.5	3.0	5.6	5.5
Philippines	1.8	1.2	4.4	3.4	2.6	4.6	3.0	1.5	1.4
Thailand	9.8	8.8	6.5	4.3	1.2	4.3	1.8	3.6	2.1
Europe and Central Asia	14.8	18.7	32.4	19.0	16.1	23.0	15.5	17.1	29.2
Czech Republic	1.6	3.2	3.5	2.4	0.6	1.2	0.8	0.2	2.2
Hungary	1.6	2.8	2.1	1.8	0.9	1.5	1.8	1.8	4.5
Poland	1.2	0.6	2.5	1.7	2.7	2.6	2.6	3.7	4.9
Russian Federation	3.6	3.8	12.9	2.8	0.7	4.7	3.1	5.9	8.8
Turkey	4.6	5.7	5.7	5.7	7.1	11.2	4.7	3.7	4.8
Latin America and the Caribbean	22.1	34.5	58.2	47.6	37.3	46.0	38.0	20.2	22.3
Argentina	3.8	10.0	11.5	11.8	7.2	6.7	5.0	2.1	0.7
Brazil	2.2	3.2	14.9	11.4	6.9	13.7	10.6	6.4	3.7
Chile	1.8	4.3	7.2	4.3	7.6	6.5	5.6	2.1	3.1
Colombia	3.2	2.3	4.9	1.8	2.0	2.2	0.6	1.2	0.2
Mexico	8.2	10.6	14.7	11.5	8.7	10.9	11.7	7.4	13.0
Middle East and North Africa	10.3	3.0	15.9	10.2	11.6	7.5	7.1	12.1	7.2
Egypt, Arab Rep. of	0.3	0.0	1.2	1.6	4.2	0.8	1.1	0.6	1.1
Iran	1.0	0.6	0.5	0.5	0.7	1.0	1.0	3.0	2.0
Saudi Arabia	3.1	0.8	9.7	6.5	4.4	2.4	1.9	5.7	0.8
South Asia	6.3	7.8	8.9	5.0	3.2	3.6	2.7	2.2	4.5
India	4.1	5.0	7.5	3.9	2.8	3.5	2.0	1.8	3.4
Pakistan	2.0	2.8	1.3	0.9	0.0	0.0	0.2	0.4	1.1
Sub-Saharan Africa	6.0	5.8	5.8	4.7	4.1	9.5	7.4	6.4	7.7
South Africa	2.6	4.1	3.6	1.3	1.9	7.1	4.4	2.8	3.1

Table B.40 Total infrastructure financing to developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
Total infrastructure finance[a]	**47.9**	**53.4**	**89.7**	**70.3**	**72.1**	**77.0**	**53.8**	**44.7**	**50.5**
By region:									
East Asia and Pacific	20.7	23.5	23.6	22.3	14.6	22.5	9.6	18.5	25.9
Debt	13.0	13.3	14.1	12.1	8.4	12.6	5.6	10.4	14.8
Equity	7.7	10.2	9.5	10.2	6.2	9.9	4.0	8.1	11.1
Latin America and the Caribbean	9.6	15.7	34.0	25.0	20.7	28.6	27.1	10.5	5.4
Debt	6.2	9.0	19.2	12.9	12.4	14.7	13.9	6.2	3.9
Equity	3.4	6.7	14.8	12.1	8.3	13.9	13.2	4.3	1.5
Europe and Central Asia	9.0	7.9	14.8	15.6	15.3	16.4	8.6	11.9	13.2
Debt	5.8	4.9	9.9	9.1	9.1	9.8	5.5	6.9	8.3
Equity	3.2	3.0	4.9	6.5	6.2	6.6	3.1	5.0	4.9
Other regions	8.7	6.3	17.3	7.4	21.5	9.5	8.5	3.8	6.0
Debt	5.4	4.4	9.7	5.8	11.4	6.2	5.6	2.3	3.9
Equity	3.3	1.9	7.6	1.6	10.1	3.3	2.9	1.5	2.1
By sector:									
Telecommunications	16.7	26.6	44.0	39.6	39.6	45.4	30.3	24.3	21.6
Debt	7.3	11.7	19.4	17.4	17.4	20.0	13.3	10.7	9.5
Equity	9.3	14.9	24.7	22.2	22.2	25.4	17.0	13.6	12.1
Transport	15.1	10.5	25.3	12.0	9.2	9.0	8.1	5.8	8.1
Debt	10.9	7.6	18.2	8.6	6.6	6.4	5.8	4.2	5.8
Equity	4.2	2.9	7.1	3.3	2.6	2.5	2.3	1.6	2.3
Power	5.5	7.2	12.7	17.2	20.9	19.4	14.3	10.8	16.3
Debt	4.0	5.3	9.4	12.7	15.5	14.4	10.6	8.0	12.1
Equity	1.4	1.9	3.3	4.5	5.4	5.1	3.7	2.8	4.2
Utility (water & sewerage)	10.6	9.1	7.6	1.5	2.3	3.3	1.2	3.9	4.5
Debt	8.2	7.0	5.9	1.1	1.8	2.5	0.9	3.0	3.5
Equity	2.4	2.1	1.7	0.3	0.5	0.7	0.3	0.9	1.0

Note: e = estimate.
a. The total volume of capital raised internationally through bank loans, bonds, and equity offering for developing countries' infrastructure.

Table B.41 Change in foreign-exchange reserves, 1995–2003

$ billions (− = increase)

