

*Global Economic Prospects
and the Developing Countries*

EMBARGO

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*Global Economic Prospects
and the Developing Countries*

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Preface



This edition of *Global Economic Prospects and the Developing Countries* is the third in an annual series of World Bank staff reports analyzing the global economic prospects for development. As in the previous issues, this report focuses on the main international economic links, with an emphasis on developing countries.

This year's *Global Economic Prospects* focuses on the role of external finance in development. External finance has an important bearing on the growth and economic prospects of developing countries, a bearing that is often disproportionately large in relation to the amount of external finance. The influence of external finance runs along many channels, including enhancing international competitiveness, reducing the cost of capital, absorbing external shocks, and sustaining adjustment efforts.

The first part, chapters 1 and 2, describes the new pattern of external finance in the 1990s and the con-

sequences of increased financial integration of developing countries with global capital markets.

The second part, chapters 3, 4, and 5, addresses major issues in external finance, including the benefits of foreign direct investment, the sustainability and volatility of portfolio flows, and the imbalance between slow growth in aid flows and fast growth in the number of claimants eligible for aid.

The third and final part, chapters 6 and 7, discusses the outlook for the global economy over the decade, examines developments in the international economic environment (including world trade, interest rates, and commodity prices), and traces the implications for developing country growth, both in aggregate and by region.

This book is a product of the staff of the World Bank International Economics Department.



Abbreviations, acronyms, and data notes

ASEAN	Association of South East Asian Nations	IDA	International Development Association
CEA	Chinese economic area	IEC	International Economics Department, the World Bank
CMEA	Council for Mutual Economic Assistance	IFC	International Finance Corporation
CPI	consumer price index	IMF	International Monetary Fund
DAC	Development Assistance Committee of OECD	LIBOR	London Interbank Offered Rate
DRS	Debtor reporting system (of the World Bank)	LMICs	Low- and middle-income countries or developing countries
EC	European Community	MERCOSUR	Argentina, Brazil, Paraguay, and Uruguay
EEUR	Eastern Europe	MFN	Most favored nation
EFTA	European Free Trade Association	MUV	Manufactures unit value index
FDI	Foreign direct investment	NAFTA	North American Free Trade Agreement
FSU	former Soviet Union	NTB	Nontariff barrier
GATT	General Agreement on Tariffs and Trade	ODA	Official development assistance
GDI	Gross domestic income	OECD	Organization for Economic Cooperation and Development
GDP	Gross domestic product	SDR	Special Drawing Rights (of the International Monetary Fund)
GNP	Gross national product	SMART	Software for Market Analysis and Restrictions on Trade
GSP	Generalized System of Preferences	TFP	Total factor productivity
G-3	Germany, Japan, and United States	UNCTAD	United Nations Conference on Trade and Development
G-5	France, Germany, Japan, United Kingdom, and United States	UNTCMD	United Nations Transnational Corporations and Management Division
G-7	Canada, France, Germany, Italy, Japan, United Kingdom, and United States	WDR	World Development Report
G-24	Group of 24 countries established by the EC under 1991 guidelines		
ICP	International Comparison Program		

The term "developing countries" as used in this study refers to all low- and middle-income economies.

Data notes

The classification of economies section designates countries by income, region, export category, and indebtedness.

The following norms are used throughout:

- *Billion* is 1,000 million
- Data for periods through 1991 are actual; data for 1992 are estimated; and data for 1993–2000 are projected.

- All growth rates are based on constant price data unless otherwise indicated and have been computed with the use of the least squares method. See the technical note to the World Development Indicators for details of this method (World Bank 1992d).

Summary



Financial environment in the 1990s

Developing country growth has been poor at the start of the 1990s, and in per capita terms has actually declined, partly reflecting the output losses associated with the structural transformation of the former Soviet Union (FSU) and Eastern Europe, the recession in the United States, and its more recent spread to Germany and Japan. Prospects for developing countries are qualified in the short run by an uncertain outlook for recovery in the industrial countries, which represent three-quarters of world output.

Nevertheless, the prospects for the remainder of the decade look brighter, holding out the promise of significantly higher growth rates than in the 1980s. The main reasons underlying the projected improvements in growth rates in developing countries are economic policy reforms, favorable supply side trends, and a stabilization of primary commodity prices, which have been declining for over a decade. Policy reforms instituted by developing countries in the latter half of the 1980s and early 1990s—especially greater openness to trade, dealing with their commercial bank debt overhang, and fiscal consolidation—tend to promote both higher savings rates and renewed access to international capital markets and to raise the efficiency with which capital and labor are used, leading to greater international competitiveness and economic growth.

A new pattern of external finance

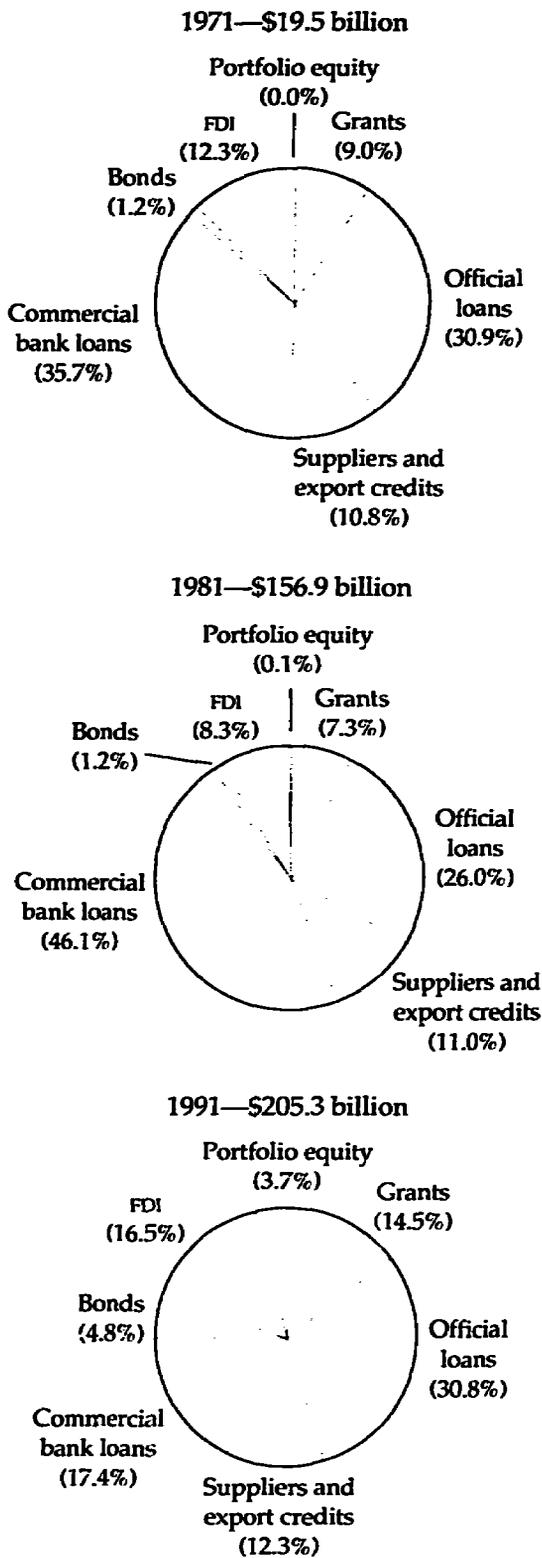
These developments will be facilitated by a growing supply of external finance from private sources, especially in the form of foreign direct investment (FDI), bonds, and equity portfolio flows. The 1970s and 1980s were the boom-and-bust years of commercial bank finance to developing countries. But that is only part of the story of a radical shift in the pattern of external financial flows to developing countries in

the early 1990s, from debt to equity financing and from bank to nonbank sources. Commercial bank loans have been replaced by bond and equity portfolio flows and greater FDI (figure 1). These nonbank sources have accounted for virtually all the recent growth in financial flows to developing countries. The main significance of these private source flows will be less their terms—which are likely to reflect fairly high real interest rates—than the benefits accompanying them and the likelihood that they will be more efficiently employed than during the heyday of sovereign lending in the 1970s. For FDI these benefits include technology transfer, management know-how, and export marketing access; for bonds, a diversified investor base; and for equity portfolio flows, a reduction in the domestic cost of capital. But as shown later in this book, these new financing opportunities also bring with them new challenges in macroeconomic and financial management.

On the borrowing side also, the private sector has come into its own. In the last few years private sector companies in a range of countries such as Malaysia, Mexico, Thailand, and Turkey have been able to access the international equity and bond markets; consequently, the proportionate decline in private sector borrowing throughout the 1970s up to the mid-1980s has been reversed (figure 2).

Within the overall pattern is a growing gulf between developing countries that can have access to the private capital markets for bank loans, bonds, and stocks and those that cannot. Those countries that avoided debt restructuring (for instance, China, India, Indonesia, and the Republic of Korea) or that have successfully reduced their commercial bank debt as part of a comprehensive reform effort (for instance, Argentina, Chile, and Mexico) have been able to maintain or regain capital market access. By contrast, many severely indebted low- and lower-middle-income countries with largely official debt have little realistic prospect of private market access

Figure 1 Pattern of external finance to developing countries: gross long-term flows



Note: Based on 115 countries for which data are available. Data are not available for the former Soviet Union for 1971 and 1981. *Source:* World Bank, DRS, and World Bank staff estimates.

(apart from short-term trade credit) for the foreseeable future.

The poorest countries have been helped by the sustained growth of official flows in the 1970s and 1980s and, within that growth, an increase in the concessional element represented by grants. This trend has ensured that net transfers (that is, net flows less interest payments and profit remittances) have remained positive in recent years for South Asia, the Middle East, and Sub-Saharan Africa (figure 3). Especially noteworthy has been the large scale of official transfers to Sub-Saharan Africa in relation to the size of recipient economies.

External shocks and financial integration

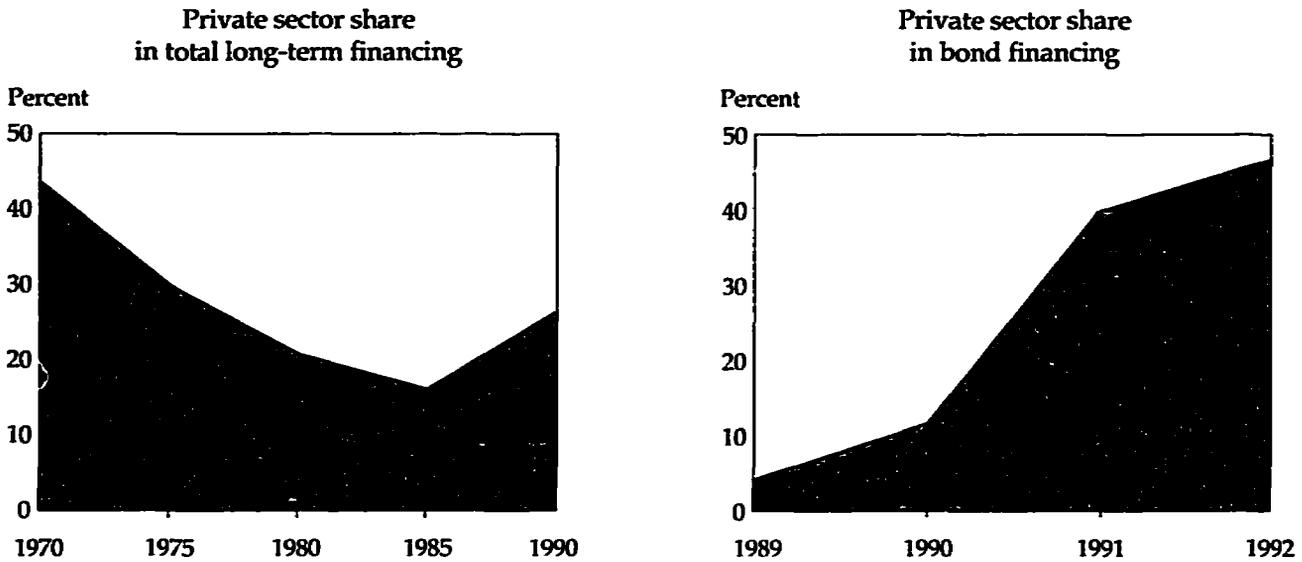
As the pattern of flows has changed, so has the structure of financial markets. An increase in the volatility of interest and exchange rates has raised the benefits of diversification and encouraged a de facto dismantling of capital account controls in developing countries—that is, increased financial integration.

But regardless of the degree of financial integration, developing countries have long been exposed to big external shocks and capital flight. During the past two decades, the variability of external shocks (for example, terms-of-trade and interest rate shocks) has been about twice as large for developing as for industrial countries, often reaching 4 percent of GDP in terms of impact on the current account. Moreover, because of credit rationing in the 1980s, developing countries have been able to finance a much smaller proportion of these shocks and thus have been forced to adjust more because of adverse external shocks than have industrial countries.

Traditionally, capital flight has been viewed as an affliction of a few Latin American countries plus one or two others; the facts indicate otherwise. A high stock of flight capital relative to GDP is a widespread phenomenon (figure 4).¹ By this measure, Sub-Saharan Africa stands much worse than Latin America. The stock of flight capital from Sub-Saharan Africa is equivalent to about 80 percent of GDP. The Middle East and North Africa region also stands badly, with Egypt, Jordan, and Syria having suffered large outflows.

The recent reversal of capital flight, particularly to three Latin American countries—Argentina, Mexico, and Venezuela—underlines the importance of sound domestic policies in respect of, for example, the real exchange rate, the fiscal stance, large-scale privatization, and financial sector repression. Flight capital lags successful adjustment and reform programs, as shown by the fact that Mexican reflows started in 1989, with other Latin American reflows in early 1991.

Figure 2 Private borrowers' share of external financing to developing countries



Note: Total long-term financing includes official grants, gross disbursements on official and private debt, including IMF purchases, net FDI inflows, and gross portfolio equity flows. Percentage shares are the shares of private borrowers in, respectively, total long-term financing and bond financing to developing countries.
Source: World Bank, DRS, and World Bank staff estimates.

Major issues in external finance in the 1990s

The new pattern of external finance raises a host of related issues for developing countries. Developing countries need to examine the benefits and sustainability of various forms of finance and evaluate the implications that different financial flows have for macroeconomic and financial management. For foreign direct investment, the issues are what benefits it brings and what conditions are necessary to attract it. For portfolio flows, the issues are whether the recent surge in portfolio flows to developing countries is sustainable and how the consequences of volatile flows can be managed.

Aid at the end of the Cold War also needs rethinking. As more countries become eligible for aid, donors face the problem of how to raise additional resources and improve the quality and allocation of these resources.

Foreign direct investment: benefits beyond finance

Foreign direct investment is a large and growing source of finance that may help developing countries close the technology gap with high-income countries, upgrade managerial skills, and develop their export markets. However, FDI should not be relied

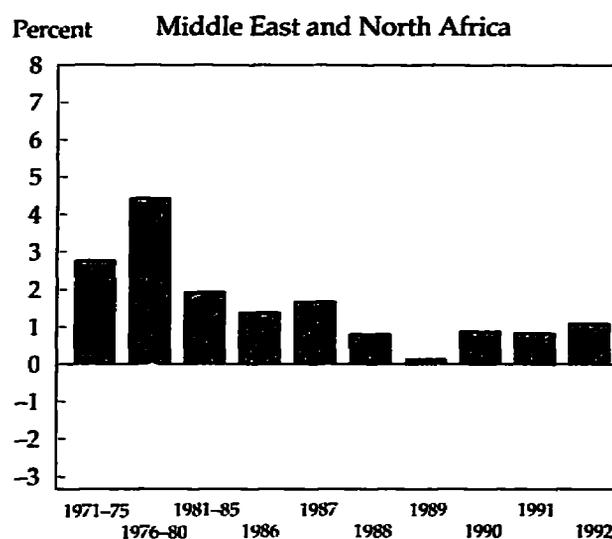
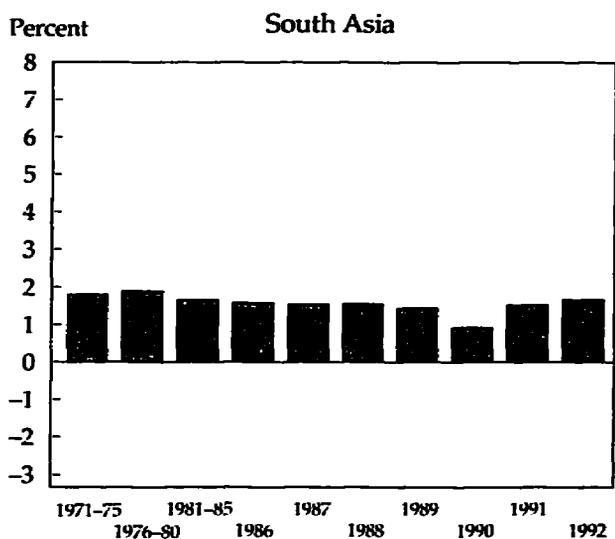
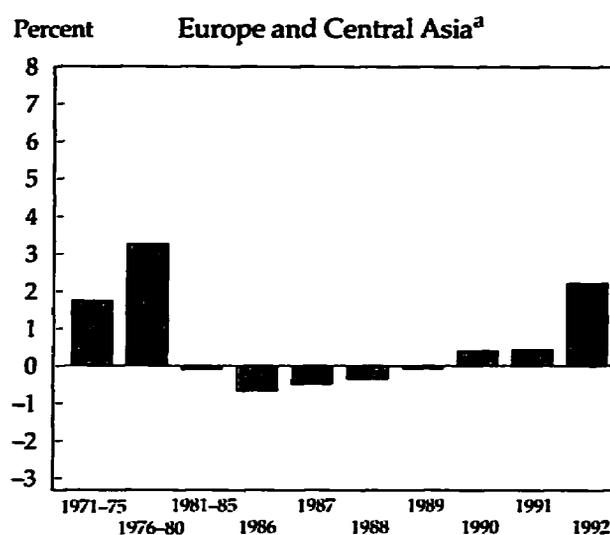
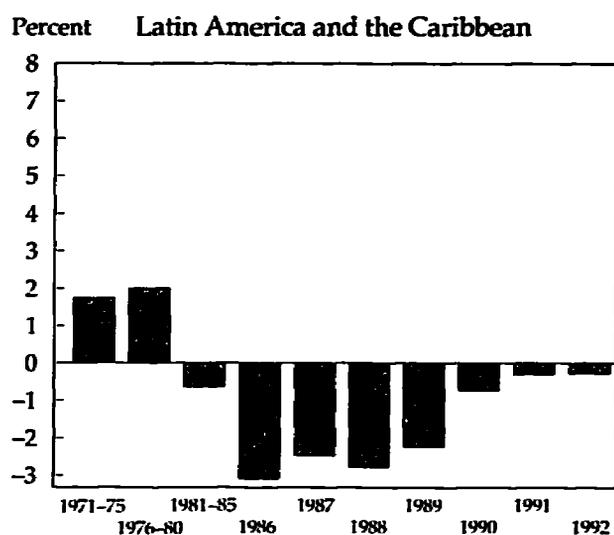
upon for medium-term balance-of-payments financing, in part because profit remittances are often high.

FDI flows to developing countries reached US\$ 38 billion in 1992, a 50 percent increase from two years earlier, reflecting improved macroeconomic performance (particularly in some Latin American countries, following debt reduction agreements), more welcoming regulatory regimes (for instance, in Thailand), and active privatization and debt conversion programs (figure 5). The share of global FDI going into developing countries has doubled from a low point of less than 12 percent in 1987 to 22 percent in 1991.

Among developing countries, FDI in relation to gross domestic investment (GDI) and output has increased in importance in most regions during the last two decades. For a number of major recipients (Brazil, China, Indonesia, and Korea) the ratio of FDI to GDI remains quite low (between 1 and 4 percent), whereas for two (Malaysia and Venezuela) it is high, at about 20 percent. If the ratio of FDI to GDI for all developing countries rose to half the highest ratios—that is, 10 percent—the increase in FDI would be enormous: about US\$ 40 billion per year, or more than the current level of all FDI flows to developing countries.

In the 1980s and 1990s, FDI flows have shifted from the manufacturing and extractive sectors to the ser-

Figure 3 Aggregate net transfers as share of GNP
(percent)



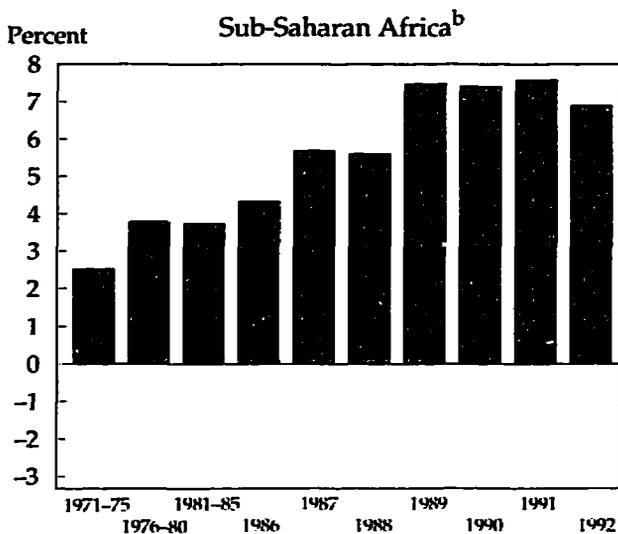
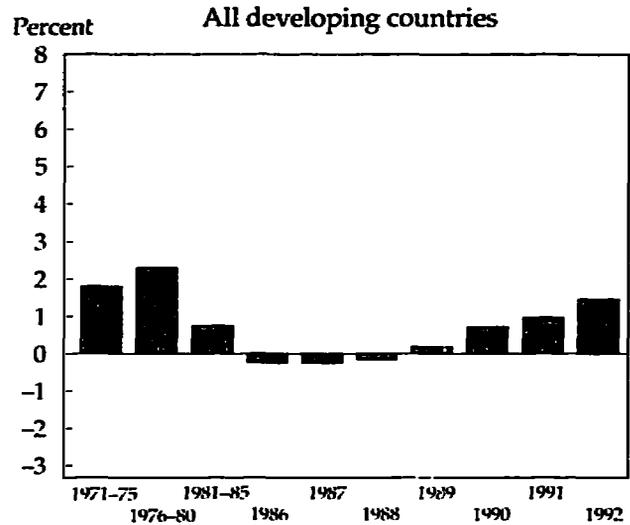
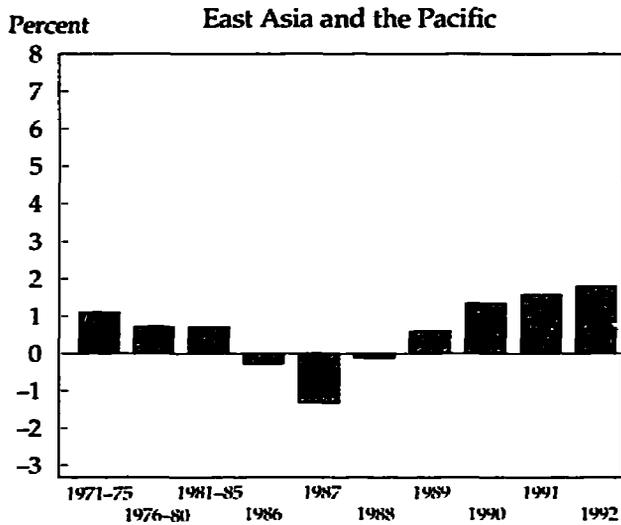
services sector, particularly the new capital-intensive service industries, such as banking, public utilities, telecommunications, and transportation, which are being privatized.

FDI exerts an important presence in export-oriented manufacturing. For example, foreign firms account for more than half of manufactured exports in Malaysia, Mexico, and the Philippines, and a recent survey of firms in Thailand found that the share was nearly three-quarters (UNTCMD 1992). Much of this employment was engaged in production with high technological and industrial know-how—for example, electrical and electronic equipment, nonelectrical machinery, and chemicals.

FDI is arguably the one source of private capital that any developing country can hope to tap. It

reaches both middle- and low-income countries, both big and small, both creditworthy and those that are less so. Unlike bond or stock flows, it does not require an organized capital market. What it does require is a healthy private sector that can earn a reasonable rate of return in a stable macroeconomic environment. And if the host country is to appropriate the benefits of FDI, it must adopt a sound policy framework (for example, outward trade orientation) that minimizes distortions.

Developing countries that wish to attract FDI flows should consider measures such as establishing a transparent legal framework that does not discriminate between local and foreign investors; adopting a liberal foreign exchange regime; and creating investor-friendly regulations and institutions.