	Gross foreign-exchange reserves									
	2002	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**951.4**	**−96.1**	**−90.4**	**−52.8**	**−16.6**	**−38.1**	**−52.6**	**−80.2**	**−172.9**	**−276.0**
East Asia and Pacific	408.3	−29.0	−45.2	−12.8	−20.7	−29.3	−10.1	−47.7	−88.0	−136.2
China	286.4	−22.0	−31.5	−34.9	−5.1	−9.7	−10.9	−46.6	−74.2	−116.7
Indonesia	30.8	−1.5	−4.5	1.7	−6.3	−3.8	−2.0	1.2	−3.7	−4.0
Malaysia	33.3	1.9	−3.2	6.1	−4.7	−4.9	1.0	−1.0	−3.7	−10.2
Philippines	13.0	−0.4	−3.7	2.8	−2.0	−4.0	0.2	−0.4	0.3	−0.3
Thailand	38.0	−6.6	−1.7	11.5	−2.7	−5.4	1.9	−0.4	−5.7	−2.9
Europe and Central Asia	174.9	−41.0	−2.3	−7.3	−4.9	−7.2	−16.8	−10.3	−44.9	−60.7
Czech Republic	23.3	−7.7	1.5	2.6	−2.8	−0.3	−0.2	−1.2	−9.1	−3.0
Hungary	9.7	−5.2	2.3	1.3	−0.9	−1.5	−0.2	0.6	0.6	−2.3
Poland	28.0	−8.9	−3.1	−2.6	−6.9	1.1	−0.2	1.2	−2.8	−3.8
Russian Federation	44.1	−10.3	3.0	−1.5	5.0	−0.7	−15.8	−8.3	−11.5	−29.1
Turkey	26.9	−5.3	−4.0	−2.2	−0.8	−3.7	0.9	3.6	−8.2	−6.9
Latin America and the Caribbean	156.0	−23.4	−28.0	−13.5	9.2	7.5	−2.9	−2.9	−0.1	−32.9
Argentina	10.4	0.0	−4.0	−4.4	−2.3	−1.6	1.7	9.9	4.1	−2.7
Brazil	37.4	−12.6	−8.6	7.5	8.2	7.8	2.3	−3.2	−1.7	−11.7
Chile	14.8	−1.0	−0.8	−2.3	2.0	1.1	−0.5	0.6	−0.8	−0.3
Mexico	49.9	−9.1	−3.9	−9.0	−3.3	0.5	−4.2	−9.2	−5.5	−7.8
Venezuela, R. B. de	8.0	1.7	−5.4	−2.9	2.4	−0.1	−0.9	3.8	0.8	−7.5
Middle East and North Africa	97.4	−3.8	−11.5	−6.6	1.5	−2.6	−12.2	−8.8	−12.2	−9.2
Algeria	23.1	0.6	−2.2	−3.8	1.2	2.4	−7.5	−6.1	−5.1	−9.8
Egypt, Arab Rep. of	13.2	−2.7	−1.2	−1.3	0.6	3.6	1.4	0.0	−0.3	−0.1
Saudi Arabia	16.7	−1.2	−5.7	−0.6	0.8	−2.8	−2.5	3.2	−1.9	−0.9
South Asia	79.8	4.1	−0.6	−5.2	−3.0	−5.0	−4.7	−10.2	−27.0	−34.6
Bangladesh	1.7	1.9	0.5	0.2	−0.3	0.3	0.1	0.2	−0.4	−0.9
India	67.0	1.2	−2.3	−4.6	−2.6	−5.0	−5.3	−8.0	−21.7	−30.6
Pakistan	8.1	0.0	1.2	−0.6	0.2	−0.5	0.0	−2.1	−4.4	−2.6
Sub-Saharan Africa	35.1	−3.0	−2.8	−7.5	1.4	−1.5	−5.8	−0.3	−0.7	−2.4
Botswana	5.4	0.0	−0.3	−0.7	−0.2	−0.4	0.0	0.4	0.4	0.1
Nigeria	7.3	−0.1	−2.6	−3.5	0.5	1.7	−4.5	−0.5	3.1	0.2
South Africa	5.6	−1.1	1.9	−3.8	0.6	−1.9	0.3	0.0	0.2	−0.6

Note: e = estimate.

Table B.42 Total external debt of developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**1,990.3**	**2,056.1**	**2,122.6**	**2,342.1**	**2,374.7**	**2,305.0**	**2,266.7**	**2,338.8**	**2,433.3**
East Asia and Pacific	455.6	490.4	526.3	533.2	538.6	497.3	501.3	497.4	514.7
China	118.1	128.8	146.7	144.0	152.1	145.7	170.1	168.3	—
Indonesia	124.4	128.9	136.2	151.2	151.2	144.4	134.0	132.2	—
Malaysia	34.3	39.7	47.2	42.4	41.9	41.9	44.6	48.6	—
Philippines	39.4	44.0	50.7	53.5	58.0	57.4	57.8	59.3	—
Thailand	100.0	112.8	109.7	104.9	96.8	79.7	67.2	59.2	—
Europe and Central Asia	349.0	367.1	387.5	485.2	495.6	503.9	498.9	545.8	577.4
Bulgaria	10.4	10.1	9.9	10.0	10.1	10.2	9.6	10.5	—
Czech Republic	16.2	20.1	23.1	24.2	22.8	21.5	22.3	26.4	—
Hungary	31.7	27.3	24.6	28.5	29.9	29.5	30.3	35.0	—
Poland	44.3	43.5	40.4	55.5	60.7	63.3	63.3	69.5	—
Russian Federation	121.5	126.4	127.6	177.9	174.8	160.0	152.5	147.5	—
Turkey	73.8	79.8	84.8	97.1	102.2	117.4	113.4	131.6	—
Latin America and the Caribbean	612.2	633.7	665.8	748.4	770.2	751.9	729.3	727.9	762.1
Argentina	98.8	111.4	128.4	141.5	145.3	145.9	136.7	132.3	—
Brazil	160.5	181.3	198.0	241.0	243.7	238.8	226.4	227.9	—
Chile	22.0	23.0	22.8	30.2	34.3	37.0	38.4	41.9	—
Colombia	25.0	28.9	31.9	33.1	34.4	33.9	36.7	33.9	—
Mexico	165.4	156.3	147.6	159.0	166.5	150.3	145.7	141.3	—
Venezuela, R. B. de	35.5	34.5	35.7	37.8	37.6	38.2	35.0	32.6	—
Middle East and North Africa	186.4	180.5	172.6	189.3	193.6	180.7	178.4	189.0	188.1
Algeria	33.0	33.6	30.9	30.7	28.0	25.3	22.6	22.8	—
Egypt, Arab Rep. of	33.5	31.5	30.1	32.4	31.0	29.2	29.3	30.8	—
Lebanon	3.0	4.0	5.0	6.8	8.2	9.9	12.4	17.1	—
South Asia	151.7	149.6	149.6	157.6	162.0	159.9	156.3	168.3	171.3
India	94.5	93.5	94.3	97.6	98.3	99.1	97.5	104.4	—
Pakistan	30.2	29.8	30.1	32.3	33.9	32.8	31.7	33.7	—
Sub-Saharan Africa	235.4	231.2	220.7	228.4	214.7	211.2	202.6	210.3	219.7
South Africa	25.4	26.1	25.3	24.8	23.9	24.9	24.1	25.0	—

Note: — = not available; *e* = estimate.

Table B.43 Total external debt of developing countries: medium and long term, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**1,631.9**	**1,674.1**	**1,729.4**	**1,983.5**	**2,033.4**	**1,981.7**	**1,937.8**	**2,012.4**	**2,069.0**
East Asia and Pacific	346.8	365.3	394.3	447.2	464.8	434.1	410.5	397.9	402.7
China	95.8	103.4	115.2	126.7	136.9	132.6	128.4	120.4	—
Indonesia	98.4	96.7	103.3	131.1	131.2	121.8	112.2	108.9	—
Malaysia	27.1	28.6	32.3	33.9	35.9	37.3	38.3	40.2	—
Philippines	34.1	36.1	38.9	46.3	52.3	51.5	51.8	53.8	—
Thailand	55.9	65.1	71.9	75.3	73.4	64.8	54.0	47.3	—
Europe and Central Asia	304.7	315.0	331.6	414.5	423.3	423.5	423.9	468.9	484.2
Bulgaria	9.9	9.2	9.1	9.6	9.7	9.8	9.3	9.6	—
Czech Republic	11.1	14.3	15.0	16.6	14.0	12.5	12.8	15.7	—
Hungary	28.4	23.9	21.2	23.7	26.3	25.4	25.7	29.3	—
Poland	42.1	40.8	36.6	49.3	54.6	56.2	56.3	60.6	—
Russian Federation	111.2	114.5	121.7	163.1	159.0	144.4	133.5	131.2	—
Turkey	58.1	62.5	66.8	75.9	78.8	88.5	97.1	116.4	—
Latin America and the Caribbean	488.8	516.7	541.8	632.9	664.0	648.6	639.8	652.2	678.2
Argentina	77.4	87.9	96.4	110.6	115.9	117.6	116.7	117.5	—
Brazil	129.3	145.4	163.2	211.1	214.5	207.8	198.1	204.5	—
Chile	18.6	20.4	21.5	28.6	33.1	34.5	35.8	38.2	—
Colombia	19.5	23.0	26.2	26.9	30.5	31.1	33.0	30.1	—
Mexico	128.1	126.4	119.8	132.7	142.4	131.4	131.1	131.4	—
Venezuela, R. B. de	32.5	31.8	31.5	35.5	35.5	34.1	31.2	28.8	—
Middle East and North Africa	154.2	149.1	140.5	152.3	152.6	143.4	141.4	151.1	150.3
Algeria	32.8	33.3	30.7	30.5	27.8	25.0	22.4	22.7	—
Egypt, Arab Rep. of	31.1	29.2	27.1	28.2	26.8	25.1	26.0	27.3	—
Lebanon	1.6	2.3	3.2	4.8	6.0	7.3	9.8	14.5	—
South Asia	142.6	139.3	141.4	150.5	154.9	153.9	151.4	161.1	162.9
India	89.4	86.7	89.3	93.3	94.4	95.6	94.8	99.9	—
Pakistan	27.0	27.0	27.6	30.1	32.1	31.3	30.4	32.1	—
Sub-Saharan Africa	194.7	188.6	179.8	186.0	173.7	178.1	170.9	181.2	190.9
South Africa	15.7	15.2	14.3	13.3	13.1	15.3	15.7	17.6	—

Note: — = not available; *e* = estimate.

Table B.44 Total external debt of developing countries: short term, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**358.5**	**382.0**	**393.2**	**358.6**	**341.3**	**323.3**	**329.0**	**326.4**	**364.3**
East Asia and Pacific	108.8	128.7	132.1	85.9	73.8	63.2	90.8	99.5	112.1
China	22.3	25.4	31.5	17.3	15.2	13.1	41.6	47.9	—
Indonesia	26.0	32.2	32.9	20.1	20.0	22.6	21.8	23.3	—
Malaysia	7.3	11.1	14.9	8.5	6.0	4.6	6.3	8.4	—
Philippines	5.3	8.0	11.8	7.2	5.7	5.9	6.0	5.6	—
Thailand	44.1	47.7	37.8	29.7	23.4	14.9	13.2	11.9	—
Europe and Central Asia	44.3	52.1	56.0	70.7	72.3	80.4	75.0	77.0	93.2
Bulgaria	0.5	0.9	0.7	0.4	0.4	0.4	0.3	0.8	—
Czech Republic	5.1	5.7	8.1	7.6	8.8	9.0	9.6	10.8	—
Hungary	3.2	3.4	3.4	4.8	3.5	4.2	4.6	5.7	—
Poland	2.2	2.7	3.8	6.2	6.0	7.1	7.0	8.9	—
Russian Federation	10.2	12.0	5.9	14.8	15.7	15.6	19.0	16.3	—
Turkey	15.7	17.3	18.0	21.2	23.5	28.9	16.3	15.2	—
Latin America and the Caribbean	123.4	116.9	124.0	115.5	106.2	103.4	89.5	75.7	84.0
Argentina	21.4	23.5	32.0	31.0	29.4	28.3	20.0	14.8	—
Brazil	31.2	35.9	34.9	29.9	29.2	31.0	28.3	23.4	—
Chile	3.4	2.6	1.3	1.6	1.2	2.5	2.6	3.8	—
Colombia	5.5	5.9	5.8	6.2	4.0	2.9	3.7	3.8	—
Mexico	37.3	29.8	27.9	26.3	24.1	18.9	14.6	9.9	—
Venezuela, R. B. de	3.1	2.7	4.2	2.2	2.1	4.1	3.7	3.7	—
Middle East and North Africa	32.2	31.4	32.1	37.0	41.0	37.3	37.1	37.9	37.9
Algeria	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	—
Egypt, Arab Rep. of	2.4	2.3	3.0	4.3	4.3	4.1	3.4	3.5	—
Lebanon	1.4	1.7	1.8	2.0	2.2	2.5	2.7	2.5	—
South Asia	9.0	10.3	8.2	7.1	7.0	6.0	4.9	7.2	8.4
India	5.0	6.7	5.0	4.3	3.9	3.5	2.7	4.6	—
Pakistan	3.2	2.8	2.5	2.2	1.8	1.5	1.3	1.5	—
Sub-Saharan Africa	40.6	42.6	40.8	42.4	41.0	33.1	31.7	29.1	28.8
South Africa	9.7	10.8	10.9	11.4	10.8	9.6	8.4	7.4	—

Note: — = not available; *e* = estimate.