Note: Data for 1971-75, 1976-80, and 1981-85 are period averages.
 a. Includes former Soviet Union beginning 1985.
 b. Excludes South Africa.
 Source: DRS.

The rise in portfolio flows: short-lived or sustainable?

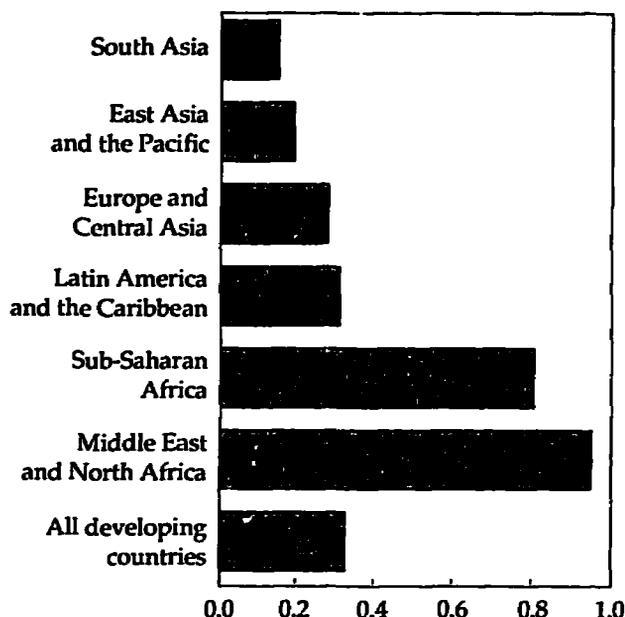
Private portfolio flows, both bonds and equity, have grown explosively from 1989 to 1992. The increase has gone largely to a few countries in Latin America and East Asia, although the range of issuing countries has broadened significantly. Gross equity portfolio flows to Latin American countries have grown more than tenfold in four years, from US\$ 434 million in 1989 to an estimated US\$ 5.6 billion in 1992, while international bond issues have shown equally dramatic growth. Much of these flows have represented repatriated flight capital, some high risk-high return funds, and some—the minor part—institutional investment by pension funds, insurance companies, trust funds, and money market funds.

The main benefit to developing countries from portfolio flows is a reduction in the cost of capital—by as much as 10 percentage points in the case of Telmex, the Mexican telephone company that was sold internationally in May 1991. Additionally, there are likely to be important spillover benefits to the pricing of domestic stocks.

If industrial country investors held developing country securities in the same proportion as the emerging markets' share of global market value (currently 6 percent), resource flows would increase by some US\$ 40 billion per year (based on a 7 percent average yearly growth rate of OECD investors' assets in the medium term and a gradual rebalancing of these investors' existing stock), an increase that is bigger than the current flows of FDI. That would be an optimal strategy if global capital markets were perfectly efficient. The segmentation of developing country markets and consequent low correlation with international market movements constitute one reason for industrial country funds to invest more than proportionately in developing country ("emerging") markets: they offer big diversification benefits and high risk-adjusted returns (figure 6).

Rates of return over the five-year period 1987-91 for the U.S. and emerging stock markets show that if U.S. investors had held 20 percent of their portfolio in emerging markets (compared with actual holdings of a fraction of 1 percent), they would have increased their average return by about 1 percent per year and

Figure 4 Stock of flight capital as a share of GDP by region
(World Bank residual method)



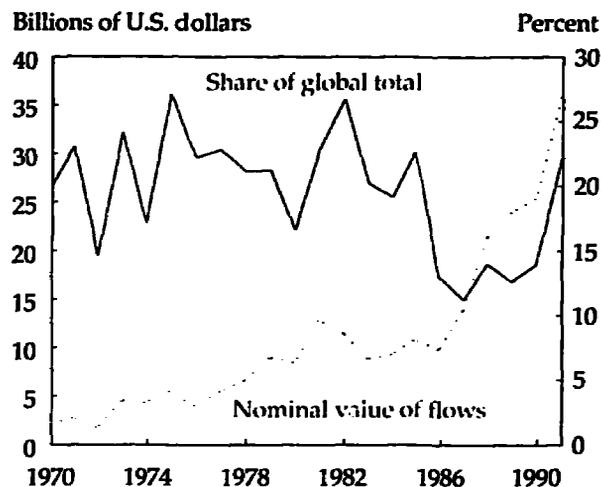
Source: World Bank staff estimates.

significantly decreased their risks (as measured by the variability of returns).

Of course, there are good reasons besides conservatism and lack of familiarity that global investors do not invest more in emerging markets. Two important impediments are domestic market shallowness and regulatory constraints. Investors are discouraged by limited availability of information, small market size, and illiquidity. Also of importance are widely varying regulations in source countries governing pension funds, insurance companies, and other institutional investors. A further impediment arises in developing country entry and exit regulations, which vary from placing no significant restrictions on the purchase of stocks and repatriation of income and capital to severely restricting access. Nine emerging markets permit free entry, and a further twelve permit relatively free entry, while six others are restricted.

Concerns over the sustainability of portfolio flows stem largely from the fear of a change in source-country economic conditions. For instance, a reversal of low short-term interest rates and poor growth prospects in the United States may reduce portfolio flows to Latin America. These conditions are an important but by no means a decisive determinant of equity flows. If U.S. dollar real interest rates rose by 100 basis points—a large rise—the net flow of portfolio

Figure 5 FDI flows to developing countries



Note: Net inward FDI. Data exclude Saudi Arabia.
Source: IMF Balance of Payments Yearbook and World Bank staff estimates.

equity to developing countries would decline by an estimated US\$ 2 billion per year (based on a regression of equity portfolio flows on U.S. interest rates, U.S. industrial production, recipient country credit rating, and relative stock market return).

Access to portfolio flows should prove to be reasonably durable, provided recipient countries persist in their policy reforms, although Latin American countries should not expect to receive such large flows in future years as they did in 1991 and 1992. One reason is that recent flows have to some extent represented a one-time stock adjustment by investors.

If developing countries wish to capture the benefit of a reduction in their cost of capital, they should therefore encourage freer corporate sector access to external capital and undertake microeconomic reforms of their capital markets, including the international listing of at least a few stocks. Source-country stock market authorities can help by easing entry requirements.

Aid at the end of the Cold War

Aid at the end of the Cold War is under pressure from newly eligible recipients (both actual and prospective) and the exceptional needs of the reforming socialist economies as well as from financing requirements for addressing international environmental concerns. Donors face the problem of how to raise additional resources if they are to avoid short-changing the needy in poor countries.

Between 1981 and 1991, aid flows were virtually unchanged as a percentage of donor GNP, but this still translated into a real increase in terms of developing country import volume (figure 7). Recently, a few donors (for example, Italy and Sweden) have implemented or announced cuts in aid programs. The one bright spot has been an increase in the degree of concessionality for the poorest countries, with grants often replacing loans.

Aid from donors outside the OECD has generally declined. Arab aid has shown major fluctuations, falling throughout the 1980s from its very high levels in the 1970s. Aid from the FSU and Eastern European donors has fallen off since 1986 and is now confined largely to technical assistance.

Meanwhile, the number of claimants recognized as eligible or potentially eligible for aid has grown. There are three categories of new claimants: first, countries that appear now able to support only concessional borrowing (for example, Angola and Mongolia); second, countries that are potentially reactivated aid recipients, following recovery from a period of poor economic performance and disruptions such as war (for example, Afghanistan, Cambodia, and Viet Nam);² and third, some republics of the

FSU and the formerly socialist economies of Eastern Europe.

A rough order of magnitude for the call on official development assistance (ODA) by new low- and lower-middle-income claimants is about US\$ 5.5 billion annually, equivalent to 10 percent of 1991 ODA disbursements from OECD-DAC to all countries. Including the upper-middle-income countries of the FSU and Eastern Europe (for example, Russia and Hungary), which are arguably temporary exceptional claimants, would add a further US\$ 4.5 billion, bringing the extra demand to US\$ 10 billion per year, or 19 percent of ODA in 1991 from OECD-DAC.

Aid tends to be concentrated on the poor but not necessarily the poorest countries. Fully one-third of aid goes to middle-income countries. The allocation of aid varies considerably among bilateral donors, with Sweden allocating 81 percent of its aid to low-income countries while the United States and France allocate more than 40 percent of their aid to middle-income recipient countries. Multilateral aid is more concentrated on the poorest, with about 90 percent going to low-income countries. That is one reason to welcome the recent successful conclusion of negotiations on the tenth replenishment of the International Development Association, amounting to SDR13 billion, representing a maintenance of IDA in real terms.

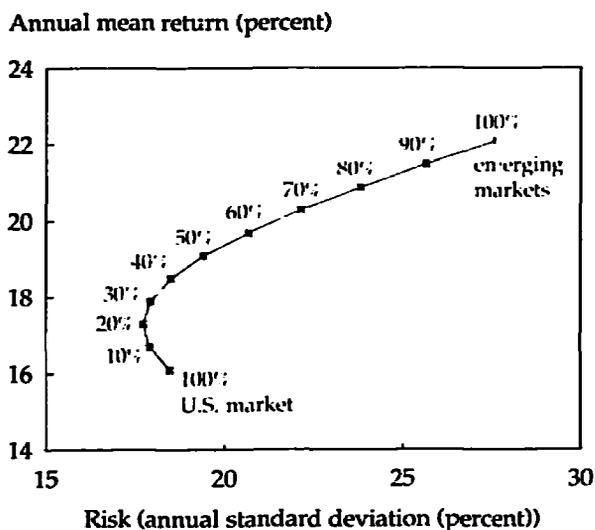
A key measure of the quality of aid is the extent to which it is tied to procurement in the donor country. Although there has been a trend toward less tying of bilateral aid in the past decade, the extent of tying remains high (in contrast to multilateral contributions by these donors, which remain untied). In 1989 the OECD-DAC country average was 44 percent for tied and 7 percent for partially untied aid, compared to 48 percent and 12 percent, respectively, in 1977-79.

The cost of aid tying for recipient countries is hard to estimate, but one study (Jepma 1991) suggests that the direct cost may range upwards from 15 percent of aid provided. (By direct cost is meant the excess in prices of aid-financed deliveries compared to prices of comparable goods and services not obtained through tied procurement.) On that basis, if all aid flows were untied, the economic benefits to developing countries would be worth as much as US\$ 4 billion per year, which equals one-fifth of the nominal increase in aid flows over the past decade. Indirect costs are also substantial.

Aid at the end of the Cold War needs to be rethought as to its rationale and needs reworking as to its adequacy and quality. If donor countries agree that with the end of the Cold War, poverty reduction deserves a higher priority, they will wish to review their aid programs in light of issues such as how to ensure that available aid is concentrated on the poor-

Figure 6 Impact of diversification on portfolio risk

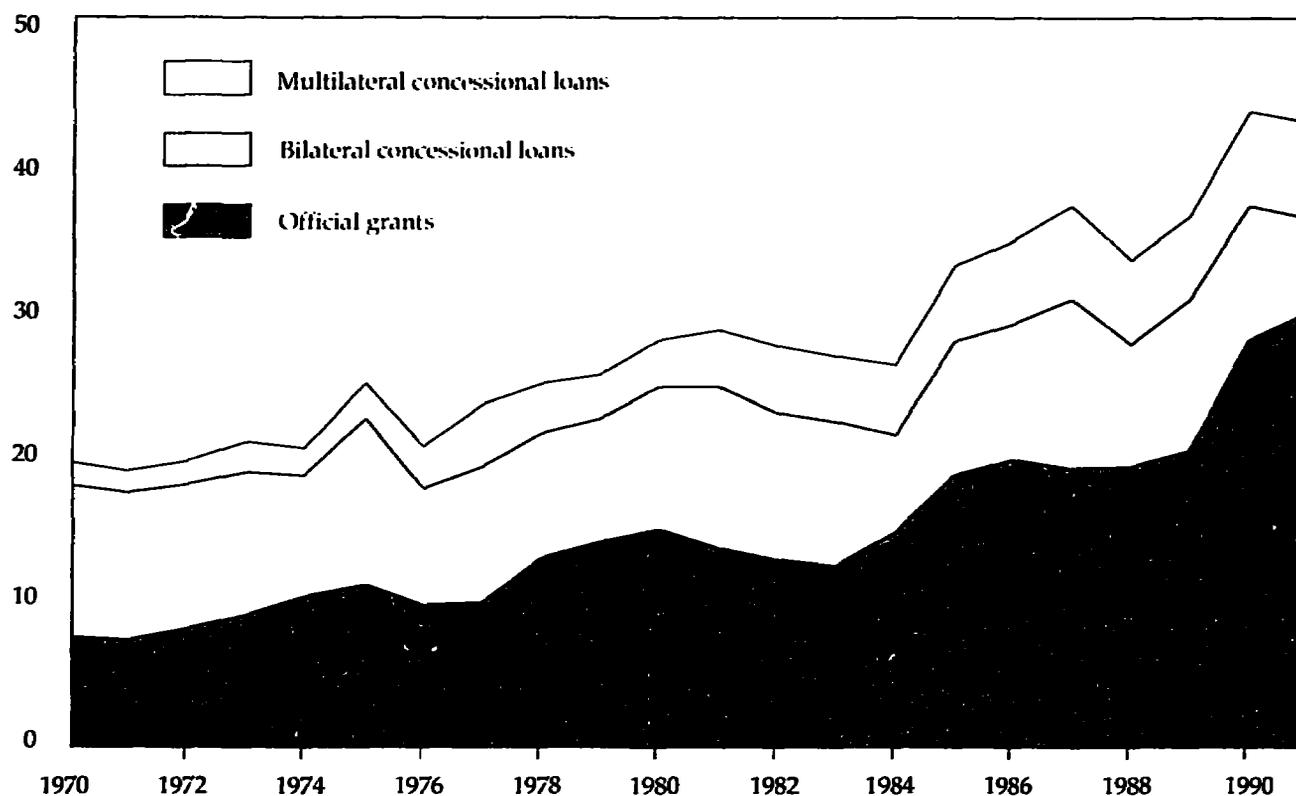
(risk and return for mixes of U.S. and emerging market indices)



Note: Five-year (1987-91) annual mean total returns. The IFC's U.S. dollar-based Composite Index (of Emerging Markets) consists of twenty emerging stock markets. The U.S. market is represented by the Standard and Poor's 500 index. Source: IFC Emerging Stock Markets: Factbook 1992 and World Bank staff estimates.

Figure 7 Real net ODA flows to developing countries

Billions of constant 1991 U.S. dollars



Note: Real flows are nominal flows deflated by an import price index for developing countries.

Source: World Bank, OECD.

est countries and those lacking access to private capital flows and ways to reduce tying and the share of technical cooperation grants in ODA.

Developing-country prospects

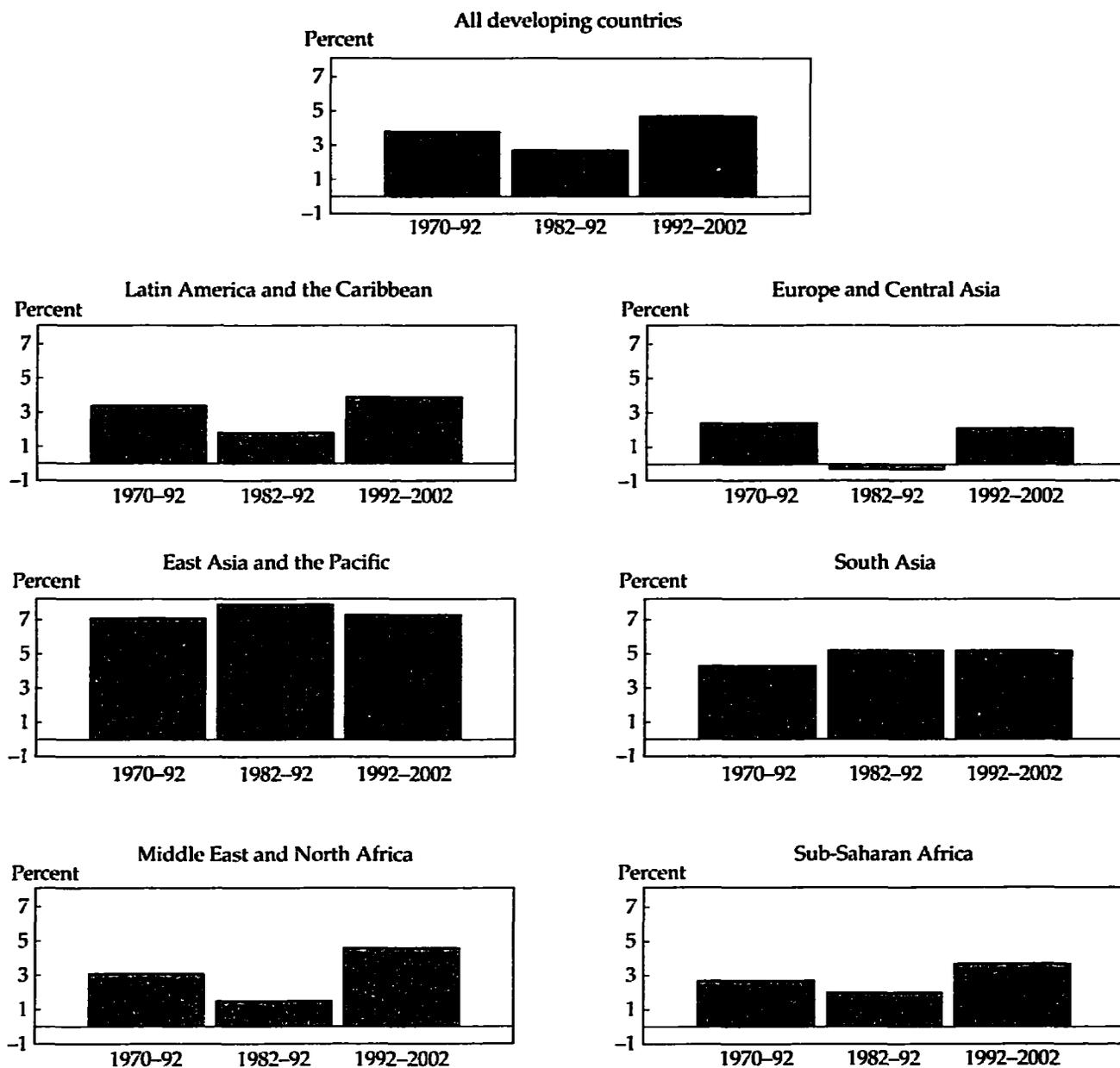
The outlook for the international economic environment is mixed. Nevertheless, developing-country prospects for the remainder of the 1990s appear brighter than in the 1980s. The improved prospects are to a large extent the dividend of the comprehensive economic policy reforms undertaken by several developing countries in recent years.

The international economic environment

The economic climate facing developing countries during the next ten years presents both large problems and opportunities (table 1):

- Economic activity in the industrial countries has not only a poor short-term outlook but also an underlying trend of slow growth in productivity, which has prevailed since 1973.
- Real interest rates (mainly long-term rates) are likely to stay high because of a decline in public savings in industrial countries.
- World trade faces an uncertain future, pending completion of the Uruguay Round, but growth in intraregional trade is likely.
- Commodity prices are expected to stabilize in real terms—a sharp break from their twenty-year declining trend—partly because of the extent to which developing countries are shifting out of primary production.
- For creditworthy developing countries, external finance is likely to be in good supply from private sources, but countries without market access will face a limited or even shrinking aid pie.

Figure 8 GDP growth prospects for different developing country regions under the baseline scenario
(average annual percentage change)



Source: World Bank projections.

Prospects

Within this mixed outlook for the international economic environment, developing country prospects for the remainder of the 1990s nevertheless hold out the promise of higher growth rates (figure 8). Per capita GDP in real terms in developing countries, which was stagnant through the 1980s, is projected

to rise at an annual rate of about 2 percent after 1996. This brighter outlook is to a large extent the dividend of the wide-ranging—and often painful—economic policy reforms of the decade.

In the aftermath of the debt crisis, public sector investments in developing countries were squeezed in the 1980s, with devastating effects on infrastructure. As these countries emerge from the debt crisis,

the introduction of relatively conservative fiscal and monetary policies has improved incentives to save. Incentives to invest have also improved through privatization, trade liberalization, and greater macroeconomic stability, particularly lower inflation. These factors have combined with a steady improvement in levels of education to result in a turnaround in growth rates in Latin America and the Caribbean region in particular.

A more longstanding beneficiary of these trends is the East Asia and Pacific region, which has been characterized by high growth and greater regional integration in respect to trade and capital flows. The strength of East Asia is an important element in the positive expectations for overall developing country growth and improvements in efficiency. Within this area, the so-called Chinese economic area (CEA), comprising China, Hong Kong, and Taiwan, China, exhibits a large and growing economic mass, sufficient to exert a substantial positive impact on other economies, and a persistence of medium-term growth in the face of shifting external circumstances. Arguably, it is becoming a "fourth growth pole" of the global economy.

For instance, if imports into the Chinese economic area from the rest of the world continue to grow at any rate close to their trend of the past fifteen years (exceeding double digits in volume terms), their absolute increase over the next three years will exceed Japan's, and by the year 2002 they will exceed Japan's in level as well. And if output of goods and services of this area were valued at standard international prices (ICP) rather than through the official exchange rate, by the year 2002 the CEA output would rank ahead of Germany's and Japan's and would be approaching that of the United States, although it would amount to only one-fifth the level in terms of GDP per capita.

Prospects vary widely by region. Both East Asia and South Asia are expected to continue with high

growth although somewhat lower than in the past decade. Latin America and the Caribbean region is expected to continue the recovery of 1992. For Sub-Saharan Africa an improved aggregate growth performance is still projected to imply little growth in per capita consumption, thus failing to recover the disastrous declines of the 1980s. After three years of restructuring and fall in output, the countries in Eastern Europe are expected to grow at a rate averaging about 4-5 percent in the medium term. The economies comprising the FSU have undergone a broadly similar collapse of GDP from 1989-92; another large decline in output is expected in 1993, and both the timing and magnitude of recovery remain highly uncertain. The projections are especially uncertain for these economies. The Middle East and North Africa region is expected to experience growth of 4-5 percent, its best performance since the 1970s, thanks to firmer oil prices in real terms from mid-decade onward. As discussed in the final chapter of this book, these projections are based on a variety of assumptions regarding both domestic and international economic developments.

The risk of unfavorable developments in the global economy makes it all the more important that industrial countries take steps to help developing countries meet the challenges of the external environment. One way to do this is by improving developing country access to industrial country markets and ensuring a speedy conclusion to the Uruguay Round. Another is by increasing public sector savings (that is, reducing fiscal deficits), which will tend to lower real interest rates. For FDI, industrial countries can help through the adoption of open trade policies, the conclusion of double taxation treaties, and the establishment of promotional programs and institutions. For portfolio flows, industrial country regulatory authorities should examine the scope for relaxing regulations without jeopardizing prudential standards, as well as easing access to securities market flota-

Table 1 International economic parameters of importance to developing countries
(average annual percentage change, except interest rate)

Indicator	1982-92	1992	1993	1992-2002	
				Baseline	Low case
G-7 GDP	2.7	1.6	1.9	2.7	2.0
G-3 real interest rate	4.0	1.9	1.8	3.0	3.5
World trade (volume)	3.7	4.5	5.6	5.8	3.0
Export price of manufactures (US\$)	4.2	5.1	1.3	2.8	2.0
Price of petroleum (US\$)	-5.5	-0.2	-3.2	4.0	2.0
Non-oil commodity price (US\$)	-0.3	-4.5	3.3	4.0	1.0

Note: In deriving G-3 real interest rate, three-month interest rates of individual countries have been aggregated using 1987 GDP weights.
Source: IEC staff estimates, based in part on *Consensus Forecasts of Inflation*.

tions. And for aid, donor countries should ensure that what is available is concentrated on the poorest countries and on exceptional needs in formerly socialist economies, and they should reduce tying aid to procurement.

The developing world's growing scale of economic activity in the 1990s will pose serious challenges for countries' efforts at better environmental management. If not managed effectively, accelerated growth could increase the dangers of industrial pollution, deforestation, and depletion of water resources. The challenge of sustainable development will be to build the recognition of environmental scarcity into incentives affecting behavior and to counteract market failure with effe-

tive policies and institutions. With sound policies and a supportive international economic and financial environment, developing countries can achieve sustainable growth in the coming decade.

Notes

1. Calculated for a set of fifty-eight developing countries for which data were available, representing 65 percent of all developing countries' GDP.