Table B.45 Total external debt of developing countries: owed by public sector and publicly guaranteed borrowers, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**1,411.0**	**1,394.8**	**1,374.7**	**1,483.0**	**1,496.1**	**1,435.0**	**1,398.9**	**1,472.2**	**1,536.2**
East Asia and Pacific	256.7	256.8	272.0	288.6	307.5	284.7	277.7	277.8	287.4
China	94.7	102.3	112.8	99.4	99.2	94.8	91.7	88.5	—
Indonesia	65.3	60.0	58.8	76.4	83.9	80.6	77.8	78.9	—
Malaysia	16.0	15.7	16.8	18.2	18.9	19.2	24.1	26.2	—
Philippines	29.3	27.5	27.3	30.5	36.6	32.4	31.4	34.7	—
Thailand	16.8	16.9	24.7	31.3	34.7	32.5	27.9	23.0	—
Europe and Central Asia	286.6	286.8	288.7	320.9	316.1	304.4	292.0	310.6	323.8
Bulgaria	9.5	8.8	8.7	9.1	9.0	9.0	8.5	8.5	—
Czech Republic	9.7	12.2	12.8	11.6	7.7	6.5	5.6	6.9	—
Hungary	24.4	18.9	15.3	15.9	16.9	14.4	12.7	13.6	—
Poland	41.1	39.2	34.2	35.1	33.2	30.8	25.7	29.4	—
Russian Federation	111.2	114.5	119.8	140.9	136.4	122.6	111.2	102.7	—
Turkey	51.0	49.1	48.1	50.6	51.6	60.7	68.4	83.9	—
Latin America and the Caribbean	401.4	399.5	379.3	412.7	419.0	403.7	398.8	423.3	454.8
Argentina	61.4	68.8	73.0	82.7	88.6	91.7	85.1	89.0	—
Brazil	98.4	96.4	87.3	103.0	100.9	95.1	101.8	117.4	—
Chile	7.2	4.9	4.4	5.0	5.7	5.3	5.6	6.8	—
Colombia	13.9	14.9	15.4	16.7	20.2	20.8	21.8	21.2	—
Mexico	109.7	106.1	92.4	95.4	92.4	81.5	77.0	76.3	—
Venezuela, R. B. de	30.5	29.9	29.0	29.6	28.7	28.0	25.2	23.3	—
Middle East and North Africa	149.0	143.6	134.0	143.7	145.6	136.9	134.8	144.6	144.9
Algeria	32.8	33.3	30.7	30.5	27.8	25.0	22.4	22.6	—
Egypt, Arab Rep. of	30.8	29.1	27.0	27.8	26.3	24.5	25.3	26.6	—
Lebanon	1.6	1.9	2.3	4.0	5.3	6.6	9.0	13.8	—
South Asia	134.3	129.9	129.7	139.3	144.6	138.5	137.2	147.2	150.4
India	82.8	79.4	80.1	84.9	86.4	83.2	83.1	88.3	—
Pakistan	25.4	25.0	25.3	27.5	29.8	28.7	28.3	30.1	—
Sub-Saharan Africa	182.9	178.3	171.0	177.7	163.3	166.7	158.5	168.7	174.8
South Africa	10.7	11.2	11.9	10.7	8.2	9.1	7.9	9.4	—

Note: — = not available; *e* = estimate.

Table B.46 Total external debt of developing countries: owed by private sector borrowers, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**579.4**	**661.3**	**747.9**	**859.1**	**878.6**	**870.0**	**867.9**	**866.7**	**897.1**
East Asia and Pacific	198.9	237.2	254.4	244.6	231.1	212.6	223.6	219.6	227.3
China	23.4	26.6	33.9	44.6	52.9	50.9	78.4	79.7	—
Indonesia	59.1	68.9	77.3	74.8	67.3	63.8	56.2	53.3	—
Malaysia	18.3	24.0	30.4	24.3	23.0	22.7	20.5	22.4	—
Philippines	10.1	16.5	23.5	23.0	21.4	25.0	26.5	24.7	—
Thailand	83.2	96.0	85.0	73.6	62.0	47.2	39.3	36.2	—
Europe and Central Asia	62.4	80.3	98.8	164.3	179.5	199.5	206.9	235.2	253.5
Bulgaria	0.9	1.3	1.2	1.0	1.1	1.2	1.1	1.9	—
Czech Republic	6.5	7.8	10.2	12.7	15.1	15.0	16.7	19.5	—
Hungary	7.3	8.4	9.3	12.6	13.0	15.2	17.6	21.4	—
Poland	3.2	4.3	6.2	20.4	27.5	32.5	37.6	40.1	—
Russian Federation	10.2	12.0	7.8	36.9	38.3	37.4	41.3	44.8	—
Turkey	22.8	30.8	36.7	46.6	50.6	56.7	45.0	47.6	—
Latin America and the Caribbean	210.8	234.2	286.5	335.6	351.2	348.2	330.5	304.7	307.3
Argentina	37.4	42.6	55.4	58.8	56.7	54.2	51.6	43.3	—
Brazil	62.1	84.9	110.7	138.0	142.8	143.7	124.6	110.5	—
Chile	14.9	18.2	18.4	25.2	28.6	31.8	32.8	35.2	—
Colombia	11.1	14.0	16.5	16.3	14.2	13.1	14.9	12.7	—
Mexico	55.6	50.2	55.2	63.5	74.1	68.8	68.6	64.9	—
Venezuela, R. B. de	5.1	4.5	6.7	8.2	8.9	10.2	9.7	9.3	—
Middle East and North Africa	37.4	36.9	38.7	45.6	48.0	43.8	43.6	44.4	43.2
Algeria	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	—
Egypt, Arab Rep. of	2.7	2.5	3.1	4.6	4.8	4.7	4.0	4.1	—
Lebanon	1.4	2.1	2.7	2.7	2.9	3.3	3.5	3.2	—
South Asia	17.3	19.8	19.9	18.3	17.4	21.4	19.1	21.1	20.9
India	11.7	14.1	14.3	12.7	11.9	15.9	14.4	16.2	—
Pakistan	4.8	4.8	4.8	4.8	4.1	4.1	3.4	3.5	—
Sub-Saharan Africa	52.4	52.9	49.7	50.7	51.4	44.4	44.1	41.7	44.9
South Africa	14.6	14.8	13.3	14.1	15.7	15.8	16.1	15.6	—

Note: — = not available; *e* = estimate.