2. Additional exceptional demands have also arisen because of the drought in Africa; for instance, in December 1992, Zimbabwe received a US\$ 1.4 billion package of concessional assistance from donors, coordinated by the World Bank.

1

A new pattern of external finance

The wide-ranging improvement in their economic policies and the recent turnaround in private capital flows offer developing countries the promise of higher growth in the 1990s than in the 1980s, despite an uncertain start to the decade and an uninspiring outlook for the industrial countries.

The importance of external finance to this promise lies less in its amount than in its quality. Openness to external finance, as to trade, exposes the recipient country to international competition and can bring such benefits as technology transfer, management know-how, export marketing access, a reduction in the cost of capital, and a diversified investor base. In the 1990s, the age of indiscriminate balance of payments financing and the belief that all borrowing is good (because developing countries offer inherently high rates of return to capital) have been largely replaced by the advent of judicious external finance.

Prospects for developing countries are qualified in both the short and the medium run by an uncertain outlook for the industrial countries, which account for three-quarters of world output. Nevertheless, developing countries as a group are likely to resume faster growth for the remainder of this decade, mainly because of domestic reform efforts and consequent favorable supply-side trends. Countries that were held back in the 1980s by debt overhangs are recovering a better pace of development, assisted by agreements to reduce their old debt obligations and by improvements in the structure of external finance. Countries that did well in the 1980s (particularly in East Asia), despite the severe shocks of that period, demonstrate a persistence of high growth that appears likely to continue for many years. (Developing country prospects are discussed further in chapter 7.)

For industrial countries the longer-run outlook is for the slowest growth of the past three decades, because of both a low underlying trend of productivity growth and low public sector savings, which will tend to keep real interest rates high. These factors will also tend to keep real commodity prices from rising,

although developing countries' continuing shift out of primary production will mean that the trend of real commodity prices will tend to be flat, rather than declining. World trade is expected to grow faster than industrial country output, thanks to growing trade between developing countries and, to some extent, the formation of regional free-trade areas. (The international economic environment is discussed further in chapter 6.)

The end of the Cold War and the resolution, by and large, of the commercial bank debt crisis had held out the hope that the external financing environment for developing countries would grow easier in the 1990s. Countries (mostly middle- and a few large low-income countries) with some access or potential access to capital markets hoped for a reinvigoration of private flows. Aid recipients (mostly low- and lower-middle-income countries) hoped for a peace dividend.

To a limited degree, these hopes are being fulfilled. Developing countries are finding that the external financing choices open to them are greater than they have been in the past two decades. But so also are the challenges of attracting, retaining, and managing that finance effectively. For countries with market access, a welcome renewal of private inflows has been accompanied by concerns over the sustainability and volatility of these flows and by awkward problems of macroeconomic management. And for aid recipients, any vestige of a peace dividend has been swallowed up by fiscal deficits in industrial countries, even as several new claimants are being identified for aid funds.

The experience of the first three years of the decade suggests that in the 1990s developing countries are experiencing the advent of judicious external finance. The resurgence of private-source flows has been complemented by the role of official non-concessional finance (both multilateral and bilateral) in supporting economic reforms and stabilization in a large number of developing countries (box 1-1). In

Box 1-1 External finance and development

Traditionally, external finance has been regarded as a key element in development strategies. The great hopes placed in the borrowing of the 1970s were, however, disappointed by the debt crisis of the 1980s, which showed that heavy reliance on external finance may be a risky strategy.

Sovereign risk and negative externalities. As an empirical fact, external finance represents a relatively small fraction of domestic investment. The key reason is sovereign risk, which sharply limits the amount of private external finance that developing countries can expect to get.

When conditions determining country creditworthiness and capital ceilings, such as returns abroad or terms of trade, change adversely, developing countries may find themselves rationed in international capital markets and forced to make repayments, as happened during the debt crisis of the 1980s. Such repayments not only entail the interruption of access to external finance but also represent sizable costs in terms of development. First, adjustment becomes inefficient; second, there is a disincentive to invest.

External finance and development. The prudent use of external finance may constitute a major contribution to economic development, however. Despite its limited volume, external finance may prove a highly efficient supplement to domestic resources under various circumstances.

External finance may have a distinct qualitative value beyond its nominal size, and its effects may go far beyond what its share in total domestic investment may suggest. First, external finance provides developing countries with foreign exchange, which is important in the least developed economies that are dependent on imports for domestic investment.

Second, external finance may also entail better access to world markets, best practices, and technological transfer, as in the case of foreign direct investment. More generally, empirical investigation suggests that the main effect of external finance has been to raise productivity, especially the efficiency of the process through which developing countries turn their human capital into growth.

Third, the availability of external finance provides insurance to developing countries facing uncertainty. Access to external finance enables these economies to avoid adjusting to temporary negative shocks and to bridge their adjustment to permanent shocks, such as terms of trade. In this way, a higher level of investment can be sustained. Furthermore, additional investment flows in limited amounts may lead to significant improvements under certain conditions, such as an abundance of human capital relative to physical capital—which is the current situation in the Eastern Bloc countries.

Another case might be that of some of the most underdeveloped countries, who may be caught in a low-growth, low-savings trap that may be eased with temporary (but possibly substantial and concessional) external finance. By accessing external finance, these economies may be able to grow consistently faster, save substantially more, and switch to a higher growth equilibrium. Official finance, by contrast to commercial finance, has an interest in the social profitability of investment and the development of countries. By promoting investments with high social return and by enforcing conditionality, official finance can relax the capital ceiling for countries with high perceived sovereign risk. Official finance can also play an important role in situations of great private sector uncertainty, where the option value of waiting to invest can produce self-feeding uncertainty. Official support can overcome the coordination problem and therefore has a critical role in financing reform in the former Soviet Republics and in Eastern Europe.

Whether official and private sources are substitutes or complements is an empirical question. The evidence is far from conclusive but suggests that official finance has tended to encourage additional private transfers (Kharas and Shishido 1991).

In conclusion, external finance can play a limited but important beneficial role when it supplements and supports domestic resources and sound development policy. Under the wrong conditions, however, access to external finance may be detrimental for development. Official finance is key for promoting the conditions under which economic development is advanced.

a world characterized by a new pattern of external finance and growing integration with global capital markets, developing countries must learn to seize the opportunities and meet the challenges presented by massive diversification of equity investment, both direct and portfolio, and keen competition for aid funds.

One of the most visible fruits of past policy reforms has been the resurgence of private-source flows to a number of developing countries (for example, Ar-

gentina, Chile, China, and Mexico), which has been both a sign of strong investor confidence and a means of fueling growth. These flows are part of a broader shift in the pattern of external finance to developing countries: a shift from debt to equity and from bank to nonbank sources—commercial bank loans have been replaced by bond and equity portfolio flows and greater foreign direct investment (table 1-1); the return of private sector borrowers; and the gulf between countries with market access and those with-

Table 1-1 Pattern of external finance to developing countries: gross long-term flows
(percentage share)

Types of finance	1971	1981	1991
Official grants	9.0	7.3	14.5
Official loans	30.9	26.0	30.8
Suppliers and export credits	10.8	11.0	12.3
Commercial bank loans	35.7	46.1	17.4
Bonds	1.2	1.2	4.8
FDI	12.3	8.3	16.5
Portfolio equity	0.0	0.1	3.7
Total	100.0	100.0	100.0
Total (current US\$ billions)	19.5	156.9	205.3

Note: Based on 115 countries for which data are available. Bonds in this table are based on DRS data covering public and publicly guaranteed issues only.

Source: World Bank, DRS, and World Bank staff estimates.

out. A striking feature of these developments has been that *virtually all the growth of the past few years in financial flows to developing countries has come from nonbank private sources, namely FDI and bond and equity portfolio flows.*

Private sector reorientation

Two factors have been at work in this shift. First, supply is no longer dominated by commercial banks, which provided in the 1970s easy terms and in the 1980s concerted lending, rescheduling, and debt reduction. As commercial banks have struggled to maintain capital adequacy, there has been a process of so-called disintermediation.

Second, demand from private sector borrowers has revived, unlike in the 1970s and 1980s when the public sector dominated and even took over private sector borrowing. In the last few years private sector companies—notably in Argentina, Brazil, Chile, India, Korea, Mexico, and Venezuela—have been able to access the international equity and bond markets; consequently, the proportionate decline in private sector borrowing throughout the 1970s up to the mid-1980s has been reversed (table 1-2).

The 1970s and 1980s were the boom-and-bust years of commercial bank finance to developing countries. In 1982 the share of commercial bank lending in total net flows to developing countries was 35 percent; a decade later, it had fallen to a mere 3 percent (although the share of gross flows was higher). Commercial bank lending to developing countries is now confined largely to trade and project finance rather than general balance of payments financing (box 1-2). The shift to nonbank investors is primarily a reflection of the capital constraints under which commercial banks are laboring at the start of the 1990s, the result as much of domestic loan prob-

lems as of the international debt crisis. Specifically, capital adequacy has been enforced by the Basle guidelines, agreed in 1988, and lending to most developing countries has been discouraged by national loan-loss provisioning requirements. Nonetheless, the rise and fall of bank lending is only part of the picture.

One manifestation of the shift from nonbank sources has been the increasing issuance of bonds, which grew rapidly from 1989–92 (table 1-3). Typically, the purchasers of these bonds have been institutional investors (for example, pension funds, insurance companies, money market funds, and trust funds) or wealthy individuals. Investment interest has been helped by the growing number of developing countries that have obtained ratings. Currently, Chile, China, Greece, Indonesia, Korea, Malaysia, Portugal, Thailand, and Turkey have investment grade ratings; Hungary, India, Mexico, and Venezuela, along with the former Czech and Slovak Federal Republic, have ratings a little below invest-

Table 1-2 Private borrowers' share of external financing to developing countries

(private share, percentage)

Year	Total long-term financing	Year	Bond financing
1970	43.6	1989	4.2
1975	29.9	1990	11.6
1980	20.8	1991	39.7
1985	16.1	1992	46.7
1990	26.5		
1991	29.7		

Source: World Bank, DRS, and World Bank staff estimates.

Table 1-3 External financing through bonds
(millions of U.S. dollars)

Region	Annual average						
	1971-75	1976-80	1981-85	1986-88	1989	1990	1991
All developing countries	425	2,372	3,718	5,255	6,797	7,013	9,909
Sub-Saharan Africa	3	83	9	0	0	0	0
East Asia	28	355	1,748	1,744	1,170	2,264	2,376
South Asia	0	0	118	385	773	586	1,889
Europe and Central Asia	4	18	243	2,282	4,003	2,224	2,251
Latin America	352	1,786	1,476	621	619	1,938	3,391
Middle East and North Africa	38	129	124	193	232	0	1

Source: World Bank and DRS data, which cover only public and publicly guaranteed bond issues.

ment grade; and Argentina and Brazil have also obtained ratings, albeit lower.

Differentiation by market access

The regional variations in table 1-1 also reflect the great gulf between developing countries that can gain access to the private capital markets for bank loans, bonds, and stocks and those that cannot (box 1-3). Those countries that avoided debt restruc-

turing in the 1980s (for instance, China, India, Indonesia, and Korea) or that have successfully reduced their commercial bank debt as part of a comprehensive reform effort (for instance, Argentina, Chile, and Mexico) have been able to maintain or regain market access. Those countries that have not yet attained a sustainable level of external debt servicing obligations—including many severely indebted low- and lower-middle-income countries with largely official debt—have little realistic prospect of private market

Box 1-2 Limited recourse project financing: the case of Malaysia

With the memory of the debt crisis in the 1980s still fresh, commercial banks have greatly reduced their lending to developing countries and concentrated mostly on short-term trade finance and project finance. This raises the question: how can a developing country with fragile creditworthiness attract bank credits?

The move toward better private sector development in many developing countries has aroused interest in so-called build-operate-transfer (BOT) or build-operate-own (BOO) projects. Such projects are sponsored by private sectors with public sector involvement and financed by private creditors with limited recourse—that is, recourse mainly to project revenues and assets.

Limited recourse projects require complex contractual frameworks that aim to apportion risks among the host government, equity investors, debt holders, including local financiers, international commercial banks, and multilateral lenders, and export credit agencies that extend or insure credits to the project. The complexities are compounded in developing countries by lesser known project sponsors, inferior infrastructure, inadequately trained manpower, inefficient government procedures, and, above all, country or sovereign risk.

Consequently, only a handful of limited-recourse projects have been completed in developing countries. Malaysia has been relatively successful in BOT project financing. Available data show BOT projects under way

in the country include: the US\$ 2.6 billion North-South Highway Construction supported by a consortium of European and Japanese banks; the US\$ 3.6 billion Kuala Lumpur Airport Rail Plan sponsored by an international construction consortium; the US\$ 480 million Light Railway Transit Project jointly financed by local and international commercial banks; the US\$ 47 million Labuan Water Supply Project partly financed by international pension and insurance funds; and the US\$ 480 million YTL Gas-fired Power Project sponsored by a joint venture with a U.K. firm with some support from the IFC.

The relative success of BOT projects in Malaysia can be attributed mainly to strong government commitment to the BOT approach as a model of project finance. The government has conscientiously integrated the BOT approach into the national privatization program in the power and infrastructure sectors as an effective means of raising capital for infrastructure development. The state tries to mitigate risks involved in BOT projects by ensuring project output off-take, financial support, smooth liaison with government, and a favorable tariff and regulatory environment. In addition, Malaysia's good credit standing as a result of prudent economic and financial management, political stability, and impressive economic performance all make it easier to attract foreign finance for BOT projects.

Box 1-3 Access to bond and money markets

Access to the international bond markets is itself a differentiated process through which developing country governments and corporations can gradually seek a wider investor base. For example, the least creditworthy or least well known borrowers might seek to issue very short-dated bonds, of one or two years maturity, as Brazil has recently done. Or they might hold credit lines in the Eurocommercial paper market in London, whereby they can issue one- or three-month notes that would be "rolled over"—that is, refinanced upon maturity.

More creditworthy borrowers would go to the Euro-bond markets, which are unregulated international bond markets denominated in the major convertible currencies. To the extent that the borrower's country might have a regional link with one of the major markets (for example, Turkey with the Deutsche mark), the borrower might also access the corresponding domestic

market, which would presume upon a considerable degree of investor familiarity that would gradually be built up over time.

A next step for a yet more creditworthy borrower might be to enter the private placement market in the United States. In this market, limited volumes of bonds (for example, US\$ 50 or \$100 million) can be placed with sophisticated institutional investors who are expected to be able to assess the credit standing of the borrower. A mature issuer would enter the Yankee bond market, the domestic United States market for foreign U.S. dollar bonds (or perhaps its Japanese counterpart, the Samurai market). To borrow in this market necessitates obtaining a satisfactory rating from a rating agency, such as Standard and Poor's or Moody's, and making a high level of financial disclosure through a filing with the U.S. Securities and Exchange Commission.

access (apart from short-term trade credit) for the foreseeable future.

Net resource flows to developing countries have grown from their low point in 1987, and net transfers have turned positive. The upturn in private flows is the primary factor underlying the 130 percent increase over the past three years in aggregate net resource flows to middle-income developing countries, to an estimated level of US\$ 90 billion in 1992 (figure 1-1). The principal reason behind this resurgence of flows has been the adjustment efforts of the countries in question. Additionally, comprehensive restructurings of commercial bank debt have played an important part in restoring investor confidence.

In contrast, low-income developing countries—particularly those that are severely indebted¹—remain heavily dependent on official sources to help finance their development projects and economic adjustment efforts. Few of these countries have benefited from the recent resurgence of private capital flows, and the overall level of aggregate net flows to this group of countries is estimated to have remained broadly unchanged from recent years—in 1992 these flows were about US \$44 billion.

Within the low-income group there are a few exceptions of countries that have maintained a strong credit standing and preserved their market access, notably China, India, and Indonesia. These countries have been able to access the bond and syndicated loan markets for sizable amounts. For some other low-income countries and also some lower-middle-income countries that are primarily indebted to official sources, the debt crisis is far from over, and external viability—the capacity to service external obligations without restructuring—remains elusive.

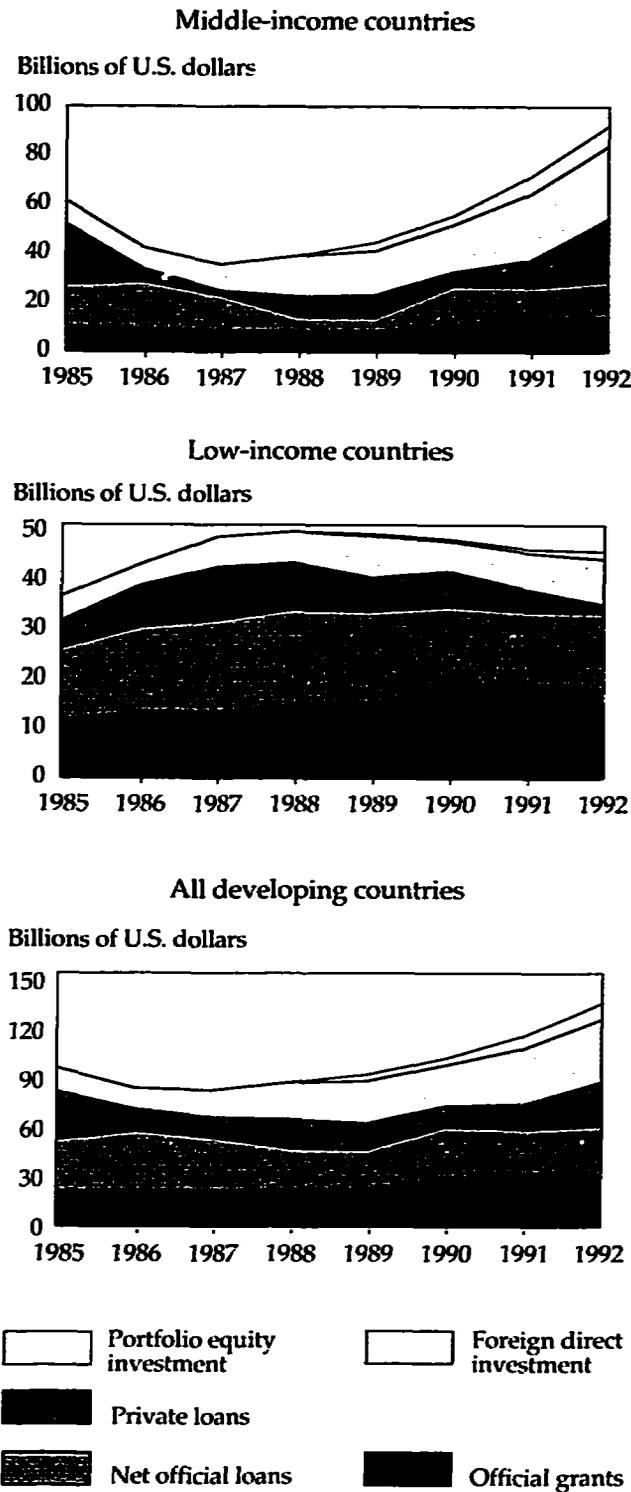
Although strong official support has provided much-needed cashflow, these countries' weak starting positions (for example, poor infrastructure and ill-trained workforce) make additional debt forgiveness necessary in many cases.

Because net flows on debt have remained positive for these countries throughout the 1980s, their outstanding debt has continued to grow. Many of them now have debt service obligations that are well in excess of sustainable levels, often exceeding a debt service-to-exports ratio of 300 percent on a present value basis.

In 1988 the Paris Club (a forum for bilateral official creditors) recognized that the debt buildup had become unsustainable in a number of low-income developing countries and agreed to offer debt and debt service reductions among other debt restructuring options (the so-called Toronto terms). A further step was taken in December 1991 when the Paris Club agreed to implement a new menu of concessions for low-income countries (the "enhanced Toronto terms")—essentially two options providing for deeper debt reduction, plus the nonconcessional option from the old Toronto terms. The concessional options amount to 50 percent forgiveness in present value terms on debt service payments falling due during the consolidation period. Additionally, creditors indicated they would be willing to consider restructuring the remaining stock of pre-cutoff-date debt after three to four years.

The enhanced Toronto terms represent a substantial advance over the previous Toronto terms. They fall short in three respects, however, from the proposal of the so-called Trinidad terms set out by the U.K. Chancellor of the Exchequer in 1990: in defer-

Figure 1-1 Real aggregate net resource flows by income groups, 1985-92



Note: All flows are deflated by the import price deflator (World Bank International Economics Department) at constant 1992 dollars. Data for portfolio equity investment are World Bank estimates, available since 1989 only.
Source: World Bank.

ring consideration of the stock of debt until three or four years later; in retaining a nonconcessional option; and in setting the benchmark adopted for the extent of debt reduction given.

The distinction between middle- and low-income countries is reflected in the widely varying experience from region to region. The East Asia and Pacific region has continued to enjoy excellent market access in recent years and recently has attracted yet more foreign direct investment, indicating a high level of investor confidence in private-sector prospects. South Asia has remained dependent primarily on official flows and has entertained very little FDI; recent reforms in Pakistan and in India have improved the prospects for attracting private finance. Sub-Saharan Africa continues to rely heavily on concessional official financing to maintain large positive net flows and net transfers relative to GNP. The Middle East also depends upon concessional official finance for a major part of its external financing. Countries in North Africa continue to have some access to commercial bank finance. Latin America has experienced a surge in private-source capital inflows in the past four years (as noted above). For several years Latin America has experienced large negative net transfers (roughly speaking, the counterpart to a trade surplus) because of high interest payments on commercial bank debt. Those negative net transfers were reduced substantially in 1991 and 1992 because of FDI and portfolio inflows.

For developing countries as a whole, aggregate net resource flows—comprising debt, equity, and grants—reached US\$ 134 billion in 1992, standing well above the low point of US\$ 83 billion (in 1992 dollars) in 1987—in the depths of the debt crisis—and very close to the level of a decade earlier. Net transfers also were positive and rising for the fourth consecutive year in 1992, at US\$ 57 billion.

Until recently, a notable longer-term trend was the growth in the 1970s and 1980s of the official share of flows and, within that growth, an increase in the concessional element represented by grants. Grants, which made up 55 percent of total bilateral official development assistance flows in 1981, now make up two-thirds of those flows. The official share in aggregate net flows, defined as the share of official development finance (comprising official loans and grants), rose through the 1980s but has declined rapidly in the past couple of years (for the reasons mentioned above). The official share stood at 35 percent in 1981, averaged 60 percent over 1986-90, then fell to 52 percent in 1991 and 46 percent in 1992.

For middle-income countries, debt indicators such as the debt-to-exports ratio and the debt-to-GDP ratio are about the same at the end of 1992 as they were a decade earlier; for low-income countries the levels of

Box 1-4 Changing role of export credit agencies

Export credit agencies (ECAs) were hard hit by the debt crisis of the 1980s, and export credit flows declined substantially. Nevertheless, ECAs remain an important potential source of external financing for developing countries. Net export credits to all developing countries, which had turned negative in 1986-88, were US\$ 7.4 billion in 1989 and US\$ 1.2 billion in 1990, or about 9 percent and 1 percent, respectively, of net resource flows, and gross credits were US\$ 29.1 billion and US\$ 22.5 billion, respectively.

The issue facing the agencies now is how they can adapt to a changing business environment in which premiums need to cover costs and the new customer is the private sector. Export credit agencies, which are just beginning to emerge from their financial difficulties in the 1980s, need to adopt a stronger market orientation so as to complement private-source financing.

The cash deficit of the ECAs resulting from the debt crisis has generated pressure to reduce or eliminate subsidies on interest and premium rates. Some agencies have raised their charges to a level that more realistically reflects the risks being covered. In consequence, however, there are now very wide variations in premi-

ums charged for particular borrowing countries (box figure 1B-1) (Tambe and Zhu 1993).