Table B.47 Total external debt of developing countries: owed to public sector creditors, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**867.3**	**833.2**	**791.1**	**866.4**	**881.1**	**839.1**	**826.1**	**872.1**	**914.1**
East Asia and Pacific	160.9	153.7	152.5	179.1	200.3	188.2	180.5	183.3	190.9
China	37.0	39.4	39.8	45.1	50.4	50.4	50.5	50.7	—
Indonesia	51.2	46.1	45.5	58.2	66.3	65.9	62.1	65.2	—
Malaysia	5.5	4.2	4.0	4.5	4.8	5.0	5.9	5.8	—
Philippines	23.4	21.0	19.7	22.2	23.6	22.0	19.8	21.0	—
Thailand	11.2	10.6	17.8	21.4	25.3	23.9	20.8	16.6	—
Europe and Central Asia	156.1	160.1	156.1	172.3	171.1	166.4	158.8	165.0	167.9
Bulgaria	3.7	3.4	3.4	3.8	3.9	3.9	3.4	3.5	—
Czech Republic	1.3	1.3	1.1	1.1	1.1	1.1	1.2	1.5	—
Hungary	4.8	3.7	3.3	2.3	2.3	1.9	1.7	1.9	—
Poland	32.2	30.5	26.6	27.1	25.1	23.7	17.8	19.7	—
Russian Federation	67.1	75.6	76.8	88.3	86.7	82.5	71.7	62.2	—
Turkey	18.0	15.9	14.3	15.0	13.8	17.4	26.9	35.9	—
Latin America and the Caribbean	187.3	164.0	145.7	160.8	162.9	149.8	162.6	182.6	200.5
Argentina	27.1	26.1	24.2	25.9	25.5	25.6	35.2	35.7	—
Brazil	28.0	25.4	22.2	32.7	37.7	31.1	37.2	52.2	—
Chile	3.6	2.7	2.2	2.2	2.1	1.9	1.7	1.5	—
Colombia	7.1	6.5	5.6	6.0	7.8	7.7	8.6	8.7	—
Mexico	54.8	42.6	32.1	31.4	26.3	20.8	19.9	20.5	—
Venezuela, R. B. de	6.9	6.3	5.5	6.7	6.6	6.1	4.9	4.4	—
Middle East and North Africa	107.9	107.5	99.7	104.1	98.5	90.9	88.6	91.5	94.1
Algeria	17.2	20.2	20.3	21.5	20.4	19.2	17.7	17.6	—
Egypt, Arab Rep. of	29.1	27.7	25.9	26.9	25.7	24.0	23.4	24.7	—
Lebanon	0.4	0.6	0.7	0.9	0.9	0.9	1.0	1.0	—
South Asia	108.9	104.1	98.9	104.6	113.3	102.8	101.1	106.3	112.1
India	59.5	55.9	52.8	53.9	58.6	50.6	49.8	49.9	—
Pakistan	24.3	23.8	22.8	25.1	27.7	26.6	26.9	29.2	—
Sub-Saharan Africa	146.2	143.9	138.1	145.5	135.0	140.9	134.5	143.3	148.6
South Africa	0.9	0.9	0.4	0.0	0.0	0.1	0.1	0.1	—

Note: — = not available; *e* = estimate.

Table B.48 Total external debt of developing countries: owed to private sector creditors, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**1,123.0**	**1,222.9**	**1,331.5**	**1,475.7**	**1,493.5**	**1,465.9**	**1,440.7**	**1,466.8**	**1,519.2**
East Asia and Pacific	294.7	340.3	373.8	354.1	338.3	309.1	320.8	314.1	323.8
China	81.1	89.4	106.9	98.9	101.6	95.3	119.6	117.5	—
Indonesia	73.1	82.8	90.7	93.1	84.9	78.5	72.0	67.0	—
Malaysia	28.9	35.5	43.2	37.9	37.1	37.0	38.8	42.8	—
Philippines	16.0	23.0	31.1	31.4	34.4	35.4	38.0	38.3	—
Thailand	88.9	102.3	91.9	83.5	71.5	55.8	46.4	42.6	—
Eastern Europe and Central Asia	192.9	207.1	231.4	312.9	324.5	337.5	340.0	380.8	409.5
Bulgaria	6.7	6.7	6.5	6.2	6.2	6.3	6.2	7.0	—
Czech Republic	14.9	18.7	22.0	23.1	21.7	20.5	21.1	24.9	—
Hungary	26.8	23.6	21.3	26.2	27.6	27.6	28.6	33.1	—
Poland	12.0	13.0	13.8	28.4	35.6	39.6	45.5	49.8	—
Russian Federation	54.4	50.8	50.8	89.6	88.1	77.6	80.8	85.4	—
Turkey	55.8	64.0	70.5	82.2	88.4	100.0	86.5	95.6	—
Latin America and the Caribbean	424.8	469.7	520.1	587.6	607.3	602.1	566.7	545.3	561.6
Argentina	71.7	85.3	104.2	115.6	119.8	120.3	101.5	96.6	—
Brazil	132.5	155.9	175.8	208.4	206.0	207.7	189.2	175.7	—
Chile	18.5	20.3	20.6	28.0	32.2	35.1	36.7	40.5	—
Colombia	18.0	22.4	26.3	27.1	26.6	26.2	28.1	25.2	—
Mexico	110.6	113.6	115.6	127.5	140.2	129.5	125.8	120.7	—
Venezuela, R. B. de	28.6	28.2	30.2	31.0	31.0	32.0	30.0	28.2	—
Middle East and North Africa	78.5	73.0	72.9	85.2	95.1	89.8	89.8	97.5	94.1
Algeria	15.9	13.4	10.6	9.2	7.6	6.1	4.9	5.2	—
Egypt, Arab Rep. of	4.4	3.8	4.2	5.5	5.3	5.2	6.0	6.1	—
Lebanon	2.5	3.4	4.3	5.9	7.3	8.9	11.5	16.1	—
South Asia	42.8	45.5	50.7	53.0	48.7	57.2	55.2	62.0	59.2
India	35.0	37.6	41.5	43.7	39.7	48.5	47.7	54.5	—
Pakistan	5.9	6.0	7.2	7.2	6.2	6.1	4.8	4.5	—
Sub-Saharan Africa	89.2	87.3	82.6	82.9	79.8	70.2	68.1	67.0	71.1
South Africa	24.4	25.2	24.9	24.8	23.9	24.7	23.9	24.9	—

Note: — = not available; *e* = estimate.

Table B.49 Gross foreign exchange reserves of developing countries, 1995–2003

$ billions

	1995	1996	1997	1998	1999	2000	2001	2002	2003e
All developing countries	**447.7**	**538.1**	**591.0**	**607.6**	**645.7**	**698.3**	**778.5**	**951.4**	**1,227.4**
East Asia and Pacific	154.5	199.7	212.5	233.2	262.5	272.6	320.3	408.3	544.5
China	73.6	105.0	139.9	145.0	154.7	165.6	212.2	286.4	403.1
Indonesia	13.3	17.8	16.1	22.4	26.2	28.3	27.0	30.8	34.7
Malaysia	22.9	26.2	20.0	24.7	29.7	28.6	29.6	33.3	43.5
Philippines	6.2	9.9	7.1	9.1	13.1	12.9	13.3	13.0	13.3
Thailand	35.5	37.2	25.7	28.4	33.8	31.9	32.3	38.0	41.0
Europe and Central Asia	81.1	83.4	90.7	95.6	102.8	119.6	130.0	174.9	235.6
Czech Republic	13.8	12.4	9.7	12.5	12.8	13.0	14.2	23.3	26.3
Hungary	11.9	9.6	8.3	9.2	10.7	10.9	10.3	9.7	12.0
Poland	14.7	17.7	20.3	27.2	26.1	26.3	25.2	28.0	31.7
Russian Federation	14.3	11.3	12.8	7.8	8.5	24.3	32.5	44.1	73.2
Turkey	12.4	16.4	18.6	19.4	23.2	22.3	18.7	26.9	33.8
Latin America and the Caribbean	125.1	153.1	166.7	157.5	150.0	152.9	155.9	156.0	188.8
Argentina	13.7	17.7	22.2	24.5	26.1	24.4	14.5	10.4	13.1
Brazil	49.7	58.3	50.8	42.6	34.8	32.5	35.7	37.4	49.1
Chile	14.1	14.9	17.3	15.3	14.2	14.7	14.0	14.8	15.1
Mexico	15.3	19.2	28.1	31.5	31.0	35.1	44.4	49.9	57.7
Venezuela, R. B. de	5.7	11.1	14.0	11.6	11.7	12.6	8.8	8.0	15.5
Middle East and North Africa	44.9	56.4	63.0	61.6	64.2	76.5	85.2	97.4	106.6
Algeria	2.0	4.2	8.0	6.8	4.4	11.9	18.0	23.1	32.9
Egypt, Arab Rep. of	16.0	17.2	18.5	17.9	14.3	12.9	12.9	13.2	13.3
Saudi Arabia	7.1	12.8	13.5	12.7	15.5	18.0	14.8	16.7	17.7
South Asia	24.2	24.8	30.0	32.9	37.9	42.6	52.8	79.8	114.4
Bangladesh	2.2	1.7	1.6	1.9	1.6	1.5	1.3	1.7	2.6
India	17.5	19.7	24.3	27.0	32.0	37.3	45.3	67.0	97.6
Pakistan	1.7	0.5	1.2	1.0	1.5	1.5	3.6	8.1	10.7
Sub-Saharan Africa	17.9	20.6	28.1	26.8	28.2	34.0	34.3	35.1	37.4
Botswana	4.6	5.0	5.6	5.9	6.2	6.3	5.8	5.4	5.3
Nigeria	1.4	4.1	7.6	7.1	5.5	9.9	10.5	7.3	7.1
South Africa	2.8	0.9	4.8	4.2	6.1	5.8	5.8	5.6	6.2

Note: e = estimate.

Table B.50 Key external debt ratios for developing countries

%, averages for 2000–02

	Total external debt (EDT) to exports of G&S (XGS)	Present value (PV) of EDT as % of XGS	EDT as % of gross national income (GNI)	PV as % of GNI	Total debt service as % of XGS	Interest service as % of XGS
Albania	84	56	30	20	4	2
Algeria	109	104	43	42	20	6
Angola	129	125	123	118	11	2
Argentina	372	393	63	66	16	7
Armenia	168	109	52	34	11	4
Azerbaijan	55	44	26	21	7	1
Bangladesh	182	117	35	22	8	2
Belarus	11	10	7	7	2	0
Belize	178	202	114	129	40	11
Benin	288	136	76	36	10	4
Bhutan	265	244	79	73	5	1
Bolivia	282	105	62	23	28	7
Bosnia and Herzegovina	107	76	47	34	7	3
Botswana	17	14	10	8	2	1
Brazil	316	336	45	48	72	20
Bulgaria	132	136	77	79	17	5
Burkina Faso	493	145	56	16	16	5
Burundi	2,492	1,553	176	110	48	14
Cambodia	129	109	86	73	1	0
Cameroon	321	183	102	58	14	6
Cape Verde	160	102	74	48	8	3
Central African Republic	831	597	107	77	1	0
Chad	542	259	77	37	12	4
Chile	174	173	63	63	32	7
China	52	50	15	14	9	2
Colombia	191	204	43	46	39	12
Comoros	753	535	119	84	13	3
Congo, Dem. Rep. of	836	805	178	171	89	28
Congo, Rep. of	211	200	241	228	1	0
Costa Rica	64	67	31	33	9	4
Côte d'Ivoire	235	188	114	91	17	6
Croatia	145	142	78	76	28	5
Czech Republic	62	62	46	46	11	3
Djibouti	133	87	57	37	5	1
Dominica	150	138	88	81	8	4
Dominican Republic	59	56	32	30	6	3
Ecuador	222	244	87	95	30	14
Egypt, Arab Rep. of	149	129	32	28	10	4
El Salvador	102	109	43	46	8	5
Equatorial Guinea	13	10	57	47	0	0
Eritrea	345	200	69	40	6	4
Estonia	90	89	87	86	15	4
Ethiopia[a]	614	374	103	63	10	4
Fiji	43	41	12	12	6	2
Gabon	107	107	87	87	12	5
Gambia, The	256	132	150	77	9	3
Georgia	178	133	56	42	12	4
Ghana	291	155	137	73	8	4
Grenada	161	141	91	80	12	6
Guatemala	94	90	22	21	8	4
Guinea	391	165	111	47	16	4
Guinea-Bissau	1,145	747	354	231	24	8
Guyana	205	119	221	129	11	5
Haiti	113	76	34	23	3	1
Honduras	174	100	86	49	13	3
Hungary	88	82	66	62	37	3
India	130	103	22	17	16	5
Indonesia	191	189	90	89	24	6
Iran, Islamic Rep. of	29	25	9	7	5	1
Jamaica	120	129	76	82	18	7