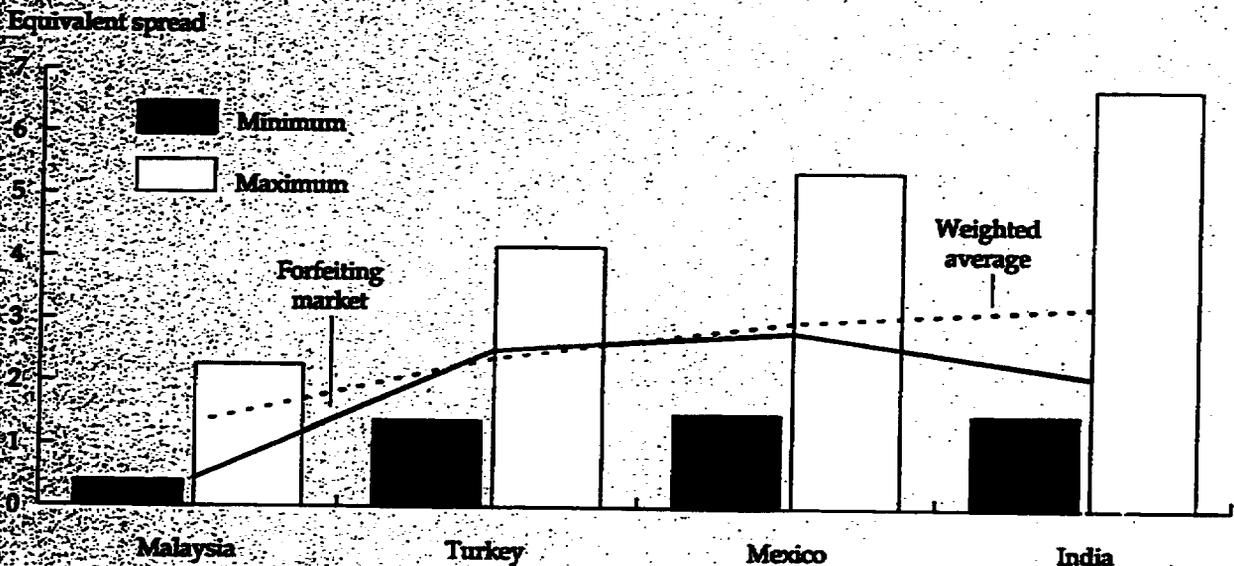
Another response to losses and perceived inefficiencies has been the privatization of export credit arrangements. For example, in the United Kingdom, the short-term business of the Export Credits Guarantee Department was sold to NCM, a private Dutch insurer that also insures on behalf of the Dutch government.

ECAs also need to meet the challenge of dealing with private-sector borrowers, for example by developing new financing and risk-sharing instruments, perhaps including longer maturities. In the past, ECAs found it easier to lend to governments or to lend with a government guarantee because that necessitated a creditworthiness assessment of the government only, not the individual project.

The policy implication for OECD countries is that ECAs need a clean start, unencumbered by past losses and dubious export promotion policies and based on a market complementarity with private sources of finance, including adequate project appraisal.

Developing countries should be mindful that export credits remain a rationed and subsidized good that necessitates efficient allocation.

Figure 1B-1 Range of equivalent spreads of export credit premiums as of July 1992 (percent)



Note: OECD ECAs five-year credits to public sector borrowers. Some forfeiting rates are for shorter maturities.
Source: World Bank staff estimates.

the indicators are much higher now. While indebtedness remains high in a number of the countries benefitting from renewed private flows, there are grounds for optimism, compared to the 1980s, for the following reasons: first, the sea change of developing country policies, including trade liberalization, fiscal consolidation, and privatization; second, the better risk-sharing between debtor and creditors in the new flows (box 1-4), with equity playing a bigger role; and third, the greater participation of the domestic private sector on the borrowing side.

Countries undertaking commercial bank debt reduction, such as Argentina, Costa Rica, Mexico, Nigeria (without official financial support), the Philippines, Uruguay, and Venezuela have completed debt reduction operations, resulting in a present value reduction of eligible debt of 30 percent. Brazil has agreed in principle with its commercial bank creditors on the terms of a deal. Experience so far suggests that Brady deals have a significant development impact when they are implemented within a strong policy framework and have a sustained track record of economic reform.²

For low- and lower-middle-income countries primarily indebted to official creditors, the story of the 1980s has been one of progressively greater debt relief through the Paris Club. Debt reduction through the so-called Toronto terms in 1988 and enhanced Toronto terms introduced in December 1991 amounts to US\$ 2.25 billion as of January 1993 (on a

present value basis), equivalent to about 17 percent of current exports from beneficiary countries concerned. Additionally, in recent years, there has been a significant write-off of ODA, amounting to a cumulative US\$ 11.6 billion or about 6 percent of bilateral ODA claims, nearly all of which applied to low-income countries. The weak starting position of many of these countries means that debt relief notwithstanding, they have yet to reach external viability—that is, the capacity to service external obligations without restructuring and with provisions for growth.

Notes

1. Developing countries are classified as severely indebted on the basis of two external debt ratios: debt-to-GNP and debt-to-export, both on a present value basis for debt. If either of these ratios exceeds critical values of 80 percent and 220 percent, respectively, the country is classified as severely indebted. The present value basis calculates the present value of all future contractual debt service payments, discounted at market-based currency-specific interest rates. Thus, the present value captures the difference between concessional and nonconcessional debt.

2. The Brady Plan, announced in 1990 and named after then-U.S. Treasury Secretary Nicholas Brady, provides for official support for debt reduction by commercial banks. A key feature of this plan is a menu of options, including both debt reduction and new money, from which commercial banks can choose.

2

External shocks and financial integration

The strong increase in capital inflows to Latin American countries during 1989–92 has highlighted a global trend that has been going on for many years: despite capital controls, developing countries have become more fully integrated with global capital markets. As the Latin American experience has shown, however, strong capital inflows pose new problems of macroeconomic management. The issue arises, therefore, is financial integration a blessing or a curse?

This chapter argues that whether by “accident” or “design,” developing countries have become more fully integrated with the global capital market, resulting in a mixed blessing—some increase in vulnerability to both outflows and speculative inflows of hot money, which, if these flows are managed carefully, is outweighed by reduced cost of capital and better possibilities to hedge external shocks.

Even without fuller integration, developing countries have been open one-way—in the form of capital flight—and have been exposed to big external shocks.

Exposure to external shocks

External shocks play an important, but insufficiently understood, role in determining the growth rate and current account position of both developing and developed countries.

In both developing and developed countries the size of both favorable and unfavorable shocks in a given year, expressed as a percentage of GDP, has often exceeded the average growth rate of the GDP over the analysis period of 1973–91¹ (figure 2-1). This measure of the impact of shocks on the current account can be magnified by multiplier effects, and, if the shock persists over several years (as in the case of oil price hikes, for example), the total effect on GDP levels can be much larger than the initial impact. Large favorable shocks can also require major and costly adjustment, such as exchange rate appreciation, or can encourage patterns of consumption and investment that are unsustainable in the longer term. As happened in several Latin American and African

countries in the 1980s, the cumulative impact of large shocks can lead to a sizable reduction in the rate of investment.

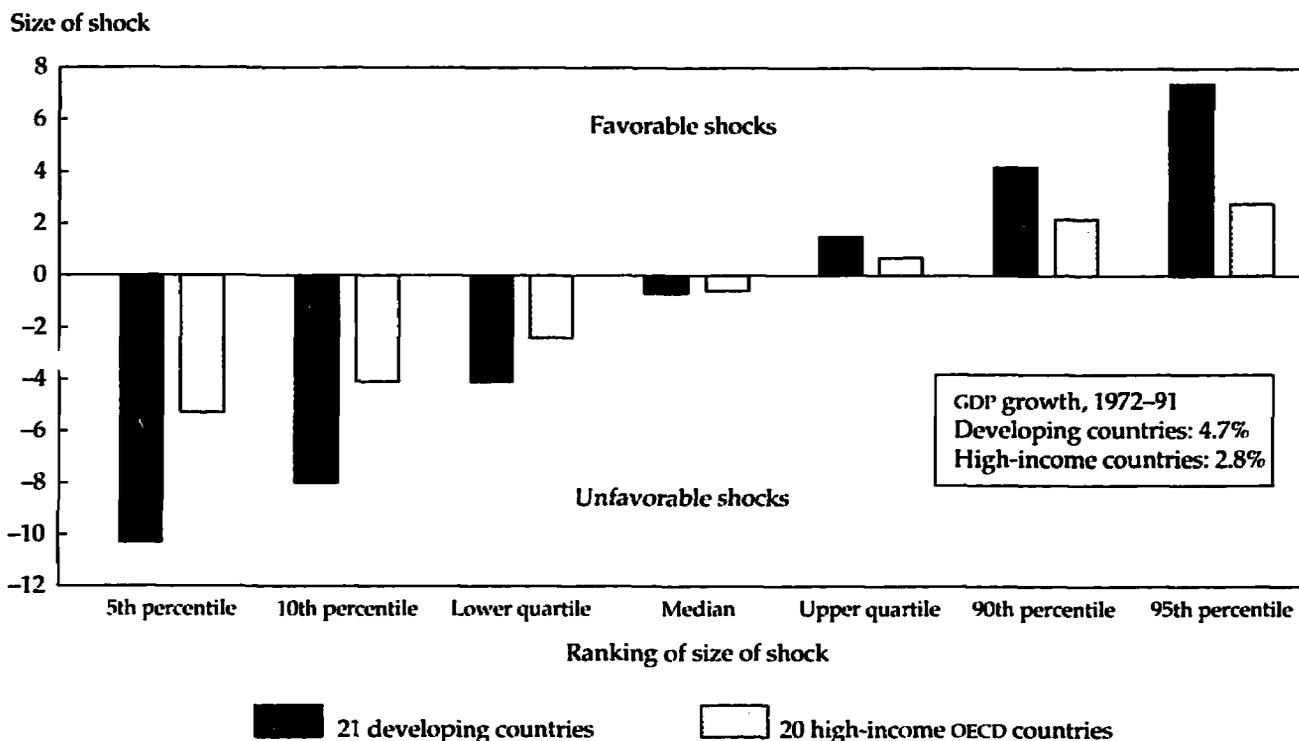
The most important source of shocks in the 1973–91 period was the terms of trade, reflecting not only the oil crises of 1973–74 and 1978–79 and the collapse of oil prices in 1986, but also the variability of the price of many primary commodities. Oil price shocks have been both positive and negative for developing countries, reflecting the presence of both producers and consumers. Export volumes, which capture the effect of global economic activity as well as anti-dumping or quota actions, were a lesser but significant source of shocks, with external finance and interest rate shocks still less important.

Developing countries are more subject to large shocks than developed countries because of the former’s much greater reliance on commodity exports, which have prices more volatile than those for manufactures, and on a less diversified set of exports.

Although during the period 1973–91, the median size of shock was about the same in low- and middle-income countries (LMICs) as in industrial countries—about 0.5 percent of GDP—the variability was about twice as great for developing as for industrial countries. It was not unusual for LMICs to suffer unfavorable external shocks equivalent to 4 percent of GDP. Brazil, for example, faced successive shocks of nearly 4 percent of GDP in 1980 and 1981, chiefly because of adverse terms-of-trade movements and, to a smaller extent, a reduction in world trade volume and an increase in interest rates. More dramatic is the instance of Côte d’Ivoire, which has been subject to a particularly severe series of shocks because of sharp changes in beverage prices, on the export side, and oil prices, on the import side; the economy suffered unfavorable shocks of more than 10 percent of GDP in 1975, 1981, and 1982, and experienced favorable shocks of a similar magnitude in 1977 and 1985, followed by a collapse in beverage prices in 1986.

The terms-of-trade developments were reflected in the overall economic performance of these countries.

Figure 2-1 External shocks 1973-91
(percent of GDP)



Source: World Bank staff estimates.

For example, between 1965 and 1978, Brazil and Côte d'Ivoire had GDP growth rates in excess of 6 percent a year, with investment-to-GDP ratios generally well above 20 percent. In subsequent years their growth rates have fallen sharply, below 3 percent in most years and showing negative growth rates in some. This has been accompanied by a decline in investment ratios, which were below 15 percent in some years.

Industrial countries, too, have faced unfavorable shocks, but in reaction they have "financed" about half the shock by running a greater current account deficit or a lower surplus, whereas, on average, over the whole period (1973-91), developing countries did not rely on significant amounts of financing to weather shocks. In the years before the debt crisis, developing countries were able to finance shocks: during 1973-78, 32 percent of shocks were financed; during 1979-85 this proportion fell to 17 percent. After 1984, however, LMICs were forced to overadjust to unfavorable external shocks by actually running a much smaller current account deficit or a larger surplus. This was achieved primarily through import reduction rather than export promotion. Over the 1985-91 period, many LMICs were rationed borrowers: while their demand for finance may have in-

creased after an unfavorable shock, the supply of finance to them actually declined, because of capital flight and the increased reluctance of foreigners to lend in the face of greater risk. The pattern of financing and adjusting illustrates vividly the proposition that access to international capital markets is a double-edged sword if confidence in policies and, more generally, in a country's creditworthiness declines.

The size, frequency, and inherent unpredictability of external shocks in developing countries are a significant deterrent to both foreign and domestic investment (Claessens and Duncan forthcoming) and carry a number of other costs. This underlines the need for policies that stress, first, flexibility and responsiveness to price signals to ensure that adjustment is fast; second, investment plans that are robust under alternative outcomes; and third, the appropriate use of hedging instruments.

Evidence on financial integration

In contrast to industrial countries, developing countries are less open financially than commercially. The ratio of gross flows to GDP (although measured with great imprecision) is considerably less than the ratio

of exports-plus-imports to GDP: for the aggregate of all developing countries, the former is only 13 percent while the latter is 45 percent. Nevertheless, the empirical evidence for developing countries is that they are more financially open than many may expect, and a significant number have become more financially integrated with the rest of the world in recent years.

Financial integration refers to degree of capital mobility—that is, the degree of substitutability between domestic and foreign assets in investment portfolios (both domestic and foreign). Increased integration can lead to a variety of effects, and measures of it include some or all of the following: the magnitude of gross capital flows; the applicability of arbitrage conditions on interest rates; the strength of saving and investment correlations; and the cross-country uniformity of consumption relationships.

A recent study (Montiel 1992), which examined all of these measures, concluded that a large number of developing countries can be described as financially open (box 2-1). Of the thirty-nine countries classified, two are ranked under high financial integration, nineteen under intermediate, and eighteen as showing no convincing evidence of financial openness, of which six countries are essentially closed (Bangladesh, Ethiopia, India, the Philippines, Rwanda, and South Africa). Since the data used in this study were reported, the Philippines has undertaken extensive reforms and is now very open financially. Besides being undermined by their lack of timeliness, the data attending this exercise are beset with problems of quality; this would suggest caution against being dogmatic about each individual country classification. The broad conclusion stands nevertheless: although cases of strong financial integration are rare, the majority of developing countries should be regarded as de facto financially open.

Some evidence of an increase in developing country financial integration in the latter half of the 1980s comes from stock market returns. Equity rates of return exhibit evidence of some restrictions on access by foreign investors to domestic securities until the mid-1980s, indicating the presence of barriers during that period. In more recent years stock markets have become increasingly integrated (fourteen out of the twenty largest in LMICs), with rising flows from industrial countries and liberalization of policies on foreign investment evidently the mechanisms of integration. The influence of international interest rates on domestic rates also indicates the same trend. For example, in the early 1970s, Indonesia, faced with competition from nearby Singapore, had strong incentives to adopt more open financial policies. The capital account was opened as early as 1971, and since domestic interest rates were freed in 1981, they have

reflected international rates (Fischer and Reisen 1992).

Policy issues

Financial integration can be expected to produce a variety of benefits, including a lowering of the cost of capital, an increase in the sharing of risks (such as the hedging noted below), and a promotion of the efficiency of resource mobilization and allocation through improved relative prices.

In the last few years, real interest rates have fallen in some developing countries by more than the decrease internationally because of liberalization of capital accounts, greater competition (for example, as measured by the number of foreign bank subsidi-

Box 2-1 Classification of developing countries by degree of financial integration

<i>High</i>	<i>Intermediate</i>	<i>Low</i>
Chile	Bolivia	Bangladesh
Dominican Republic	Burundi	El Salvador
	Cameroon	Ethiopia
	Côte d'Ivoire	Ghana
	Colombia	Honduras
	Cyprus	India
	Ecuador	Kenya
	Egypt	Madagascar
	Gambia	Morocco
	Guatemala	Nepal
	Haiti	Niger
	Korea, Rep. of	Philippines
	Malawi	Rwanda
	Malaysia	South Africa
	Mexico	Sri Lanka
	Pakistan	Tunisia
	Senegal	Uganda
	Thailand	Venezuela
	Turkey	

Note: Each country has been classified subjectively into one of three categories of financial integration (high, intermediate, or low) as of the 1980s and according to four measures of integration: levels of gross flows of capital to GDP; interest rate parity; savings investment correlation; and Euler consumption data tests. Countries for which information was available for only one measure of integration (typically the gross-flow ratio measure) were left unclassified, as were those for which the various measures were judged too contradictory to permit even a rough classification. No systematic rules were imposed on the classification procedure except that the presumption was against classification in the high category if the (preferred) Euler equation test rejected integration. However, little weight was given to this test when it failed to reject integration with poor data.

Source: Montiel (1992).

aries), and an increase in creditworthiness. Mexico, for example, started a sustained capital account liberalization process in the mid-1980s, which accelerated after its debt reduction deal in 1989. Combined with strong fiscal efforts, this gradual liberalization effort has led to a fall since mid-1989 in real domestic interest rates of about 30 percentage points.

Financial integration, however, reduces both the domestic policymaker's room for maneuver and the external creditor's tolerance for poor performance. For example, large capital inflows pose dilemmas of monetary and exchange rate policy. To the extent that external factors are the cause (for example, U.S. dollar interest rates, OECD recession) or that the change in capital flows is transitory, it makes sense to "sterilize" the impact of the inflow on the money supply—but that risks a vicious circle of high interest rates and further inflows. To the extent that domestic factors are the cause (for example, a country's improved creditworthiness) or that the change in capital flows is permanent, it makes sense to permit a real exchange rate appreciation—but that risks eroding export competitiveness. Adopting neither course relinquishes control of the money supply and risks increasing inflation.

Cross-border financial flows tend to be more volatile than domestic flows. This is particularly true for equity flows: the turnover ratio for cross-border transactions in foreign equity (the ratio of flows to stocks) among industrial countries is about twice as high as for domestic equity (Tesar and Werner 1992). For developing countries the turnover ratios for cross-border equity transactions are much higher than for domestic equity transactions. Volatility can be even more of an issue when there is a tendency for speculative "bubbles" through which prices (temporarily) deviate from their long-run equilibrium level. Evidence for this is found in the markets for stocks, bonds, foreign exchange, and precious metals (Summers 1991). These bubbles, mixed with domestic distortions and high financial leverage, can create the ingredients for a crisis.

Ubiquitous capital flight

The choice for developing countries is not, however, between financial integration and no integration. Rather, it is between two-way integration that permits capital inflows and private institutional outflows and one-way integration that consists of capital flight. Everywhere developing countries have found that capital controls are porous to outward flows from the personal sector. Traditionally, capital flight has been viewed as an affliction of a few Latin American countries plus one or two others; the facts indicate otherwise (box 2-2).

Box 2-2 Measurement of capital flight

This year's *Global Economic Prospects* presents flow data on capital flight based on the "World Bank residual" method, which uses balance of payments components to determine the residual. It is defined as follows:

$$\text{Capital flight} = \begin{matrix} \text{Sources} \\ \text{(External borrowing + FDI)} \end{matrix} - \begin{matrix} \text{Uses} \\ \text{(Current account deficit + Increase in reserves)} \end{matrix}$$

External borrowing is defined as the change in external debt, adjusted to exclude private non-guaranteed debt flows and the effects of currency valuation changes and debt reduction.

FDI, the Current Account Deficit, and the Increase in Reserves are taken from IMF *Balance of Payments Statistics*.

The basic World Bank measure is a "net residual". This is the broadest measure of capital flight. As such, it tends to overstate the volume of flight capital by including all external assets, both recorded and unrecorded. These assets include, for example, legitimate portfolio diversification and interbank transfers within a monetary zone.

Alternative Measures

Dooley (or IMF) method: The Dooley method defines the stock of flight capital as the difference between measured foreign assets and the foreign assets necessary to generate the income reported in the balance of payments. In effect, the Dooley method is the same as the World Bank residual except that it excludes recorded external assets.

The concept is that income from flight capital is not reported in the investment income in the balance of payments. So recorded investment income is used to derive recorded foreign assets. These derived foreign assets are less, by the amount of flight capital, than the foreign assets measured from recorded and unrecorded claims.

$$\begin{aligned} \text{The Dooley stock of flight capital} &= \text{Measured claims} - \text{Derived assets from investment income} \\ &= \text{Unrecorded claims} + \text{Recorded claims} \\ &= \text{Debt stock} - \text{Capital account liabilities} \end{aligned}$$

Hot money measure: There are several different hot money approaches, but all seek to measure flows that represent short-term changes in cross-border capital movements, using balance of payments components. Hot money measures define capital flight as the (negative of the) sum of balance of payments errors and omissions and private short-term capital assets. Some definitions also include portfolio investment.

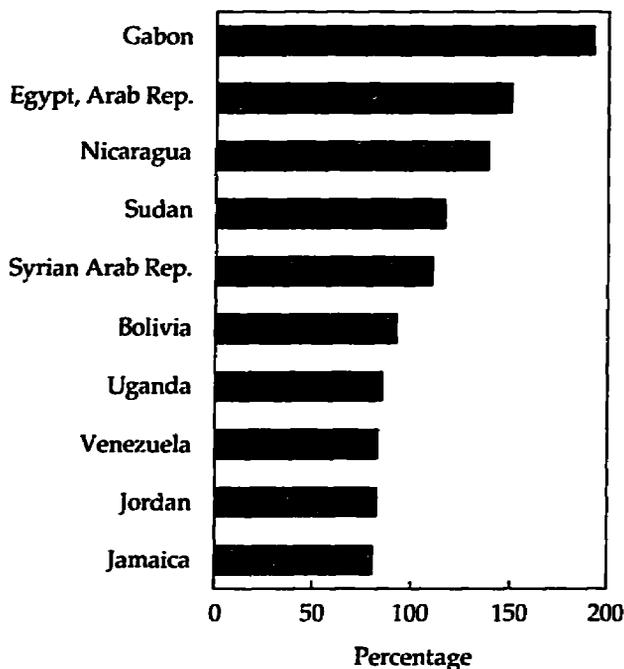
Table 2-1 Flight capital as a share of GDP, end-1990

Region	Percent
South Asia	14.9
East Asia and the Pacific	18.9
Europe and Central Asia	27.8
Latin America and the Caribbean	30.8
Sub-Saharan Africa	80.3
Middle East and North Africa	94.9
Fifty-eight developing countries	32.3

Source: World Bank staff estimates.

In relation to GDP, a high stock of flight capital is a widespread phenomenon (table 2-1 and figure 2-2). By this measure, Sub-Saharan Africa stands much worse than Latin America and the Caribbean. The stock of flight capital from Sub-Saharan Africa is equivalent to 80 percent of GDP. (As noted in box 2-2, however, there may be some overstatement of the stock of flight capital because of transfers within a

Figure 2-2 Stock of flight capital as a share of GDP, end 1990: ten leading countries
(World Bank residual method)



Source: World Bank staff estimates.

monetary zone.) The Middle East and North Africa region has the highest ratio of flight capital to GDP, with a ratio for several countries (Egypt, Jordan, and Syria) more than 150 percent. As elsewhere, the large flight capital is a reflection of the (political) uncertainties in this region. More recently, Russia has experienced substantial capital flight in 1991 and 1992.