(Table continues on next page)

Table B.50 Key external debt ratios for developing countries (*continued*)

%, averages for 2000–02

	Total external debt (EDT) to exports of G&S (XGS)	Present value (PV) of EDT as % of XGS	EDT as % of gross national income (GNI)	PV as % of GNI	Total debt service as % of XGS	Interest service as % of XGS
Jordan	129	118	92	84	9	3
Kazakhstan	159	149	85	80	37	7
Kenya	197	147	54	40	15	3
Kyrgyz Republic	282	208	126	93	27	4
Lao PDR	522	280	162	87	9	2
Latvia	175	174	86	85	17	4
Lebanon	333	352	96	102	43	21
Lesotho	115	78	64	44	12	3
Liberia	1,584	1,686	526	559	1	0
Lithuania	97	94	51	50	20	5
Macedonia, FYR of	101	83	45	37	15	3
Madagascar	417	*129*	107	*33*	7	3
Malawi	609	*183*	168	*51*	8	3
Malaysia	44	44	58	57	7	2
Maldives	57	42	45	34	5	1
Mali	279	*123*	109	*48*	9	2
Mauritania	600	*148*	243	*60*	17	5
Mauritius	63	60	40	39	9	2
Mexico	75	82	24	26	23	6
Moldova	138	126	86	79	23	5
Mongolia	149	102	100	69	8	2
Morocco	129	119	55	51	26	8
Mozambique	444	*86*	138	*27*	7	2
Myanmar	241	150	—	—	4	1
Nepal	228	133	53	31	8	2
Nicaragua	501	*221*	174	*77*	12	4
Niger	527	*149*	92	*26*	8	3
Nigeria	138	143	78	81	7	2
Oman	39	38	24	23	15	2
Pakistan	256	201	57	45	22	6
Panama	91	107	71	84	18	6
Papua New Guinea	117	113	85	82	13	3
Paraguay	96	92	44	42	11	4
Peru	280	296	53	56	33	12
Philippines	130	135	75	77	20	7
Poland	127	122	39	38	25	5
Romania	103	106	36	37	22	4
Russian Federation	121	122	49	50	12	6
Rwanda	912	*438*	83	*40*	14	5
Samoa	249	178	95	68	8	5
São Tomé and Principe	1,903	*640*	751	*253*	35	15
Senegal	247	*152*	86	*53*	14	5
Serbia and Montenegro	280	269	108	104	3	3
Seychelles	48	49	42	43	3	1
Sierra Leone	1,181	*585*	207	*102*	19	8
Slovak Republic	84	84	62	62	22	6
Solomon Islands	139	100	66	47	4	2
Somalia	—	—	—	—	—	—
South Africa	66	66	22	22	12	3
Sri Lanka	129	103	60	48	10	3
St. Kitts and Nevis	157	148	84	80	23	11
St. Lucia	110	107	67	65	7	4
St. Vincent and the Grenadines	116	95	63	51	7	3
Sudan	620	600	137	133	1	0
Swaziland	27	26	26	25	2	1
Syrian Arab Republic	274	270	116	114	3	2
Tajikistan	152	118	113	88	10	2
Tanzania	483	*117*	79	*19*	10	5
Thailand	71	69	50	49	24	3

Table B.50 Key external debt ratios for developing countries

%, averages for 2000–02

	Total external debt (EDT) to exports of G&S (XGS)	Present value (PV) of EDT as % of XGS	EDT as % of gross national income (GNI)	PV as % of GNI	Total debt service as % of XGS	Interest service as % of XGS
Togo	314	231	125	92	3	1
Tonga	102	68	50	34	4	1
Trinidad and Tobago	55	61	31	35	5	4
Tunisia	123	123	66	65	14	5
Turkey	227	232	75	77	48	10
Turkmenistan	—	—	—	—	—	—
Uganda	378	*116*	72	22	7	3
Ukraine	63	59	37	35	15	3
Uruguay	274	278	65	65	33	12
Uzbekistan	142	136	60	57	23	5
Vanuatu	50	33	38	25	1	1
Venezuela, R. B. de	101	113	29	33	23	7
Vietnam	72	61	41	35	6	2
Yemen, Rep. of	101	68	59	40	3	1
Zambia	*566*	*406*	177	*127*	29	10
Zimbabwe	197	190	35	33	3	1

Note: — = not available. For definition of indicators, see Sources and Definitions section. Numbers in italics include the effects of traditional relief and HIPC relief (countries that have reached the completion point) and are based on public and publicly guaranteed debt only. Exports comprise the total value of goods and services exported, receipts of compensations of employees and investment income, and workers' remittances. In the ratios, the numerator refers to the 2002 data and the denominator is an average of 2000 to 2002 data.
a. As of December 31, 2002, Ethiopia had yet to reach the completion point under HIPC.

Table B.51 Classification of countries by levels of external indebtedness

135 economies in the World Bank Debtor Reporting System

Severely indebted low-income	Severely indebted middle-income	Moderately indebted low-income	Moderately indebted middle-income	Less indebted low-income	Less indebted middle-income
Angola	Argentina	Benin	Bulgaria	Armenia	Albania
Bhutan	Belize	Burkina Faso	Chile	Azerbaijan	Algeria
Burundi	Brazil	Cambodia	Colombia	Bangladesh	Belarus
Central African Republic	Dominica	Cameroon	Croatia	Equatorial Guinea	Bolivia
Chad	Ecuador	Eritrea	Grenada	Haiti	Bosnia and Herzegovina
Comoros	Estonia	Gambia, The	Honduras	India	Botswana
Congo, Dem. Rep. of	Gabon	Georgia	Hungary	Lesotho	Cape Verde
Congo, Rep. of	Guyana	Ghana	Kazakhstan	Madagascar	China
Côte d'Ivoire	Jamaica	Guinea	Lithuania	Mozambique	Costa Rica
Ethiopia[a]	Jordan	Kenya	Malaysia	Solomon Islands	Czech Republic
Guinea-Bissau	Latvia	Malawi	Morocco	Tanzania	Djibouti
Indonesia	Lebanon	Mali	Philippines	Uganda	Dominican Republic
Kyrgyz Republic	Panama	Mauritania	Russian Federation	Ukraine	Egypt, Arab Rep. of
Lao PDR	Peru	Moldova	Samoa	Vietnam	El Salvador
Liberia	Serbia and Montenegro	Mongolia	Slovak Republic	Yemen, Rep. of	Fiji
Myanmar	Syrian Arab Republic	Nepal	Sri Lanka		Guatemala
Nicaragua	Turkey	Niger	St. Kitts and Nevis		Iran, Islamic Rep. of
Nigeria	Uruguay	Pakistan	St. Lucia		Macedonia, FYR of
Papua New Guinea		Senegal	St. Vincent and the Grenadines		Maldives
Rwanda		Uzbekistan	Thailand		Mauritius
São Tomé and Principe		Zimbabwe	Tunisia		Mexico
Sierra Leone			Turkmenistan		Oman
Somalia					Paraguay
Sudan					Poland
Tajikistan					Romania
Togo					Seychelles
Zambia					South Africa
					Swaziland
					Tonga
					Trinidad and Tobago
					Vanuatu
					Venezuela, R. B. de

a. As of December 31, 2002, Ethiopia had yet to reach the completion point under HIPC.