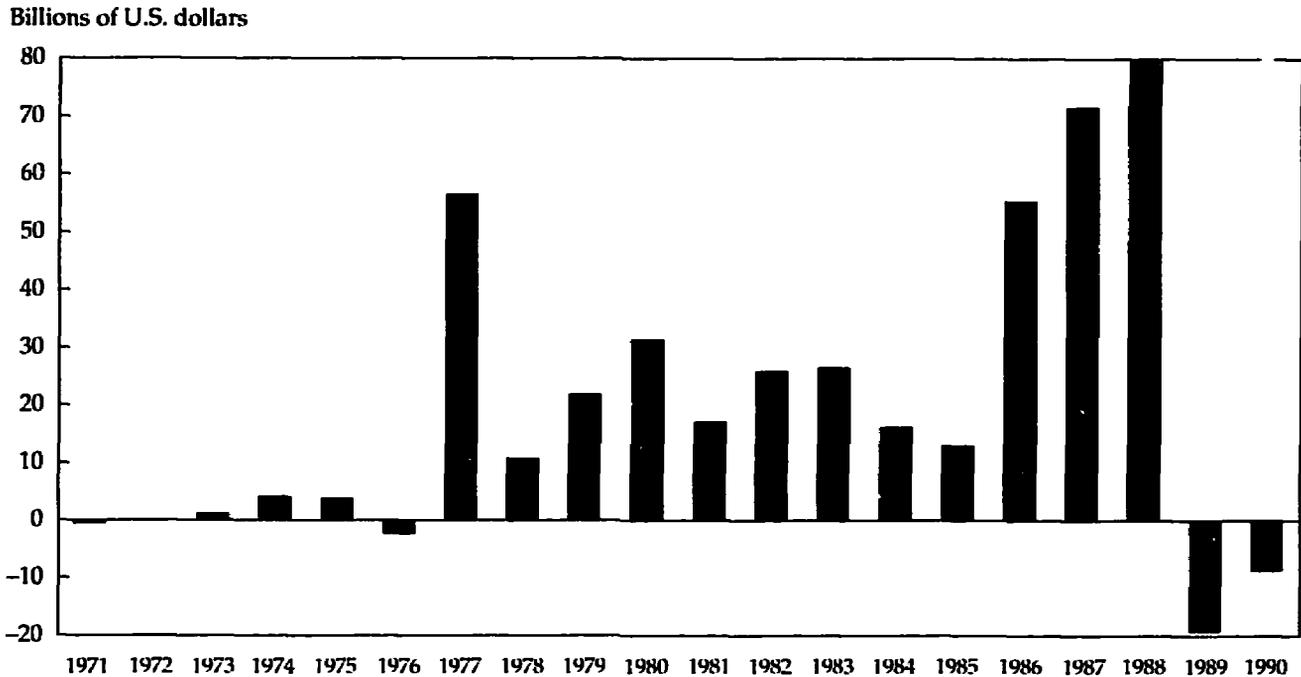
At its peak, global capital flight from developing countries amounted to close to US\$ 80 billion per year, and the stock of capital flight stood at US\$ 700 billion at the end of 1990, or 55 percent of the external debt stock at that time (figure 2-3). In the last four years, capital flight has reversed itself, and a substantial amount of capital has gone back, particularly to Argentina, Brazil, and Mexico.

As the recent return or reversal of capital flight has shown, it was the lack of good domestic policies that motivated capital flight in many cases. Overvalued real exchange rates, fiscal deficits, and spreads between domestic and international interest rates, as well as poorly developed domestic financial markets are often found to be correlated with capital flight. Furthermore, in many cases, taxes on the domestic financial system that were not harmonized with those prevailing in other countries presented an incentive for capital flight. For these reasons, capital flight should be distinguished from portfolio diversification when liberalization of outflows takes place within the context of sound domestic policies.

In some cases the removal of capital outflow restrictions appeared to have the (paradoxical) effect of stimulating a net inflow of capital, presumably by assuring investors that it would be easy to repatriate their money should they wish to do so. In former Yugoslavia (1990) and in Britain (1979), capital temporarily flew in after capital outflow liberalizations. However, in the former Yugoslavia, a worsening economic environment led to a sharp reversal in these flows some nine months after liberalization, and capital controls were reimposed after a further two months (Williamson 1992).

The fact that capital flight has been possible for some individuals does not imply that capital controls are completely ineffective in limiting the exports of capital. Pension funds and other domestic institutional investors are certainly affected by capital outflow restrictions. In Chile the private social security system (pensions funds) was until recently not allowed to invest its assets abroad. The new rules now allow the pension funds not only to gain from the increased diversification potential but also to be better adapted to deal with the demands on their funds arising from the age structure of the Chilean population (Meltzer 1992).

Figure 2-3 Annual flows of capital flight from developing countries
(World Bank residual method)



Source: World Bank staff estimates.

Risk management

Increased financial integration implies higher capital mobility and increased risk sharing (box 2-3). Developing countries, often already price takers in financial and trade markets, are typically exposed to idiosyncratic risks (the weather, for example), which could be diversified away at low cost in the international capital markets through financial integration, particularly of the stock market. Simulations show that the benefits of risk sharing associated with higher capital mobility are large because sharing reduces consumption risk, leading to a larger supply of risk capital and higher growth. By one measure, the welfare gains could be several times greater than initial wealth for some regions of developing countries (Obstfeld 1992).

To get most of the benefits of increased financial integration, there is a need for improved management of external exposure to exchange rate, interest rate, and commodity price risk. Past methods to manage these exposures—which have included general borrowing, contingent finance, reserves management, domestic and international commodity price stabilization schemes, and export diversification—

do not in many instances meet the requirements of urgency and flexibility needed in an environment of increased financial integration. Moreover, they can be costly. With the tools available now in financial markets—swaps, options, and futures—there is much scope, especially for the private sector, to improve the hedging of exchange rate, interest rate, and commodity price risks. Hedging of these external price risks should play a more prominent role in the many developing countries that have a large exposure to volatile financial and commodity markets.

A recent example is Mexico's hedging of a significant part of the oil price risk it incurs on its exports. In late 1990 and during the first half of 1991, Mexico used financial risk management tools to protect the next six months of its earnings from crude oil exports (which are about 1 million barrels a day) against a price drop. Spreading the transactions over several months and among a number of intermediaries, Mexico was able to hedge what amounted to a significant quantity without much difficulty. By using these contracts, Mexico effectively ensured some minimum price (about US\$ 17 a barrel) of its main export over the near future. In addition, Mexico established a special contingency fund to protect

Box 2-3 Financial integration requires risk management

Developing countries have historically experienced much larger external shocks than have industrial countries—about twice as high as a percentage of GDP, and external creditors have in general not been willing to finance the shock. Public sectors in some developing countries have also been hedging their external risks using risk management instruments, such as futures, options, and swaps, for some time (for example, the Central Bank of Chile and the cocoa marketing board in Ghana; note also the example of Mexico's oil hedging, discussed in this chapter). Since these tools are less dependent on the willingness of external creditors to lend, they are generally more readily available to transfer risk to the international capital markets at low cost. Increased financial integration and the large role of the private sector now requires that the private sector also has ample access to these tools.

Although creditworthiness and cash flow issues are almost always a limiting factor, it is often the institutional and legal framework within the country that prevents private entities from accessing these markets. The Colombian economy, for example, is heavily exposed to coffee prices, with coffee exports accounting for about US\$ 1.5 billion. Private coffee exporters do not hedge for long periods, however, because exports contracts are not "opened" by the institution supervising coffee exports for more than three months, and the (regulated) cost and fees to be paid domestically for exports beyond three months remain, therefore, uncertain. At the same time, a well-functioning international hedging market for long-term contracts exists. But because the risk introduced by the variable costs set by the regulatory body is greater to the private exporter than

are the risks of variable international coffee prices, exporters have no incentive to hedge.

In addition to the institutional framework, the law in Colombia had also restricted hedging by private entities. The framework was revised in 1992 when parliament adopted legislation allowing the private sector to hedge interest rate, commodity, and currency risks in the international markets. This also allowed the national oil company to initiate hedging on its exports, which in recent years have risen to about US\$ 2 billion.

In many cases, permitting or encouraging private businesses and public sector enterprises to access readily available instruments will also lead to a stabilization of the overall economy and government tax revenues, especially when distortions are minimal. Provided this hedging is done within an authorized set of guidelines, properly supervised, integrated with other risk management and external borrowing activities, and insulated from the government budget, there is no role for the government. Occasionally, however, it may be necessary for the government to direct private sector risk management instruments itself for the benefit of the country as a whole. Such a situation may arise, for example, in case of a (private or state-owned) refinery importing and refining crude oil for domestic purposes. From the viewpoint of the refinery, locking in or ensuring a minimum margin for its refining operations and passing the price risk on the refined product onto its consumers are most desirable. For the country as a whole, hedging the total crude oil import bill would be more desirable. Setting incentives for the refiner to hedge the overall crude oil import bill may then be necessary.

against a trend decline in oil prices. The risk management served to reassure investors that regardless of oil price movements, the economic program and the budget would be sustained. Hedging should not be expected, on average, to realize cash profits but rather to reduce the volatility of commodity earnings.

Note

1. For a full exposition of the methodology employed to compute shocks and the response of countries in terms of adjustment and financing, see McCarthy and Dhareshwar (1992).

Foreign direct investment: benefits beyond finance

Foreign direct investment (FDI) flows to developing countries have increased at a rapid pace, reaching an estimated US\$ 38 billion in 1992, a fourfold increase since the mid-1980s and a 50 percent increase over the past two years. FDI now represents the dominant form of resource flows to developing economies and the primary source of private capital for low-income countries, accounting for more than one-quarter of aggregate net flows and exceeding total long-term debt flows.

This chapter argues that FDI is a large and growing source of equity investment that brings with it considerable concomitant benefits: technology transfer, management know-how, and export marketing access. Many developing countries will need to be more effective in attracting FDI flows if they are to close the technology gap with high-income countries, upgrade managerial skills, and develop their export markets.

Growing importance to developing countries

After a spectacular growth in the second half of the 1980s, global FDI flows have declined over the last two years from their peak of nearly US\$ 200 billion in 1989. By contrast, FDI flows to developing countries have increased, reflecting improved macroeconomic performance (particularly in some Latin American countries, following debt reduction agreements), more welcoming regulatory regimes (for instance, in Thailand), and active privatization and debt conversion programs. The share of FDI going into developing countries increased from a low point of less than 12 percent in 1987 to 22 percent in 1991 (table 3-1).

The concentration of FDI flows is pronounced on the part of source countries. Two countries—the United States and Japan—accounted for nearly 70 percent of the entire FDI flows to developing countries in 1990 (box 3-1). A consequence of source country concentration is the so-called triad pattern of FDI

flows, with its regional associations, which appears to be growing more accentuated. For example, U.S. multinationals favor Latin America, whereas Japan and the Asian newly-industrialized economies (NIEs) are the main source of FDI in Asia. There has also been some growth in intradeveloping country flows, for example from Korea to China. For the countries of Eastern Europe, the European Community is the major source of FDI.

By host country, the concentration is less marked. The percentage share of absolute flows in 1991 was 35 percent for the top three recipient countries and 71 percent for the top ten. This apparent concentration largely disappears when FDI is scaled by recipient GDP or gross domestic investment (GDI) (table 3-2). Top recipients' ratios of FDI-GDP and FDI-GDI were often not very different from the averages for all developing countries of 1.1 percent and 4.5 percent, respectively. Exceptions were Argentina, Malaysia, and Venezuela, with high FDI-GDI ratios, and Malaysia, with a high FDI-GDP ratio. If the ratios of FDI to GDI for all developing countries rose to the level of the highest individual ratio, the increase in aggregate net flows would be huge—about US\$ 120 billion per year, or more than three times the current level.

Regional associations are accompanied by a differentiation in sectoral composition. FDI in East Asia tends to contribute to new fixed capital formation (especially power and infrastructure), but the bulk of flows in Latin America has been directed to the purchase of existing companies. Often these existing companies are capital hungry (for example, Argentina's and Venezuela's telecommunications industries) and can be expected to attract future flows to support investment in excess of initial outlays.

In the 1980s and 1990s, FDI flows have shifted from the manufacturing and extractive sectors to the services sector, particularly the new capital-intensive service industries, such as telecommunications, transportation, banking, and public utilities, which

Table 3-1 FDI flows to developing countries

Flow	1971	1976	1981	1986	1991
FDI to developing countries (US\$ billions)	2.7	3.9	12.9	9.8	35.9
Share of global FDI (percent)	23.0	22.2	22.8	13.0	22.1

Note: Excludes Saudi Arabia.

Source: IMF *Balance of Payments Yearbook* and World Bank estimates.

are being privatized and opened to FDI in a number of developing countries (figure 3-1 and box 3-2). During 1988-92, privatization transactions in developing countries amounted to US\$ 56 billion. It is estimated that about US\$ 14 billion, or 25 percent of

the privatization proceeds, were financed by external capital flows, with the balance accounted for by debt-equity conversions and local financing. Infrastructure and financial services accounted for three-quarters of these transactions (figure 3-2).¹

Box 3-1 Japan's foreign direct investment in developing countries

Despite a recent slowdown, foreign direct investment (FDI) from Japan has grown at a rapid pace since the mid-1980s. Japan became the leading source of FDI flows to developing countries in 1989, with a total of US\$ 14.5 billion (on a notification basis, as compiled by the Japanese Ministry of Finance). Japanese FDI flows have since declined from their 1989 peak, reaching US\$ 11.6 billion in 1990 and a lower level estimated for 1991, but they still represent roughly one-third of the total FDI in developing economies.

Japanese foreign investment has been (increasingly) concentrated in Asia, which accounted for more than 60 percent of Japan's FDI in developing countries in 1990. Latin America and the Caribbean was the second most favored developing country destination for Japanese foreign investment. In 1990, Japanese FDI in Latin American and Caribbean countries amounted to US\$ 3.6 billion, but this region's share in the total has shown a steady decline over the years. Japanese FDI in other developing country regions remains insignificant.

Manufacturing sectors, led by electric and electronic manufactures and chemicals, attracted nearly one-third of Japanese FDI in developing countries, showing a gradual increase in their share in the total throughout the second half of the 1980s. The bulk of Japanese investment in manufacturing industries in developing countries, however, went to the Asia region. Among the secondary and tertiary industries, the financial sector (including commerce and insurance) and the transportation sector were most active in receiving foreign investments from Japanese transnational corporations. A large share (about 30 percent, excluding offshore banking centers) of Japanese FDI in Latin America and the Caribbean was in the finance sector.

The surge in Japanese FDI, especially in the late 1980s, appears to have reflected several major factors, includ-

ing: liberalization of capital transactions, large current account surpluses, appreciation of the yen, and strong performance of the domestic stock market (which resulted in a substantial reduction in the cost of capital for Japanese multinational corporations until 1991) (Froot 1990).

Among other factors contributing to the increased FDI flows, particularly to developing countries (mostly in Asia), were the trade frictions with Japan's major trading partners, which directed some export-oriented foreign investments to developing countries. While the improved policy and regulatory environment in host countries provided an additional impetus for FDI flows, source country conditions appeared to have played a greater role in the dramatic surge in Japanese FDI flows since the mid-1980s.

Recent survey data (World Bank/JCIE forthcoming) show that large trading companies—often representing overseas business activities for their associated conglomerates—have been the leading Japanese direct investors in manufacturing sectors, whereas a major share of overseas direct investments in financial sectors has been represented by life insurance companies in Japan. Nippon Life Insurance, the leading life insurer in the world, held the largest stock of FDI, amounting to yen 3.8 trillion (or roughly US\$ 30 billion equivalent) at the end of 1989.

Declining corporate profitability and weak financial markets in Japan, coupled with general economic slowdown, are attributable to the recent downturn in FDI outflows from the country. Nevertheless, in view of mounting trade surpluses, Japan's relatively low FDI-to-GNP ratio, and improving prospects for global economic recovery, Japanese FDI is expected to continue to be the major source of financing for many developing countries in the 1990s.

Table 3-2 Major destinations of FDI to developing countries, 1991

Countries	US\$ millions	Share of recipient	Share of recipient
		GDP (percent)	GDI (percent)
All developing countries	35,895	1.1	4.5
Mexico	4,762	1.7	7.4
China	4,366	1.2	3.3
Brazil	1,600	0.4	2.0
Malaysia	3,455	7.4	20.5
Argentina	2,439	1.9	15.1
Thailand	2,014	2.2	5.6
Indonesia	1,482	1.3	3.6
Korea, Republic of	1,116	0.4	1.0
Venezuela	1,914	3.6	19.2
Turkey	810	0.8	3.9

Note: FDI based on net inflows, balance of payments basis. Data not yet available for Saudi Arabia.

Source: IMF Balance of Payments Yearbook and World Bank estimates.

Impact of FDI on the host country

FDI can contribute to the growth of host economies through various channels in addition to physical capital formation, including technology transfer, human capital (managerial skills) development, and promotion of foreign trade. Typically, however, FDI should not be counted on for medium-term balance of payments support, because of high profit remittances. And its benefits will be lost if the host economy is heavily distorted.

One example of benefits is that foreign-owned firms may stimulate local productivity through backward linkages to service suppliers and the labor force and by serving as a model of working practices and management techniques. It has been argued (Julius 1991) that the best measure of FDI's impact is not simply the initial balance of payments transaction but additionally the foreign firm's local purchases from suppliers and sales to customers in the host market, because these are analogous to exports and imports. For the United States, for instance, total 1987 exports were less than half the sales by U.S.-owned firms abroad.

Foreign affiliates of transnational corporations can make a direct contribution to technological advancement in host developing countries through a stimulus to research and development (R&D) expenditures, changes in product and export composition, and higher factor productivity. During the past decade, for example, data gathered by UNCTAD for U.S. majority-owned affiliates in developing

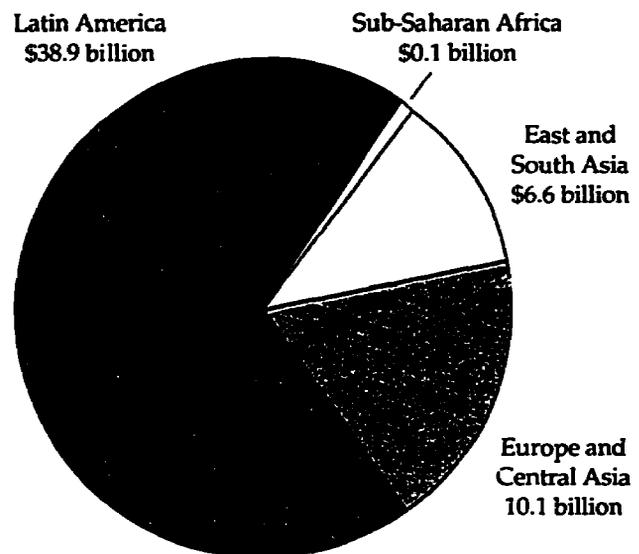
countries show that the share of R&D expenditures in sales, albeit small, has increased (UNCTAD 1992). Technology may also be transferred by way of non-equity channels such as licensing and subcontracting.

Although direct employment by foreign-owned corporations in developing countries is small (less than 1 percent of the workforce), foreign affiliates accounted for more than a quarter of employment in manufacturing in more than half of a group of developing countries for which data were available (UNCTAD 1992). Much of this employment was engaged in production with high technological and industrial know-how, for example electrical and electronic equipment, non-electrical machinery, and chemicals.

Their presence in the manufacturing sector has also enabled foreign firms to generate a high share of manufactured exports. For example, foreign firms account for more than half of manufactured exports in Malaysia, Mexico, and the Philippines, and a recent survey of firms in Thailand found that the share was nearly three-quarters.

The macroeconomic impact of FDI varies considerably by region and country, a recent study (Fry 1992) finds: outside the Pacific Basin developing countries, FDI has tended to substitute for other capital flows, whereas in Pacific Basin countries, it has been addi-

Figure 3-1 Value of privatization transactions in developing countries, 1988-92



Note: Based on 279 privatization transactions reported.
Source: World Bank staff estimates.

Box 3-2 Role of privatization programs in facilitating FDI flows

During the period 1988-92, assets amounting to at least US\$ 206 billion were privatized globally, with developing countries accounting for 27 percent.

By far the most active region within the developing world was Latin America and the Caribbean, accounting for 70 percent of all developing-country privatizations, followed by Europe and Central Asia with 18 percent and Asia with 12 percent (see figures 3-1 and 3-2). Sub-Saharan Africa did not manage to benefit from the recent wave in privatization. Although minor transactions were completed, the only sizable ones occurred in Kenya and Nigeria during this period, amounting to not more than US\$ 100 million. Within the developing world the most intensive privatizer in recent years is Mexico, which, with almost US\$ 22 billion, accounted for nearly half of all privatization transactions in the developing world in such sectors as airlines, banking, mining, steel, and telecommunications.

These often quite significant amounts of privatization transactions do not, however, imply an equal increase in foreign direct investment. First and foremost, a major

share of these purchases are undertaken by domestic investors and thus simply represent a change in ownership without any balance of payments effects. Second, the use of debt-equity swap facilities results in a reduction of external debt rather than direct foreign exchange earnings. It is estimated that during the second half of the 1980s, Chile, the country with the most extensive and liberal debt-equity swap program in the developing world, allowed 80 percent of foreign direct investment into the country through swap financing, compared to almost 60 percent in Brazil and 30 percent in Mexico (United Nations 1992). Argentina recently stepped up the use of debt-equity swaps, and more than US\$ 12 billion of external debt has been converted since 1990. Thus, the immediate gain in the form of foreign exchange might not be large. The budgetary impact has been strongly positive in Latin America, but that will not necessarily hold true for forthcoming privatizations in Eastern Europe and the FSU. The principal motivation for privatization, therefore, is to raise efficiency, and that in itself will tend to attract FDI.

tional to domestic investment and has not, therefore, financed the pre-existing balance of payments (that is, both domestic investment and the current account deficit have increased). Coupled with the empirical observation that profits on FDI often climb quite steeply after an initial period of unprofitability (figure 3-3), this suggests that FDI should not generally be viewed as a means of financing balance of payments needs over the medium term (box 3-3).

Regional trade arrangements and FDI

Regional arrangements already directly influence more than 40 percent of international trade flows (Primo Braga and Yeats 1992). This figure is expected to surpass the 50 percent mark with the implementation of the North American Free Trade Agreement (NAFTA) and the "widening" of the European Community in the context of an array of preferential trade arrangements between Western European countries and the former socialist economies.

The experience of both the EC (in the context of the Single Market Initiative) and the North American economies (in response to the Canada-U.S. free trade agreement and the NAFTA negotiations) seems to support the idea that the formation of a regional arrangement may spark an investment boom. Some of this boom may represent FDI creation, some FDI diversion from elsewhere. Once the first wave of investments occurs, however, the sustainability of the FDI wave will depend on the scope for additional

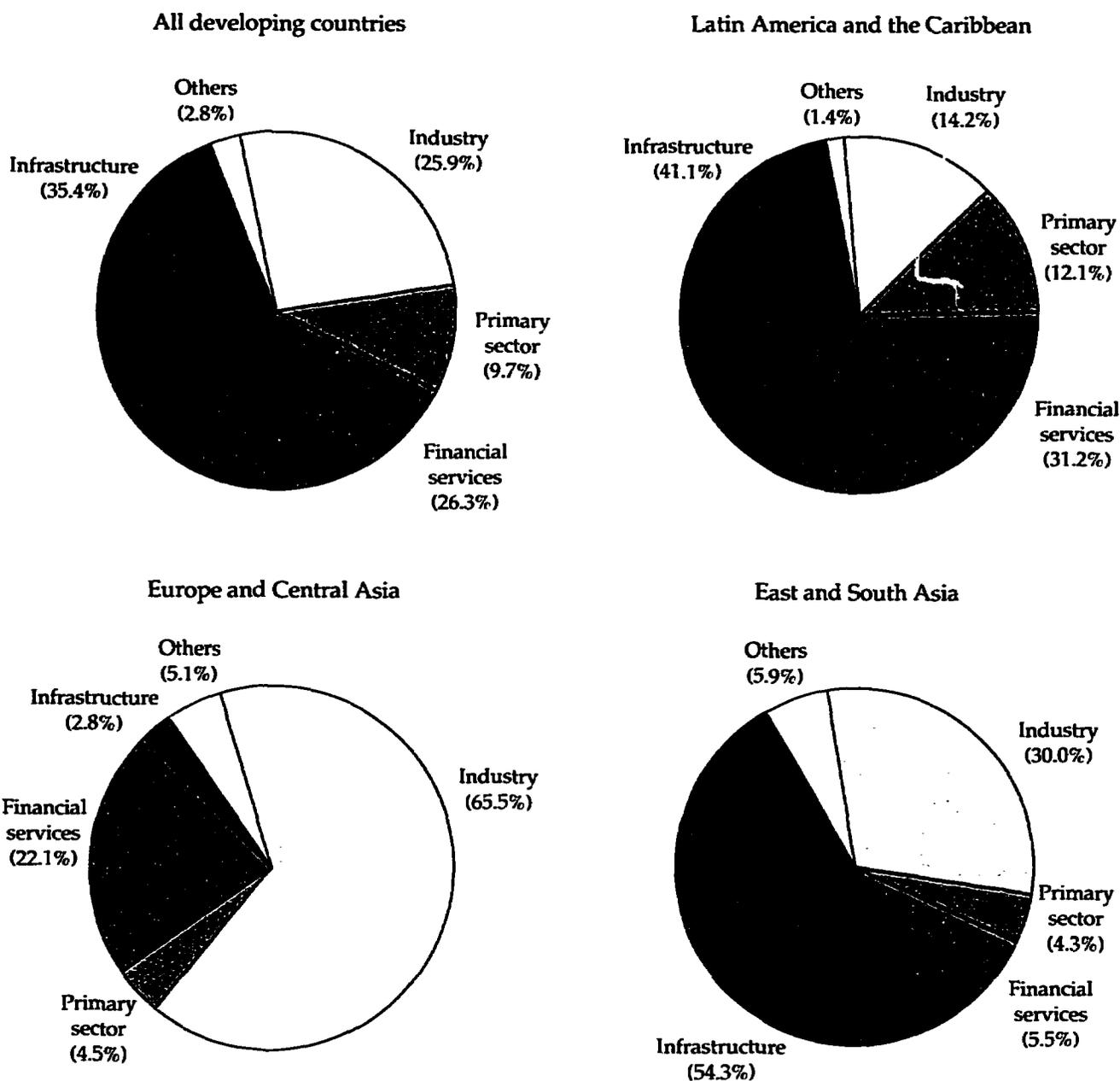
efficiency-driven investments consistent with the locational advantages of the member countries, not to mention the overall macroeconomic environment.

Developing countries can be affected by these developments in several ways. First, assuming that the pool of global savings is relatively inelastic in the short run, the bulge in investment demand may imply a higher cost of capital for the rest of the world. Second, companies may divert funds originally earmarked for investments elsewhere to the members of the regional arrangement. Third, to the extent that these new investments increase the competitiveness of companies in the member countries, exports from other developing countries may experience declining market shares.

These potential negative externalities should not be exaggerated, however. Some of these impacts (for example, the sharp increase in the demand for investment) are bound to be transitory. And even though the increase in competitiveness of firms located in the EC and in the NAFTA countries may pose a challenge for exporters from developing countries, losses in market share may be more than compensated for by the economic expansion of these "blocs" engendered by the investment expansion. It is also worth noting that efficiency-driven FDI in North America and Western Europe will tend to concentrate in industries in which most developing countries do not hold a comparative advantage.

Taken alone, these arguments suggest that the indirect effects of regional trade arrangements would

Figure 3-2 Value of privatization transactions in developing countries by sector, 1988-92
(percentage share)



Note: Infrastructure includes power, telecommunications, and transport. Primary sector includes petroleum, mining, and agrobusiness. Industry includes manufacturing, chemicals, and heavy industry.
Source: World Bank staff estimates.

not cause a significant diversion of FDI from developing countries. This conclusion seems to add strength to the perception that the "new" regional initiatives are not necessarily a threat to a liberal trade order or that at least they will not generate significant trade diversion (at an aggregate level) from nonmember

countries (Page 1992 and Primo Braga 1992). There are, however, some important qualifications to this line of argument.

In those sectors in which pre-existing levels of protection (for example, textiles and clothing, frozen-concentrated orange juice) are relatively high, future

Box 3-3 Determinants of FDI flows

Political and economic stability are vital for attracting FDI. Beyond that, however, there is much that we do not yet know about what determines FDI flows. Aside from the primary determinants—sound macroeconomic environment and growth potential, creditworthiness, export market access, and an adequate and transparent regulatory regime—a number of other factors that could attract or deter FDI flows have been identified. One set emphasizes relative rates of return and portfolio choice. Another set emphasizes market imperfections and suggests that FDI is the result of some firms having special skills such as technological and managerial advantages. Yet another set emphasizes important complementary variables, such as political instability, government regulations, and tax policy. Recent work suggests that home (that is, source) country taxation matters as much as (if not more than) host country taxation in multinationals' investment location decisions (Joo Sung Jun 1992). There is also evidence that financing opportunities in the host country could play a role in attracting FDI inflows.

A huge volume of literature—both conceptual and empirical—currently exists, providing alternative explanations for a wide range of factors that contribute to the flow of foreign investment to host countries. The most important determinants of FDI appear to be the firm-specific attributes that underlie the competitive advantages of transnational corporations, the ability of transnational corporations to gain from internalizing market relationships, the strengths of particular host countries as locations for foreign production by transnational corporations, and the policies of host and home countries.

Among these factors, certain firm-specific assets may be the primary determinants of whether FDI takes place, whereas locational factors—such as market size and the prospects for increased sales, labor cost,

and tariffs—are important in determining where the FDI takes place. Host country policies provide a necessary precondition for attracting FDI, although effective policies by themselves may not be sufficient to stimulate large inflows of FDI. Although firm-specific factors are largely beyond the control of host countries, the macroeconomic environment can be improved by sound policies, and, as a result, country creditworthiness can be raised, thus influencing a multinational corporation's decision on location and size of direct overseas investment.

Traditional factors that determined FDI flows to developing countries in the 1970s and early 1980s, such as low labor cost, product life cycle, and the servicing of a protected market, although still important, have weakened. In many industries, the proportion of labor cost to total manufacturing cost has declined, and new patterns of the international product life cycle have developed. Changes in technologies in some sectors have altered the economic scale of production, weakening the case for offshore production in low labor-cost countries. In this new environment, FDI flows generally have been attracted to developing economies with an efficient and dynamic private sector, accompanied by responsive institutions and a highly motivated skilled labor force. The pattern of incentives and the extent to which various incentives are used to promote FDI have undergone significant changes over the past two decades (OECD 1989.) The general trend in recent years has been less frequent uses of microincentive measures. A reorientation or realignment of investment incentives has also taken place, with continuing emphasis on proactive (rather than defensive) measures. There also has been a noticeable trend away from horizontal, sectorwide schemes to vertical ones—for instance, promoting the use of new technologies.

FDI flows may expand supply capacity in member countries (Mexico in the case of NAFTA, Eastern European countries in the case of the evolving EC) at the expense of more efficient producers in developing countries. It is true that this result should not be blamed on the regional initiatives per se but primarily on the maintenance of protectionist trade policies by the member countries (a powerful reminder of the relevance of a successful conclusion of the Uruguay Round of trade talks). In any case, this outcome can significantly harm certain export industries in developing countries over the long run.

Another qualification refers to the fact that these arrangements may explicitly promote investment (and trade) diversion by discriminating against nonmember countries. Restrictive rules of origin are the instrument of choice in this context. In testimony to

the U.S. Congress in 1992, the U.S. Trade Representative cited as one of the achievements of NAFTA that "strict rules of origin [would] restrict benefits of NAFTA to North American-made products." Rules of origin are designed to influence sourcing decisions by manufacturers that wish to take advantage of preferential duty-free access in FTA partner markets. The adoption of restrictive rules of origin may hinder new investments from third countries in member countries or affect prevailing outsourcing practices in a discriminatory fashion. In both circumstances, they tend to have an antitrade bias from the perspective of nonmember countries.

Component-outsourcing FDI and horizontally-integrated FDI are particularly vulnerable to the influence of restrictive rules of origin. In the case of component-outsourcing FDI, the introduction of

more restrictive rules of origin can disrupt pre-existing trade networks and divert trade in favor of firms in the member countries. NAFTA, for example, is expected to affect outsourcing in certain segments of the electronics industry. Asian picture tubes are currently incorporated into television sets assembled in Mexican *maquiladoras* and then exported to the United States. More restrictive rules of origin may divert trade in favor of North American producers, curtailing the demand for the existing installed capacity of tube producers in Asia, which is oriented toward the North American market (U.S.-OTA 1992).

In the case of horizontally-integrated industries, more restrictive rules of origin also tend to foster trade diversion, thus being particularly disruptive for intrafirm trade. The recent dispute over Honda cars produced in Canada (Honda was accused of not complying with the rules of origin established in the Canada-U.S. free trade agreement) illustrates the type of conflict that will become more common as regional arrangements with complex rules of origin expand their geographical and economic coverage.

Finally, it is also worth mentioning that even in the absence of explicit discrimination, the threat of future discrimination may induce the flow of FDI by nonmember countries into the regions either to avoid future discrimination or to defuse the threat of it (in the context of what has been called *quid pro quo* FDI).² Japanese investment in the EC in the 1980s is often rationalized in these terms—that it was a response to fears associated with the possibility of “Fortress Europe” (Balasubramanyam and Greenaway 1992).

Policy implications

If it is accepted that FDI, like trade, can foster international competitiveness, then the main policy task for industrial and developing countries alike is to establish (ideally in a multilateral forum) a legal, foreign exchange, regulatory, and institutional framework and an administrative and commercial environment that promote openness to FDI. For example, there have been discussions in multilateral forums of the desirability of a code of conduct on the transfer of technology and for environmental safeguards. An additional task for developing countries is to adopt sound policy (for example, outward trade orientation) if they are to reap the benefits of FDI.

Host country policies have an important bearing on the amount and character of FDI received. Consistent and stable macroeconomic policies are fundamental in establishing a private sector that is conducive to investment. Also vital is a foreign exchange regime that affords ready access to foreign exchange for imported inputs and freedom to remit dividends and profits and to repatriate capital. For-

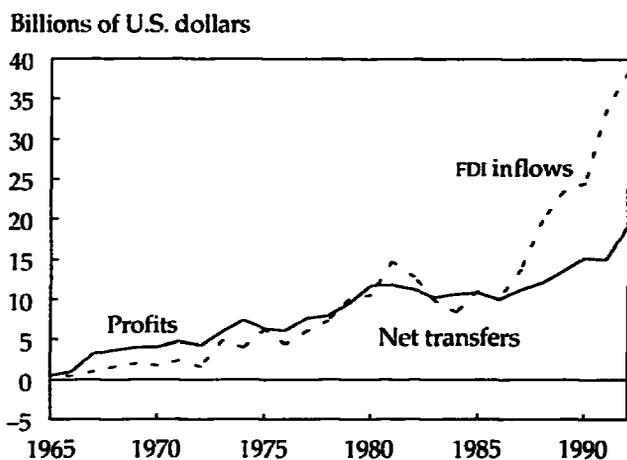
eign exchange controls remain, albeit to varying degrees, in a number of large developing countries, including Brazil, China, India, Korea, and Nigeria.

FDI is likely to be facilitated by a legal framework that advocates open admission policies, subject to certain clearly defined and permissible restrictions (for example, national security); recommends equal treatment of foreign and domestic investors as a general principle; provides for the free transfer of profits, other payments due from the investor to external creditors, and repatriation of capital; and legitimizes expropriation only in accordance with legal procedures in pursuance of public purpose, without discrimination, and against payment of appropriate compensation defined under detailed criteria to reflect market value. These principles would imply, for example, easing restrictions on the freedom to employ expatriates and on the number of prohibited sectors in the host economy.³

Developing countries should consider specific additional measures to dismantle barriers to FDI—by easing regulations, strengthening institutions, and liberalizing the financial sector. World Bank Group⁴ advisory work on FDI suggests that the existing developing country impediments to FDI may be broadly categorized into three groups: legal (noted above), institutional, and regulatory constraints.

Institutional problems are found in areas ranging from overstringent bureaucracy to the presence of too many institutional bodies or to the absence of an investment-enabling agency. Egypt, Sri Lanka, the

Figure 3-3 Net transfers on foreign direct investment



Note: Net transfers on FDI are defined as net inflows of FDI (including reinvested profits) minus total profits.
Source: IMF balance of payments statistics.

Philippines, Uruguay, and Venezuela have been weak in these areas. Almost all of the nineteen countries studied for this advisory work had an archaic and inefficient regulatory structure (for example their tax policies), often resulting in a complex combination of incentive and disincentive elements that created distortions in the economy without providing a concomitant attraction for investors. These complexities illustrate the importance to investors of not only the degree of hospitality that FDI policies embody but also their transparency and consistency.

Special FDI incentives such as tax concessions, investment allowances, training subsidies, and subsidized credits often prove unnecessary for attracting FDI and may make it more difficult for the country to achieve its other developmental objectives (World Bank 1991a). Moreover, certain tax incentives for FDI may simply result in a transfer of funds from the host country to the home country treasury without benefiting foreign investors. An example would be when the home country taxes residents on the basis of their worldwide income and allows a tax credit against foreign taxes paid by their residents—the system that is adopted by most major industrial countries (with the exceptions of France and the Netherlands) (OECD 1989).

Source countries too have their part to play. Among macroeconomic policy measures, import policies (that is, open trade) appear to have the most effective impact on FDI flows because export-oriented FDI strategies are critically dependent on fair and stable access to markets in industrial countries.

Other macroeconomic policies—particularly fiscal, monetary, import, and foreign exchange policies—in industrial countries exert a substantial impact on the outward volume, although not on the destination, of FDI but are necessarily governed by other considerations (Bachmann 1991).

Additionally, there are a number of micro-specific measures that source countries can take to facilitate FDI flows to developing countries. Such measures include the conclusion of double taxation treaties, tax sparing and bilateral investment agreements, and improvement in promotional programs and institutions dealing with FDI in developing countries.

Notes

1. Debt-equity conversions do not generate an external capital inflow, only a change in external liabilities. However, they are reported in balance of payments statistics as a notional inflow offset by a corresponding debt repayment outflow. This is one reason why FDI numbers need to be interpreted with care.

2. See Bhagwati (1985) for further details on *quid pro quo* FDI.

3. An extensive set of legal guidelines appeared in "Legal Guidelines for the Treatment of Foreign Investment," a report prepared by the World Bank for the Development Committee, September 1992.

4. The World Bank Group includes the International Bank for Reconstruction and Development (IBRD), the International Finance Corporation (IFC), the International Development Association (IDA), and the Multilateral Investment Guarantee Agency (MIGA).

Rise in portfolio flows: short-lived or sustainable?

4

Private portfolio flows, both bonds and equity, have grown explosively from 1989–92 (figure 4-1). These flows, which averaged under US\$ 6 billion a year in the period between 1982–88, were estimated at US \$34 billion in 1992. The revival of portfolio flows to developing countries was led initially by a sharp expansion in bond financing. Several countries that had previously been absent from international capital markets re-entered this market beginning in 1989. Equity flows through closed-end country and regional funds, which until recently had been the main vehicle for participation in developing country stock markets, were fairly modest during 1989–90. In the past two years, the use of international share offerings by several major middle-income countries to privatize public sector firms and the opening up of many developing country stock markets to direct participation by foreign investors have boosted equity portfolio flows.

The increase has gone largely to a few countries in Latin America where gross equity portfolio flows have grown more than tenfold in four years, from US\$ 434 million in 1989 to an estimated US\$ 5.6 billion in 1992 (table 4-1). Much of these flows have represented repatriated flight capital, some high risk or high return funds, and a small part institutional investment, at a time of falling U.S. dollar interest rates and recession in the United States.¹ The issue arises, therefore, as to whether access to these flows will prove to be sustainable.

In this chapter, we shall largely focus on equity flows because the capacity to issue bonds is determined overwhelmingly by creditworthiness considerations rather than other host or source country factors.

We argue that the potentially huge supply of portfolio equity flows to developing countries is motivated not only by source country conditions but also by host country creditworthiness, a desire for diversification, host and source country regulations, and investor information. Therefore, access to these flows should prove to be sustainable to a reasonable degree.

Benefits of equity portfolio flows

The primary benefit conferred by equity portfolio flows on a host country is a reduction in its cost of capital (in addition to the presumed benefit of efficient employment of resources by the most creditworthy corporations in the private sector). Prices in developing country stock markets typically have jumped higher upon opening to foreign investors, indicating that removal of market segmentation has permitted the domestic rate of return to fall. But the benefit is not realized by all types of these flows. International stock trading (through so-called American depository receipts—ADRs) and direct purchases on domestic stock markets appear to be much more beneficial than are country funds (comprising largely closed-end mutual funds), because they alter the way in which stocks are priced domestically.

An important international capital market instrument in lowering the equity cost of capital has been the ADR (box 4-1). ADRs are a good way to attract external capital flows and diversify a foreign investor base. The companies in developing countries that have listed ADRs have seen their costs of capital decline. In the case of *Teléfonos de México*, for example, its cost of capital has fallen by some 10 percentage points (relative to Mexican rates of return generally) since the offering of its ADRs in May 1991. Evidence from industrial countries also indicates that dual stock listings lead to a lower cost of capital—for example, in the case of Canadian firms by 0.71 percent (Alexander, Eun, and Janakiraman 1988) and for Australian firms by close to 2 percent (Eun, Claessens, and Jun 1992).

The issuance of ADRs has not only lowered the costs for individual firms themselves but also for other domestic firms through important spillover effects. An important contrast here is with country funds, which are unlikely to have the same spillover benefits because there are not the same direct price linkages.² Country funds, however, can be useful in promoting investor familiarity with an emerging

stock market in instances where direct purchases are difficult or when a country is concerned about large foreign ownership.

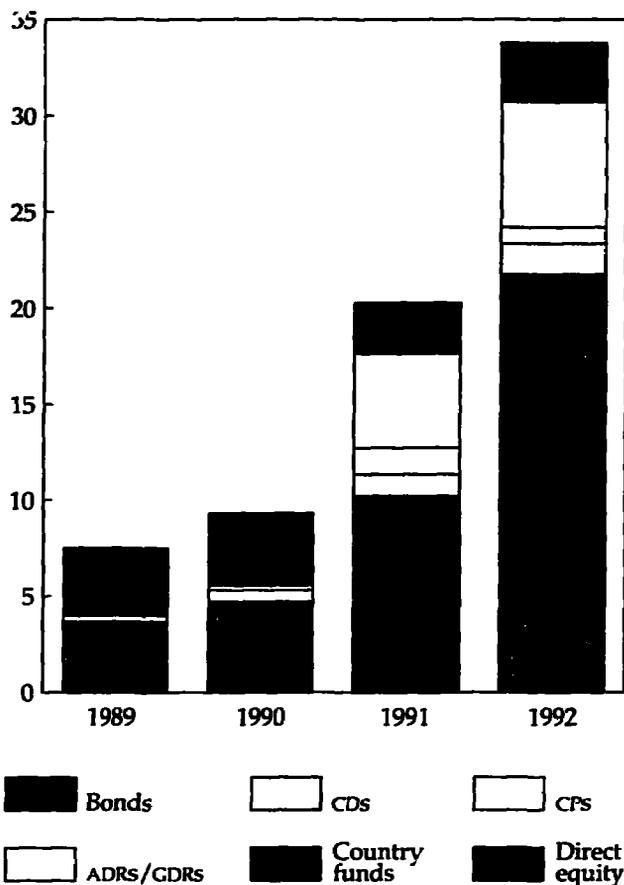
The cost of equity capital has also come down as a result of large capital inflows and associated increases in stock prices, in part driven by a perception of improved earnings prospects. After significant capital gains on most local stock markets, local price-earnings ratios are now at their highest levels in most developing countries with a well developed stock market, indicating lower required rates of return on equities. In India, for example, the average price/earnings (P/E) ratios at the end of 1992 were more than 30, up from 18 in 1986. Following the liberalization in Brazil, the P/E ratio increased 40 percent in 1991 alone, and direct foreign equity purchases in 1991 and 1992 exceeded US\$ 1 billion. For the group of emerging countries as a whole, the P/E ratio is now 17, up from 10 in 1986.

Supply of portfolio investment

It is difficult to assess accurately the global availability of funds for equity and bond portfolio investment because data sources are fragmented, partial, and lacking uniformity. Nevertheless, a rough order of magnitude can be estimated for the assets of certain classes of institutional investor in some major OECD countries. At the end of 1991, total assets of pension funds and of life and casualty insurance companies in five major industrial nations (Canada, Germany, Japan, United Kingdom, and United States) stood at about US\$ 8.3 trillion. Allowing for other classes of funds (for example, mutual and trust funds) and including other countries, a global figure might be as much as US\$ 14 trillion. Much, though not all, of those funds are invested in equities; the balance is

Figure 4-1 Gross portfolio flows to developing countries, 1989-92

Billions of U.S. dollars



Source: World Bank staff estimates.

Table 4-1 Portfolio investment in Latin America, 1989-92

(millions of U.S. dollars)

Type of investment	1989	1990	1991	1992 ^a
Equity investment from abroad	434	1,099	6,228	5,570
of which				
Closed-end funds	416	575	771	293
ADRS/GDRS	—	98	4,697	4,377
Direct equity investment	18	426	760	900
Bonds	833	2,673	6,848	11,732
Commercial paper	127	0	1,212	840
Certificates of deposit	0	0	670	1,100
Total	1,394	3,772	14,958	19,243

— Not available.

a. Estimated.

Source: World Bank staff estimates.

Box 4-1 American Depository Receipts (ADRs)

An ADR is a U.S. dollar-denominated negotiable certificate that represents a non-U.S. company's stock publicly traded in the U.S. market.¹ An ADR is issued by a U.S. commercial bank, which acts as the "depository" for an equivalent number of foreign stocks that are deposited with the depository bank's foreign custodian.

Since ADRs are quoted and pay dividends in U.S. dollars, they essentially repackage the underlying foreign securities so that these securities assume the identity of U.S. securities in the global capital market. Thus ADRs are traded freely as U.S. securities on organized stock exchanges or the over-the-counter market. Compared to public offerings of stocks, ADR issues can save foreign firms time and costs because these issues are exempt from the registration and disclosure requirements of the U.S. Securities and Exchange Commission (when issued under Rule 144A, which is explained in the main text).

As international capital markets have become more integrated during the 1980s, the ADR market has grown substantially, with 886 ADR programs from 34 countries as of the end of 1991. Recently, firms from developing countries have started to launch ADR issues, highlighted by the landmark deal of the US\$ 2 billion facility for

Teléfonos de México (Telmex) in 1991. In the same year, Mexican firms raised more than US\$ 4.3 billion in U.S. capital through ADR issues, exceeding the country's combined syndicated loan and bond issues by more than US\$ 1 billion over the same period.

ADR firms are not the only beneficiaries of this low-cost access to the U.S. capital market. To the extent that purely domestic (internationally non-tradable) stocks are correlated with the internationally traded stocks in local markets, non-ADR firms also benefit in terms of higher stock prices and, thus, lower costs of capital. This economywide benefit arises from the spillover effects of international trading in some securities on the pricing of purely domestic securities (Eun, Claessens, and Jun 1992). Studies have shown that spillover effects have been particularly strong in the case of the Telmex offering because Telmex stock is highly correlated with the Mexican stock market index.

1. Some firms have made use of Global Depository Receipts (GDRs), which are similar to ADRs except that they are issued simultaneously in multiple markets and traded under a global book-entry settlement system.

largely placed in bonds, money market instruments, and real estate.

Focusing on equities, the share of institutional funds invested in "emerging" (that is, developing country) stock markets is on average less than 5 percent of foreign equity holdings, equivalent to less than a quarter percent of total assets (Chuhan 1992). No less significant than the average is the heterogeneity across countries and, within a country, across funds. Shares held in foreign securities are high in the U.K. and Japan, intermediate in the United States and Canada, and low in Germany. In recent years, U.S. investors have steadily increased both gross and net purchases. And within source countries, many funds hold no emerging market stocks at all while a few hold significant shares.

In the U.S., institutional investors have tended to favor Latin American securities. In contrast, U.K. institutional investors are more heavily invested in the emerging markets of the Far East, although interest in emerging Latin American economies has increased in recent years. Japanese institutional investors have invested very little in emerging markets and have typically lagged behind U.S. and U.K. institutional investors in some of these markets. Japanese investors, although recognizing the improved creditworthiness of several Latin American countries, have directed their investments to southeast

Asian markets because of the proximity of these markets to Japan. Furthermore, U.S. and other institutional investors have largely invested through ADRs and private placements (under Rule 144A, which was introduced by the U.S. Securities and Exchange Commission in 1990 and which reduces the time that institutional investors are obliged to hold securities and thereby enhances the securities liquidity).

An alternative perspective on supply is given by the share of emerging stock markets in global equity markets. After remaining fairly constant from 1982–87, emerging stock market capitalization as a share of world equity markets more than doubled to 6 percent by the end of 1991. Moreover, since their 6 percent share is still far below the share of emerging market GDP in world output—13 percent—the size of emerging stock markets is likely to continue to grow at a brisk pace. If industrial country investors held developing country stock in proportion to the emerging markets' share (about 6 percent), resource flows would increase by some US\$ 40 billion per year, an increase that is bigger than current flows of FDI. Although it is true that industrial country investors do not typically hold foreign stocks in proportion to their global share—they exhibit home country bias, partly attributable to inadequate investor information—that bias should be offset for developing coun-

tries by the big diversification benefits they offer and, in some instances, the high risk-adjusted returns (see figure 6 in the Summary).