Income and indebtedness classification criteria

	Indebtedness classification		
Income classification	PV/XGS higher than 220 percent or PV/GNI higher than 80 percent	PV/XGS less than 220 percent but higher than 132 percent or PV/GNI less than 80 percent but higher than 48 percent	PV/XGS less than132 percent and PV/GNI less than 48 percent
Low-income: GNI per capita is $735 or less	Severely indebted low-income countries	Moderately indebted low-income countries	Less indebted low-income countries
Middle-income: GNI per capita between $736 and $9,075	Severely indebted middle-income countries	Moderately indebted middle-income countries	Less indebted middle-income countries

Note: PV/XGS is present value of debt service to exports of goods and services. PV/GNI is present value of debt service to gross national income.

Table B.52 Classification of countries by region and level of income

Income group	Subgroup	Sub-Saharan Africa: East and Southern Africa	Sub-Saharan Africa: West Africa	Asia: East Asia and Pacific	Asia: South Asia	Europe and Central Asia: Eastern Europe and Central Asia	Europe and Central Asia: Rest of Europe	Middle East and North Africa: Middle East	Middle East and North Africa: North Africa	Americas
Low-income		Angola Burundi Comoros Congo, Dem. Rep. of Eritrea Ethiopia Kenya Lesotho Madagascar Malawi Mozambique Rwanda Somalia Sudan Tanzania Uganda Zambia Zimbabwe	Benin Burkina Faso Cameroon Central African Republic Chad Congo, Rep. of Côte d'Ivoire Equatorial Guinea Gambia, The Ghana Guinea Guinea-Bissau Liberia Mali Mauritania Niger Nigeria São Tomé and Principe Senegal Sierra Leone Togo	Cambodia Indonesia Korea, Dem. Rep. of Lao PDR Mongolia Myanmar Papua New Guinea Solomon Islands Timor-Leste Vietnam	Afghanistan Bangladesh Bhutan India Nepal Pakistan	Azerbaijan Georgia Kyrgyz Republic Moldova Tajikistan Uzbekistan		Yemen, Rep. of		Haiti Nicaragua
Middle-income	*Lower*	Namibia South Africa Swaziland	Cape Verde	China Fiji Kiribati Marshall Islands Micronesia, Federated States of Philippines Samoa Thailand Tonga Vanuatu	Maldives Sri Lanka	Albania Armenia Belarus Bosnia and Herzegovina Bulgaria Kazakhstan Macedonia, FYR[a] Romania Russian Federation Serbia and Montenegro Turkmenistan Ukraine	Turkey	Iran, Islamic Rep. of Iraq Jordan Syrian Arab Republic West Bank and Gaza	Algeria Djibouti Egypt, Arab Rep. of Morocco Tunisia	Bolivia Brazil Colombia Cuba Dominican Republic Ecuador El Salvador Guatemala Guyana Honduras Jamaica Paraguay Peru St. Vincent and the Grenadines Suriname
	Upper	Botswana Mauritius Mayotte Seychelles	Gabon	American Samoa Malaysia N. Mariana Islands Palau		Croatia Czech Republic Estonia Hungary Latvia Lithuania Poland Slovak Republic		Lebanon Oman Saudi Arabia	Libya	Argentina Belize Chile Costa Rica Dominica Grenada Mexico Panama St. Kitts and Nevis St. Lucia Trinidad and Tobago Uruguay Venezuela, R. B. de

(Table continues on next page)

Table B.52 Classification of countries by region and level of income (*continued*)

Income group	Subgroup	Sub-Saharan Africa: East and Southern Africa	Sub-Saharan Africa: West Africa	Asia: East Asia and Pacific	Asia: South Asia	Europe and Central Asia: Eastern Europe and Central Asia	Europe and Central Asia: Rest of Europe	Middle East and North Africa: Middle East	Middle East and North Africa: North Africa	Americas
High-income	*OECD*			Australia Japan Korea, Rep. of New Zealand			Austria Belgium Denmark Finland France[b] Germany Greece Iceland Ireland Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom			Canada United States
	Non-OECD			Brunei French Polynesia Guam Hong Kong, China[c] Macao, China[d] New Caledonia Singapore Taiwan, China		Slovenia	Andorra Channel Islands Cyprus Faeroe Islands Greenland Isle of Man Liechtenstein Monaco San Marino	Bahrain Israel Kuwait Qatar United Arab Emirates	Malta	Antigua and Barbuda Aruba Bahamas, The Barbados Bermuda Cayman Islands Netherlands Antilles Puerto Rico Virgin Islands (U.S.)

Note: For operational and analytical purposes, the World Bank's main criterion for classifying economies is gross national income (GNI) per capita. Every economy is classified as low income, middle income (subdivided into lower middle and upper middle), or high income. Other analytical groups, based on geographic regions and levels of external debt, are also used.

Low-income and middle-income economies are sometimes referred to as developing economies. The use of the term is convenient; it is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. Classification by income does not necessarily reflect development status.

This table classifies all World Bank member economies and all other economies with populations of more than 30,000. Economies are divided among income groups according to 2002 GNI per capita, calculated using the *World Bank Atlas* method. The groups are: low income, $735 or less; lower middle income, $736–2,935; upper middle income, $2,936–9,075; and high income, $9,076 or more.

a. Former Yugoslav Republic of Macedonia.
b. The French overseas departments French Guiana, Guadeloupe, Martinique, and Réunion are included in France.
c. On July 1, 1997, China resumed its exercise of sovereignty over Hong Kong.
d. On December 20, 1999, China resumed its exercise of sovereignty over Macao.