Despite considerable variation in returns across emerging stock markets, these markets have on average performed strongly in recent years, although less well in the second and third quarters of 1992. The International Finance Corporation's composite index of total returns for twenty emerging markets rose 148 percent during 1987-92, exceeding returns on the U.S. stock market (Standard and Poor's 500) of 119 percent. The IFC's Latin America regional index rose 321 percent during this period. The best performers in Latin America were Argentina, with a return of 1,057 percent, and Mexico with a return of 939 percent. The IFC's Asia regional index was not quite as strong but nevertheless posted a gain of 153 percent during this period. Among the Asian economies, Thailand was the strongest performer with a

total return of 598 percent. Among the emerging stock markets of Africa, Nigeria and Zimbabwe yielded returns of 43 percent and 29 percent, respectively. The poorest performing market was Jordan with a total return of 19 percent during this period, reflecting the consequences of the Gulf crisis.

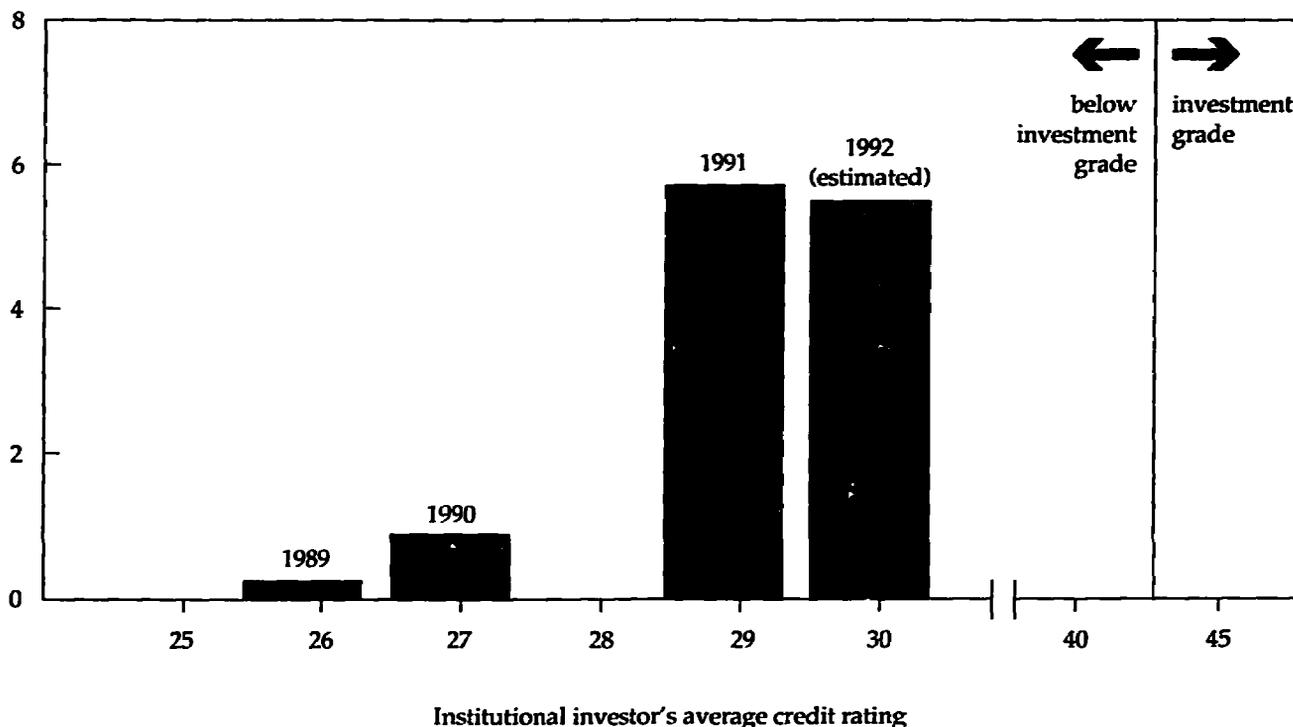
Determinants of equity portfolio flows

Undoubtedly, a main factor determining the destination of equity portfolio capital is developing country creditworthiness. What the recent experience in Latin America shows is that markets are willing to recognize and reward improvements in creditworthiness quickly (figure 4-2).

Country risk ratings compiled by popular investment publications indicate that there has been a general improvement in the creditworthiness of several developing countries in recent years. Both *Institu-*

Figure 4-2 Creditworthiness and equity portfolio flows to selected emerging markets in Latin America

Billions of U.S. dollars



Note: Includes Argentina, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico, Peru, Trinidad and Tobago, Uruguay, and Venezuela. The lowest institutional investor credit rating corresponding to a Baa3 rating, Moody's minimum investment grade, is used to determine the investment cut-off. The cut-off is based on September 1992 ratings. Average credit rating has been computed using equal weights. Equity data exclude regional funds.
Source: *Institutional Investor*, international edition, various issues.

tional Investor, which presents a semiannual country credit rating in March and September, and *Euro-money*, which presents a yearly country risk rating in September, show that the creditworthiness of major Latin American economies has tended to improve in recent years. *Institutional Investor's* average credit rating (using equal weights) for the emerging market countries of Latin America rose impressively from 26.1 in September 1989 to 30.4 in September 1992. During the same period the average credit rating for the region also rose, albeit at a slower rate, from 20.1 to 22.2. Thus can be observed a positive co-movement between credit rating and portfolio flows for the emerging Latin American countries.

The South Asia and East Asia and Pacific emerging markets and the smaller group of emerging markets in these regions with investment grade ratings also display an association between creditworthiness and high portfolio flows. The credit rating for the emerging markets of these regions has fluctuated within a narrow band.

For countries with established access to international capital markets, the association between creditworthiness and portfolio flows is between absolute levels rather than changes in these levels—a continuing high level of creditworthiness has been associated with a continuing high level of portfolio inflows. This is illustrated by investor attention to emerging markets in Korea, Thailand, and, increasingly, Indo-

nesia. First-time entrants to international equity markets in 1992, such as corporate borrowers in China and India, have also had success in issuing new shares. By the same token, the absence of interest in Sub-Saharan Africa implies a perceived lack of profitable investment opportunities.

A second factor is regulatory and other impediments in the markets themselves. Developing-country investment regulations vary from placing no significant restrictions on the purchase of stocks and repatriation of income and capital to severely restricting access. Nine emerging markets permit free entry, and a further twelve permit relatively free entry, while six others are restricted (table 4-2). Nonetheless, a survey of institutional investors suggests that they do not consider restrictions in host countries to be a crucial factor impeding portfolio investment (Chuhan 1992). Investors are apparently more concerned about the limited availability of information, small market size, and illiquidity.

Several countries, notably Argentina, Brazil, Colombia, Pakistan, and Malaysia, have removed all significant restrictions in terms of registration procedures, and foreign investors can freely purchase listed stocks, albeit sometimes subject to a ceiling. These countries also allow free repatriation of income and capital. This trend in financial liberalization has continued into 1992. Korea opened its market to foreign investors at the beginning of 1992,

Table 4-2 Availability of listed stocks in emerging markets to foreign investors (as of March 31, 1992)

<i>Free entry</i>	<i>Relatively free entry</i>	<i>Special classes of shares</i>	<i>Authorized investors only</i>	<i>Closed</i>
Argentina	Bangladesh	China	India	Nigeria
Brazil	Chile	Korea		
Colombia	Costa Rica	Philippines		
Jordan	Greece	Zimbabwe		
Malaysia	Indonesia			
Pakistan	Jamaica			
Peru	Kenya			
Portugal	Mexico			
Turkey	Sri Lanka			
	Thailand			
	Trinidad and Tobago			
	Venezuela			

Note: Some industries in some countries are considered strategic and are not available to foreign or nonresident investors, and the level of foreign investment in other cases may be limited by national law or corporate policy to minority positions to aggregate more than 49 percent of voting stock. The summaries above refer to "new money" investment by foreign institutions; other regulations may apply to capital invested through debt conversion schemes or other sources. India liberalized foreign investment rules in September 1992.

Key to access: Free entry—no significant restrictions to purchasing stocks; Relatively free entry—some registration procedures required to ensure repatriation rights; Special classes—foreigners restricted to certain classes of stocks designated for foreign investment; Authorized investors only—only approved foreign investors may buy stocks; Closed—closed entirely or access severely restricted.

Source: IFC *Emerging Stock Markets: Factbook 1992*.

and later in the year India allowed foreign institutions to invest freely in its local stock market (table 4-2 shows classifications at end-March 1992, before that change). Most other developing countries, however, have entry restrictions in terms of registration procedures and exit controls, such as requiring permission from the central bank or some other national authority to repatriate income and capital. A few countries, including China and Korea, restrict foreigners to certain classes of stocks.

Accounting standards and disclosure requirements in developing countries are often below international standards (Chuppe and Atkin 1991). Disclosure requirements are needed to provide financial information to investors, and sound accounting standards are required to facilitate proper assessment of a firm's financial information.

The IFC's *Emerging Stock Markets: Factbook 1992* indicates that in a majority of emerging market countries, accounting standards are not of internationally acceptable quality. In addition, publicly traded companies are generally not required to file quarterly financial disclosure statements. The outcome is that industrial country investors are unable to evaluate properly companies in these countries. Rigorous disclosure standards in international markets have hindered developing country companies wishing to list their shares in these markets. This is particularly true for issuers in the U.S. market who have to meet rigorous disclosure and reporting requirements under the U.S. securities laws. Not surprisingly, medium-size companies and first-time issuers in foreign markets have avoided onerous U.S. reporting requirements by using the private placement rather than the public market.

Securities law and investor protection laws in developing countries generally fall short of internationally acceptable levels. Laws are either rudimentary or not rigorously applied. Developing country stock markets require an appropriate level of government regulation and supervision in order to promote public confidence. The correct balance between government control and self regulation by the private sector should be determined by the level of development of the market. Although excessive government regulation is likely to reduce competition and allocative efficiency, lack of adequate government regulation and supervision will undoubtedly constrain the proper functioning of the stock market. National regulators in developing countries need to adopt a transparent pricing system, strictly enforce contracts, and establish credible insider trading laws. Regulation in the form of capital adequacy requirements for

securities firms and margin requirements on trading may also be necessary.

In addition, regulators need to establish an efficient settlement system so that the transfer of securities does not take several days (as is often the case). The market scandal involving the Bombay stock exchange in the first half of 1992 highlights the pitfalls of complex regulation, weak supervision, and an inefficient settlement system. In this situation, low profits on lending resulting from regulation, including priority lending requirements and interest rate structure, encouraged Indian state banks to seek rapid and high returns. State banks, which cannot invest in the stock market, nevertheless violated regulations and passed funds to brokers for investment in the local stock market. Because of the lack of a fully computerized and efficient settlement system, the supervision system failed to realize that these banks were carrying out massive and inappropriate off-balance-sheet transactions.

In China the lack of transparent and fair procedures for public offerings provoked accusations of insider trading and price manipulation over a share issue in August 1992 and resulted in rioting. The country has recently established a national regulatory agency to provide coherent securities policies for its two securities markets in Shanghai and Shenzhen.

Developing country stock markets are relatively small, despite a tremendous growth in market capitalization in recent years. Small size poses a liquidity problem for these markets because large blocks of stocks cannot be traded without substantially moving prices. Average daily trading volumes on emerging stock markets have risen dramatically, but they are still well below those in the major industrial country stock markets. This relative illiquidity of small markets is particularly troublesome to institutional investors who are used to investing large sums in any individual market.

Market concentration in developing country stock markets is also relatively high. The share of market capitalization held by the ten largest stocks is more than 30 percent for virtually all emerging markets—the comparable figure for the U.S. is about 15 percent. Thus, a handful of large companies represent a substantial share of market capitalization. Small size and domination by a handful of companies also add to excessive volatility in these markets. In addition, high market concentration increases the scope for insider trading—privileged information is a big factor in moving markets—reducing the attractiveness of small markets for institutional investors.

Table 4-3 Regulatory impediments to outward portfolio investment, by institutional investors in major industrial countries

Country	Restrictions on foreign investments of	
	Insurance companies	Pension funds
United States	<p>Ceiling: varies by state and is typically prohibitive. New York State, which is the most influential state on insurance issues, raised the ceiling on foreign investments of insurance companies to 6 percent from 3 percent in 1990.^a</p> <p>Other: restrictions on credit quality of investment;^b restrictions on composition of assets.</p>	<p><i>Private</i></p> <p>Ceiling: none.</p> <p>Other: "prudent man" rule and diversification;^c charters of some pension funds impose restrictions on credit quality of investments.</p> <p><i>Public</i></p> <p>Ceiling: typical and often binding.</p> <p>Other: charters of some pension funds impose restrictions on credit quality of investments.</p>
Japan	<p>Ceiling: nonbinding at 30 percent of assets in the general account.^d</p> <p>Other: companies place tight restrictions on credit quality of investments; accounting incentives that bias investment in favor of high-income securities against those yielding potential capital gains.</p>	<p>Ceiling: nonbinding at 30 percent of assets in the general account.</p> <p>Other: restrictions on credit quality of investment.</p>
Germany	<p>Ceiling: prohibitive at 5 percent of coverage fund. An EC directive would raise the ceiling on foreign investment, but regulators are still expected to require assured returns on investments.</p> <p>Other: 100 percent matching of liabilities by assets in the same currency; restrictions on credit quality of investment.</p>	<p>Ceiling: prohibitive at 5 percent of assets.</p> <p>Other: 100 percent matching of liabilities by assets in the same currency; restrictions on credit quality of investment.</p>
United Kingdom	<p>Ceiling: none.</p> <p>Other: at least 80 percent matching of liabilities by assets in the same currency for liabilities in any currency that account for more than 5 percent of the total.</p>	<p>Ceiling: none.</p> <p>Other: prudence.</p>
Canada	<p>Ceiling: none. A June 1992 regulation removed ceilings on foreign investments, but limits may be imposed based on prudential considerations.</p>	<p>Ceiling: A December 1991 law progressively raises the ceiling on foreign investment from 10 percent to 20 percent in 1994.</p>

a. Does not include investments in Canada.

b. Investments are rated by the National Association of Insurance Commissioners.

c. The Employee Retirement Income Security Act (ERISA) of 1974, which governs U.S. private pension funds, requires plan fiduciaries to exercise prudence in investment decisions. ERISA also requires plan trustees to diversify investments to minimize risk.

d. Restrictions on postal life insurance are more prohibitive.

Source: Chuhan 1992.

A third factor is source country regulations, both fiduciary and institutional. Fiduciary regulations governing investors are typically more constraining for insurance companies than for pension funds and vary substantially from country to country (table 4-3). German institutional investors, for instance,

have the most stringent controls, while Japanese investors are subject to nonbinding ceilings on foreign asset size. To date, existing regulations have generally not been a binding constraint on outward portfolio investment. Cross-country differences in portfolio investment may be attributed in part to

these regulatory differences and in part to geographical and cultural factors, including investor information. If outward portfolio flows from all source countries behaved like those from the United States, portfolio flows to developing countries would increase by an estimated US\$ 3 billion per year.

In most industrialized countries, insurance companies face ceilings on the share of foreign assets in their portfolios, and they are also frequently subject to restrictions on the quality of investments. Such restrictions are, of course, necessary to ensure sound prudential standards. The issue for developing countries is whether such regulations might not be more standardized between investor groups, consistent with minimum credit standards. Thus, for instance, in the United States, state regulators have imposed severe limits on the external investments of U.S. insurance companies. New York State, which is one of the most influential states on investment issues, only recently raised the ceiling on the foreign investments of life insurance companies from 3 percent to 6 percent (excluding investments in Canada) of assets.

The investments of German insurance companies are also very tightly regulated, and these enterprises have invested only a tiny fraction of their portfolio overseas. German insurance companies are required to invest their assets in a few predetermined categories and in the same currency in which insurance payments are to be made.

On the other hand, Japanese insurers, which are the second largest group in the world, have comparatively less prohibitive restrictions on their external investments, although overall investment practices are strictly regulated. In the 1980s Japan continued to raise the ceiling on the percentage of foreign assets allowed in the portfolio of insurance companies. Ceilings on holdings of foreign assets—30 percent of all assets in the general account—have not been binding since the late 1980s, however, and insurance companies hold a sizable share of their portfolio in foreign securities.³

A more important constraint is the common practice, especially among life insurance companies, of requiring investment grade credit rating (on bonds) for their general accounts. Another relevant restriction on insurance companies' investments is the fact that insurance companies cannot use capital gains to pay dividends to policyholders. Japanese insurance companies, for example, thus prefer high-income securities over equities with a large potential for capital gains.

In contrast to insurance companies, pension funds generally face less stringent controls on foreign investment. They are usually subject to prudent investment and diversification rules and only occasionally

to binding limits on the share of external assets in the total portfolio. The Employee Retirement Income Security Act (ERISA) of 1974, which governs U.S. private pension plans, imposes no regulatory impediments to investment. Thus, there are no quantitative restrictions on private pension funds, although the overall investment strategy has to be prudent, and the portfolio has to be diversified in order to minimize risk. The charters of some private pension plans do not permit pension funds to hold below-investment-grade assets. Unlike private pension funds, public pension funds in the United States are constrained by state investment laws, and the restrictions on these funds' foreign investments are often severe. Not surprisingly, U.S. public pension funds have on average diversified to a lesser extent overseas than have private funds. Pension funds in the United Kingdom also operate under the so-called prudent-man rule, but compared with U.S. private pension funds, U.K. pension funds have diversified abroad to a greater degree.

Several countries continue to maintain regulatory constraints on the foreign assets of pension funds, however. In Japan, the ceiling on the share of foreign assets of pension funds is similar to that on insurance companies, but it is nonbinding. At the other extreme is Germany, where prohibitive restrictions on German pension funds have sharply curtailed the foreign investments of these institutions.

Institutional regulations—for example, stock market regulations—can play an important part in facilitating developing country access. One such regulation is Rule 144A (see above), which permits private placements in the U.S. domestic market and thus circumvents onerous filing requirements for public offerings. It has permitted a number of mostly small developing country borrowers to access the ADR market. Raising capital through Rule 144A ADRs has been especially popular among first-time foreign issuers in the U.S. equity market. The ADR offerings under Rule 144A are usually small, with most of them under US\$ 100 million. One of the largest offerings in this category was a US\$ 636 million issue by Telefónica de Argentina, the Argentine telephone company, in 1991.

A fourth factor is source country economic conditions, for instance low interest rates and poor growth prospects. These conditions are an important but by no means a decisive determinant of equity portfolio flows. If U.S. dollar real interest rates rose by 100 basis points—a large rise—the net flow of portfolio equity would decline by an estimated US\$ 2 billion per year.

A fifth factor is the potential for diversification, set against barriers to capital mobility, such as informa-

tion costs and taxation and the high systematic risk and price volatility in these markets. Investing in emerging stock markets potentially lowers portfolio risk for the global investor. Emerging stock markets are weakly, and in some cases negatively, correlated with stock markets in industrial countries, and therefore these markets provide substantial potential risk reduction benefits to international investors.⁴ Moreover, stock returns tend to be more homogeneous in emerging rather than in developed country markets. There is a strong tendency for all stocks within one market to move together, which implies that market picking is more important than picking good stocks within that market (Divecha, Drach, and Stefek 1992 and Howell and Cozzini 1991).

In addition, emerging stock markets are generally undervalued as measured by price earnings and price-to-book ratios, thus providing investors with a potential for high returns. Several studies have shown that the gains to U.S. investors from holding an international portfolio that contains emerging market stocks are quite high, even allowing for exchange rate changes. But even though emerging markets have outperformed world stock markets, investment in these markets is well below the levels that would be suggested by market capitalization or risk-adjusted return calculations.

Although there is an increasing trend toward diversification into foreign assets, industrial country investors continue to display a large bias in favor of home country risky assets relative to the world market portfolio (Cooper and Kaplanis 1985, French and Poterba 1991, and Tesar and Werner 1992). Thus, U.S. investors such as pension funds and insurance companies, the largest institutional investors in the world, have under 5 percent of their assets invested in foreign securities, considerably less than the 30 percent suggested by risk-return calculations (Wilcox 1992). German institutional investors have under 1 percent of their assets in foreign securities, in sharp contrast to German corporations, which are the third largest owners of FDI stock and major suppliers of FDI (Bachmann 1991). Among the major industrial countries, only U.K. and Japanese institutional investors have a sizable share of their portfolio invested in foreign securities. And even then, Japanese institutional investors are overly concentrated in U.S. securities.

This home bias can be explained by barriers to international capital mobility that increase the cost of ownership of foreign securities (Cooper and Kaplanis 1985 and Demirguc-Kunt and Huizinga 1992). Barriers to foreign investment are a cost to the investor. Besides the easily measurable costs of withholding taxes and direct transactions fees, there are

additional costs that are not easily quantifiable, such as information gathering, possibility of expropriation, and exchange controls.

Developing countries generally levy withholding taxes on interest and dividends and, to a lesser extent, on capital gains. Withholding taxes in emerging stock markets are near international rates, however. Withholding taxes (for U.S.-based institutional investors) on interest and dividends are generally in the range of 10–20 percent, with some countries not imposing any withholding taxes on portfolio income. Moreover, several industrial countries allow investors to receive credit for tax withheld against taxable foreign income. The absence of a double taxation treaty, however, does increase the investor's cost and is a deterrent. Even with a double taxation treaty, a foreign tax decreases the effective return for a tax-exempt pension fund because the fund cannot receive credit in the home country for taxes paid abroad. A few countries also impose a capital gains tax. Since these countries typically do not adjust for inflation when taxing capital gains, they increase the tax base to which the capital gains tax is applied and therefore increase the cost to the investor. Direct transaction fees—for example, stamp duty and broker fees and safe custody fees (that is, fees charged for custodianship services typically provided by banks and stockbrokers to foreign investors who may want to have their foreign securities kept in safe custody) are fairly low.

Policy implications

A major benefit of portfolio flows is a reduction in the cost of capital. The lowering of the cost of equity capital has been helped by the issuance of ADRs, which not only reduce capital costs for the individual firm listed internationally but also bring big spillover benefits to other domestically listed firms. By this means, Telmex, the privatized Mexican telephone company, reduced its cost of capital by about 10 percentage points per year (that is, 1,000 basis points). Spillover benefits to the domestic cost of capital were smaller but of the same order of magnitude.

The volatility of flows notwithstanding, developing country policymakers should therefore consider encouraging the international listing of at least a few stocks. Additionally, they should consider microeconomic reforms of their capital markets, for example, improvements in supervisory and regulatory policies, accounting and disclosure standards, investor protection, and settlement and clearing procedures. Source country regulatory authorities should exam-

ine the scope for relaxation of regulations without jeopardizing prudential standards.

Notes

1. The categories of funding source are not mutually exclusive. Managed high risk-high return funds may well represent a large element of repatriated flight capital.

2. Country funds have a surprisingly close relationship with the markets in which they trade and less with the market from which they originate, implying that

they diversify local risks to a much lesser extent than ADRs, which trade at (close to) local prices (when converted into dollars). See further, Diwan, Errunza, and Senbet 1992.

3. The ceiling was raised from 23 percent to 30 percent in 1986.

4. Although a study by Rogers (1990) shows that the co-movement between some emerging stock markets and the U.S. stock market appears to have permanently strengthened after the October 1987 crash, indicating that links with the U.S. market have increased.

Aid at the end of the Cold War

Aid—or to give its proper name, official development assistance (ODA),¹ comprising grants and concessional loans—accounted for a third of net resource flows to all developing countries in 1992 and for nearly twice that share to the low-income countries. The number of country claimants on aid has been growing fast, however, and donor objectives have been changing. The issues have arisen, therefore, as to whether the underlying slow growth in real aid flows can be augmented to meet special needs and what can be done to improve the quality of aid in respect to distribution and tying to donor procurement. This chapter argues that the aid “pie” at the end of the Cold War is limited at a time when new claimants and the exceptional needs of the reforming socialist economies have appeared. Donors are faced with the problem of how to raise additional resources if they are to meet environmental challenges and avoid shortchanging the needy in poor countries.

There are two forces impelling change: first, the imbalance between slow growth in donor aid budgets and fast growth in the list of claimants recognized as eligible for aid and, second, the change in donor objectives, resulting largely from the demise of communism in Eastern Europe and the former Soviet Union (FSU).

The slowly expanding supply of aid

Donor aid flows in real terms have grown at a respectable but not especially fast rate over the past decade (table 5-1). During 1981–91, aid from OECD, Arab, and CMEA donors averaged 4 percent growth (including significant amounts of debt forgiveness in 1990 and 1991), deflating with a developing country import price index. In terms of donor GNP, however, the position appears less favorable. For example, OECD-DAC figures show that aid as a percentage of GNP in countries that are members of the OECD Development Assistance Committee (DAC) averaged 0.32 percent in 1978–82, 0.33 percent in 1983–87, and 0.33 percent for 1991.² The main

bright spot has been an increase in the degree of concessionality for the poorest countries, with grants often replacing loans.

Donors vary widely from the 1991 average of 0.33 percent of GNP devoted to aid, from 0.20 percent for the United States to around 1 percent each for Denmark, Norway, and Sweden.

While some countries, such as Finland, France, Japan, and Switzerland, have sought to raise their ODA-GNP ratios, others, such as the United States, have reduced their aid in real terms. In the United Kingdom, aid has been growing, following cuts earlier in the 1980s. A recent example of unexpected budget stringency occurred in Sweden, which in the autumn of 1992 was buffeted by the currency crisis in the European Exchange Rate Mechanism (ERM) and was forced to cut its aid budget. A second example is found in the situation of Italy, whose aid budget rose strongly in 1979–89 but declined subsequently. Globally, aid from private voluntary organizations, although small in relation to official aid, has grown more rapidly.

Arab aid has shown major fluctuations, falling throughout the 1980s from its very high levels (in relation to donor GNP) in the 1970s. In its peak years between 1975 and 1981, aid from Arab donors reached higher than US\$ 8 billion per year and accounted for a substantial portion of total net ODA. More recently, in 1990 Arab donors offered strong support to countries later affected by the Gulf crisis, notably Bangladesh, Egypt, Jordan, Pakistan, and Turkey. For 1991 it appears that the amount of such support dropped sharply.

Aid from the FSU and Eastern European donors has fallen since 1986. Although comprehensive data are not available on such aid, it appears that there was a further fall in 1991 and that aid is now confined largely to technical assistance. Previous major recipients were Cuba, Mongolia, and Viet Nam.

One bright spot in aid flows is nongovernmental organizations (NGOs), which form a distinct and growing aid channel. In 1991, NGOs provided about

Table 5-1 Official concessional flows to developing countries by types of flows, 1981–91
(billions of U.S. dollars)

	1981	1986	1991
Official development assistance			
Bilateral loans	24.2	27.4	42.9
Multilateral loans	9.4	7.4	6.5
Official grants ^a	3.4	4.5	6.6
	11.5	15.6	29.8
Real net ODA (1991 US\$ billions)^b			
Bilateral loans	28.6	34.6	42.9
Multilateral loans	11.1	9.3	6.5
Official grants	3.9	5.7	6.6
	13.6	19.7	29.8

a. Excludes technical cooperation grants, which amounted to US\$ 6.4 billion in 1981, US\$ 8.7 billion in 1986, and US\$ 10.5 billion in 1991.

b. Real flows are nominal flows deflated by an import price index for developing countries.

Source: OECD, World Bank.

US\$ 5 billion in grants to developing countries, equivalent to 4 percent of total net resource flows. Nevertheless, since roughly one-third of that amount was funding derived from bilateral government sources, some of the NGO-mediated flow may represent a reallocation of rather than an addition to traditional aid sources.

The prospect in the 1990s, therefore, is for a limited aid pie in real terms.

And new claimants knocking at the door

Meanwhile, the number of claimants recognized as eligible or potentially eligible for aid has grown. The principal criterion for aid eligibility is per capita income, with low-income countries (those with a 1991 per capita income of US\$ 635 or less) recognized as the most deserving. Other criteria include economic performance, the lack of access to private market financing, and the need for food or relief aid.

Three categories of countries appear as new claimants: first, countries that appear now able to support only concessional borrowing (for example, Angola and Mongolia); second, countries that are potentially reactivated aid recipients, following poor economic performance and exceptional factors such as war (for example, Afghanistan, Cambodia, Iran, Jordan, and Viet Nam);³ and third, the republics of the FSU and the formerly socialist economies of Eastern Europe. Some of these countries have been receiving substantial financial support from a single donor and now hope to attract broader creditor support. Viet Nam,

for example, has recently (November 1992) become eligible for Japanese ODA.

Additionally, there is a group of countries that have been receiving bilateral aid and are now deemed eligible for multilateral concessional funds through IDA, the World Bank Group's concessional lending arm. These countries (for example, Côte d'Ivoire, Egypt, and Honduras) have suffered a regression in per capita income, and even if they can support some nonconcessional borrowing, their weak creditworthiness position makes a softening of borrowing terms desirable.

Concerns have been voiced that official concessional support for the republics of the FSU and Eastern Europe could divert aid from other developing countries. (The concerns apply primarily to concessional flows because nonconcessional flows—for example, multilateral lending—are much less constrained.) ODA flows are indeed susceptible to diversion, to the extent that national aid budgets are not increased to cover grants and concessional loans to the FSU republics and Eastern Europe.⁴ Therefore, donors need to take steps to ensure that resources allocated to the reforming socialist economies are additional, or diversion will become a valid concern for the future. Grants from OECD countries to the FSU totaled US\$ 600 million in 1990 and US\$ 2.6 billion in 1991 (while concessional loans were zero). Although comparable figures for earlier years are not available, the amounts for 1990–91 would appear to represent a big increase.

In December 1992 all five Central Asian republics (Kazakhstan, Kyrgyzstan, Tadjikistan, Turkmenistan, and Uzbekistan) were deemed eligible for OECD and DAC aid (recognized by donors as additional legitimate claimants on ODA), and three Caucasian republics (Armenia, Azerbaijan, and Georgia) and Moldova are also prospective recipients.

Official aid from OECD countries to Eastern Europe was US\$ 1.5 billion of concessional disbursements in 1990, and commitments (particularly to Hungary and Poland) are high. It is understood that ODA disbursements to Eastern Europe and the FSU taken together were in the region of US\$ 7.5 billion in 1991, including US\$ 2 billion of debt relief for Poland from the United States. Much of this assistance has been coordinated by the Group of 24 (G-24) countries, established by the EC under 1991 guidelines that provided for balance of payments financing in support of reform.⁵ So far, G-24 financial support has been aimed at Bulgaria, the former Czechoslovakia, Hungary, Poland, Romania, and the former Yugoslavia and was extended in July 1992 to the Baltic countries and Albania.

In assessing the impact of new claimants on aid requirements, it is worth distinguishing those countries whose per capita income lies in the upper-

middle-income range (that is, above US\$ 2,555 in 1991). From the FSU, these countries are Belarus, Russia, and the three Baltic republics (Estonia, Latvia, and Lithuania) and from Eastern Europe, the countries are Hungary and the former Yugoslav Republic. Arguably, the requirements for concessional assistance from these countries are exceptional and temporary (in the form of, for example, technical assistance and temporary food and other emergency assistance).

A rough order of magnitude for the potential additional requirements for ODA from all new low- and lower-middle-income claimants can be found by assigning ODA on the basis of population and per capita income and comparing each claimant to countries of similar per capita income level. On that basis, the potential call on ODA by new claimants would be roughly US\$5.5 billion per year, equivalent to 13 percent of 1991 net ODA to all developing countries. For the reforming socialist economies the best measure of their exceptional requirements may be recent actual receipts, indicating balance of payments needs. Including the upper-middle-income countries of the FSU and Eastern Europe on that basis would add a further US\$ 4.5 billion, bringing extra requirements to US\$ 10 billion per year, or 23 percent of 1991 net ODA.⁶

What these figures suggest is that the call of new claimants on aid funds is a major, but potentially not insuperable, challenge to donor countries.

Distribution and quality of aid

No less than one-third of aid continues to go to middle-income countries. By income group, low-income countries (those with 1991 per capita income below US\$ 636) account for 66 percent of ODA to all developing countries, 25 percent of GNP, and 70 percent of population. Middle-income countries account for 34 percent of ODA, 75 percent of GNP, and 30 percent of population. Within middle-income countries, lower-middle-income countries (those with 1991 per capita income between US\$ 636 and US\$ 2,555) take 27 percent of ODA and have a 22 percent GNP share and a 14 percent population share; for upper-middle-income countries the shares are 7 percent ODA, 53 percent GNP, and 16 percent population. Moreover, the numbers exclude US\$ 2 billion of concessional flows that went to high-income countries in 1991.

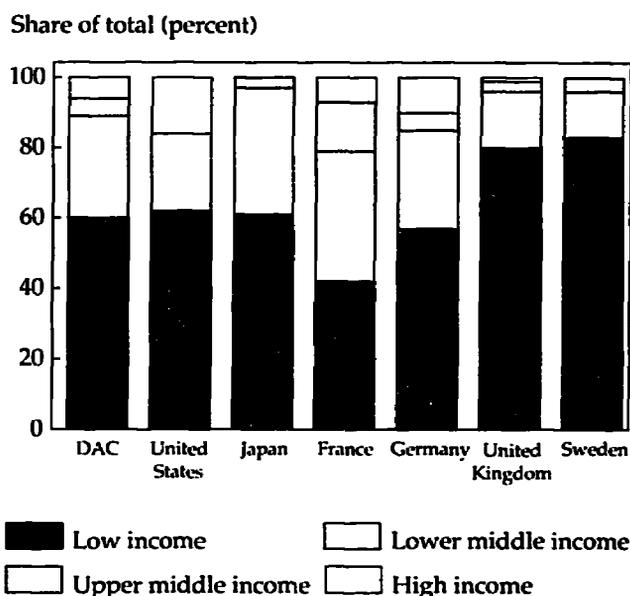
Multilateral aid is substantially more concentrated on the poorest countries than is bilateral aid. In 1991 the share of multilateral aid going to low-income countries was about 90 percent. By contrast, the corresponding share of bilateral aid to low-income countries was around 60 percent. By individual donor, the share of net bilateral aid going to low-income countries varies widely (figure 5-1).

A recent evaluation of the alleged middle-income bias in bilateral aid flows (Clark 1992) concluded that ODA flows from multilateral agencies showed a much smaller bias than did bilateral disbursements (as confirmed by the figures quoted above on distribution by income band). This finding suggests that one way donors could ensure that aid distribution is concentrated on the poorest countries would be to accord higher priority to multilateral channels.

The degree to which bilateral aid is concentrated on a small number of recipients also varies widely among donors. For the period 1986-90, the share going to the top five recipients, for example, is 59 percent for the United States, 50 percent for Sweden, 48 percent for Japan, 33 percent for the United Kingdom, 32 percent for France, and 24 percent for Germany. In 1990, the top five recipients of aid from the United States were (in descending order) Israel, Egypt, El Salvador, the Philippines, and Pakistan; from Japan, they were Indonesia, China, the Philippines, Thailand, and Bangladesh; and from Sweden, they were Tanzania, Mozambique, India, Viet Nam, and Ethiopia. Concentration by recipient is in itself neither good nor bad, but it can be an indicator of donor priorities.

The distribution of overall aid flows also reveals a tendency for smaller countries to receive more aid per capita than larger countries. For example, ODA per capita in 1991 was US \$1.6 for the biggest (India

Figure 5-1 Share of bilateral net ODA to developing countries by recipient income, 1991



Note: Excludes flows not allocated by donors to specific countries.
 Source: OECD.

and China combined), US\$ 6.6 for seven other countries with populations greater than 75 million, US\$ 16.7 for the thirty-nine countries with populations between 10 and 75 million, and nearly US\$ 50 for sixty-seven countries with populations of 10 million or less. In part, this reflects absorptive capacity in the biggest countries and their ability to access non-concessional sources of funds.

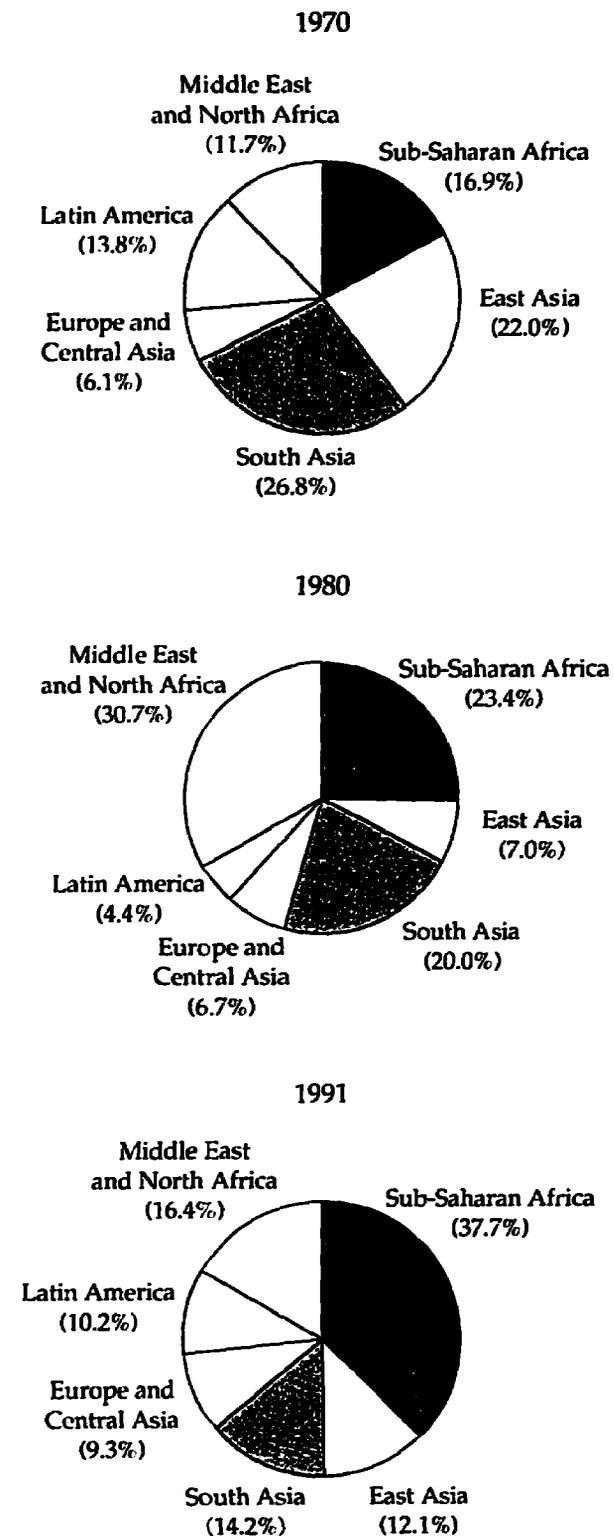
The geographical allocation of ODA (figure 5-2) has shown a strong rise in the proportion going to Sub-Saharan Africa in the past decade; a rise and then a fall in the share going to the Middle East and North Africa over the past two decades; a general decline in the share going to South Asia; and a recent significant increase in the share going to Europe and Central Asia. The rising share for Sub-Saharan Africa reflects donor perceptions of a growing need for concessional assistance to that region. The fluctuations in the Middle East and North Africa share reflect those of Arab donors' contributions. At its peak in 1980 these contributions amounted to more than US\$ 8 billion, concentrated in Jordan, Morocco, Syria, and Yemen. More recently, following the Gulf crisis, the largest recipient was Egypt. The declining South Asia share is perhaps explained by India's growing capacity to access external finance on commercial terms and by a fall-off in Arab donor aid, particularly to Pakistan. In consequence, aid to South Asia grew modestly in nominal terms over the 1980s, below the ODA average. Finally, the recent increase of aid to Europe and Central Asia is accounted for by the FSU.

A key measure of the quality of aid is the extent to which it is tied to procurement in the donor country. Although there has been a trend toward less tying of bilateral aid in the past decade, the extent of tying remains high. In 1989, the OECD-DAC country average was 44 percent for tied and 7 percent for partially untied aid, compared to 48 percent and 12 percent, respectively, in 1977-79. There is evidence, however, that tying declined significantly in 1991.

One area of recent modest progress has been in mixed credits, which constitute an especially beguiling form of tying. Mixed credits (and so-called associated financing), which originated in the 1970s, are a financing package that combines ODA, officially supported export credits, and nonconcessional loans. In practice, the ODA component of mixed credits is effectively tied and represents a domestic subsidy available as a protectionist device.

Attempts to minimize misuse met with success in February 1992 when OECD export credit agencies agreed to amend the guidelines on tied aid credits (the "OECD consensus") to restrict the use of mixed credits. The agreement, if implemented effectively, would virtually eliminate the use of mixed credits

Figure 5-2 Regional allocation of net ODA to developing countries



Note: Based on 115 DRS reporting countries. ODA is the sum of net flows on official concessional debt and official grants, excluding technical assistance.
Source: World Bank, OECD.

for upper-middle-income recipients. OECD-DAC continues to examine policy options to extend untying.

Donors appear to tie aid in order to improve domestic employment and the balance of payments or as a protectionist reaction to other donors' tying. The overall impact of tying on any single donor country's exports is, however, likely to be very small because aid is only a fraction of donor exports. This suggests that the lobbying of individual sectors or business firms in the donor country for directed subsidies is a more rational if less laudable explanation for tying. Coordinated action among donors would be necessary to offer realistic prospects of a substantial reduction in the degree of tying. Multilateral aid, in contrast to bilateral, is untied.

The cost to recipient countries of tying aid is hard to estimate, but one study (Jepma 1991) suggests that the direct cost may range upwards from 15 percent of aid provided and that circumstantial evidence produces individual cases of much higher excess cost margins. By direct cost is meant the excess in prices of aid-financed deliveries compared to prices of comparable goods and services not based on an explicit aid policy. On this basis, untying all aid flows would generate economic benefits to developing countries of as much as US\$ 4 billion per year, which equals one-fifth of the nominal increase in aid flows over the past decade. In addition, the indirect costs—such as administrative overheads, misallocation of skilled labor, and a distorting preference for capital-intensive, import-oriented projects—are substantial. To be sure, costs are reduced to the extent that the recipient country is able and willing to substitute flexibly between alternative sources of donor funds (Bhagwati 1985); substitutability is, however, hard to estimate, and, hence, estimates of costs should only be considered as orders of magnitude.

Multilateral aid, in addition to being concentrated on the poorest countries, is untied and plays a key role in improving the effectiveness of all aid through the efforts of multilateral agencies to promote sound policies in recipient countries and in coordinating donors. In this context, the recent successful conclusion to the IDA Tenth replenishment ("IDA 10") negotiations is to be welcomed. Donors committed SDR13 billion (Special Drawing Rights, of the IMF) over a three-year period, representing a maintenance of IDA in real terms. Also noteworthy is the growing share of aid channeled through the EC.

Aid and trade

Protectionism in OECD markets is particularly vexing for aid-receiving countries that are, through their own export efforts, attempting to generate additional financial resources for industrialization.

The importance of trade barriers, both tariff and non-tariff, is illustrated by the position of fourteen aid-receiving countries (table 5-2).⁷ First, the average levels of tariffs that several of these developing countries face are relatively high.⁸ Bangladesh, Dominican Republic, Korea, and Sri Lanka face OECD tariffs that average 7 to 10 percent (the average level of OECD tariffs on all imports is now 4 percent), while Haiti—because of the high share of textiles and clothing in total exports—encounters average tariffs over 11 percent. Second, nontariff barriers (NTBs) are also of major importance as over 50 percent of the exports of Hungary, Pakistan, Poland, Thailand, and Sri Lanka encounter these measures, while 80 percent of Bangladesh's exports face NTBs.⁹

What value of additional export earnings might occur if the tariff and NTB restrictions reported in table 5-2 were removed?¹⁰ Total exports from China, Jamaica, Pakistan, Philippines, and Thailand would increase by at least 40 percent if OECD trade barriers were removed. Other countries would gain even more: Bangladesh, Dominican Republic, Haiti, Jamaica, and Sri Lanka—countries whose total exports contain a high share of textiles and clothing—could double their exports (table 5-3). Even in the case of a "least developed" country such as Haiti (which has major clothing exports to the United States market), the projected trade gains are more than double ODA assistance. These gains would also expand the demand by these countries for OECD exports in a mutually beneficial expansion of trade.

In short, the old phrase "trade not aid" would certainly be the most advantageous prescription for this set of countries.

Changing donor objectives

Bilateral (as distinct from multilateral) ODA has generally pursued a variety of objectives besides economic development—for instance, commercial, political, humanitarian, and cultural interests. These objectives have influenced the allocation of aid, the degree to which it has been tied, the conditionality attached to it, and hence its effectiveness. The end of the Cold War, by altering foreign policy objectives, has brought major changes also in aid objectives (OECD 1990). Accordingly, donors now find it less expedient to overlook economic mismanagement and poor governance by recipient countries.

Although it is difficult unambiguously to identify donor objectives (not least because of the multiplicity of ministries responsible for individual donor programs),¹¹ among the most prominent publicly stated ones are the following: reduced poverty; human development; environmental protection; reduced military spending; efficient economic management;

Table 5-2 Average tariffs and nontariff barriers for aid-receiving countries in all OECD markets

<i>Exporting country</i>	<i>1988-89 value of OECD imports (billions of U.S. dollars)^a</i>	<i>Average OECD tariff (percent)^b</i>	<i>Share of imports covered by nontariff measures (percent)^c</i>
Bangladesh	1.0	6.9	80.5
China	31.8	5.4	43.4
Dominican Republic	1.8	9.9	38.3
Haiti ^d	0.4	11.2	16.7
Hungary	3.3	2.9	57.4
India	9.4	2.3	49.2
Jamaica	0.9	6.2	43.7
Korea, Republic of	43.4	7.1	37.1
Malaysia	12.9	2.2	40.8
Pakistan	2.7	3.5	65.6
Philippines	6.6	5.7	35.9
Poland	4.8	2.5	50.8
Sri Lanka	1.0	8.3	63.9
Thailand	11.4	3.3	51.4

a. Imports of all OECD countries except Turkey.

b. The trade-weighted average of the MFN, GSP, Lomé Convention, or other preferential tariff actually applied to imports.

c. Some products are covered by multiple forms of NTBs.

d. Designated by the United Nations as one of the "least developed" countries.

Source: World Bank, UNCTAD, and SMART database.

private enterprise development; enhancement of the role of women; good governance and democratic government; and the observance of human rights and the rule of law.

A recent example is the 1992 White Paper on Japanese ODA released by Japan's Ministry of Foreign Affairs in October 1992. The report states that Japan's post-Cold War ODA should play a more active role in "promoting democracy, human rights, and world peace" as well as in addressing "global environmental issues." The White Paper listed examples of the application of the ODA guidelines adopted in April 1991 by the government. These guidelines necessitated full consideration of trends in military expenditure and the democratization process in the recipient countries. Kenya and Malawi were cited as examples where the Japanese government refrained from pledging new aid at international donor meetings; Indonesia and Thailand were cases where Japan, together with other nations, expressed concern over antidemocratic incidents. In August 1991 Germany similarly announced that its 1992 foreign aid budget would reflect a new policy of linking foreign aid to recipient military expenditures.

Many donors now recognize the importance of support for environmental protection to promote sustainable development. Increasingly, they are viewing these needs as a legitimate call on aid budgets. Additionally, the role of aid in supporting eco-

nomics reforms and stabilization has been complemented by official nonconcessional finance, both multilateral and bilateral.

A recent study (Hewitt and Killick 1992) of major donors indicated that aid objectives had proliferated and grown more diffuse in recent years. Of the ten most commonly articulated donor aid objectives, more than half are considered non-high priority by more than half the major donors whereas three—efficient economic management, environmental protection, and observance of human rights and the rule of law—command widespread support. The common consistency and feasibility of these objectives will be an important determinant of the effectiveness of aid in coming years.

Policy implications

Aid at the end of the Cold War needs rethinking as to its rationale and needs reworking as to its adequacy and quality. Donor countries should explore new ways to augment the slow growth in aid flows of recent years, should ensure that available aid is concentrated on the poorest countries and on exceptional needs in support of reform, and should reduce tying, which is a form of protectionism. For some recipient countries a better alternative to more aid is more trade. For recipient developing countries the stark message is: show a capacity to use aid effectively—through both sound economic policy and effective governance—or risk losing it.

Table 5-3 Estimated effects of trade barrier liberalization in major OECD markets on selected aid-receiving countries' exports

<i>Aid-receiving country</i>	<i>Estimated effects of removal of trade barriers value (millions of U.S. dollars)</i>		<i>Projected increase in exports as a percent of</i>	
	<i>Total</i>	<i>Percentage increase</i>	<i>1991 debt service</i>	<i>1991 ODA assistance</i>
Bangladesh	985	104	168	46
China	12,313	41	146	568
Dominican Republic	1,712	95	632	—
Haiti ^a	421	100	—	214
Hungary	581	22	14	—
India	3,123	35	42	188
Jamaica	555	62	79	282
Korea, Republic of	18,006	44	298	—
Malaysia	1,943	16	59	423
Pakistan	1,492	58	75	126
Philippines	2,820	44	82	229
Poland	1,725	37	172	—
Sri Lanka	1,016	105	236	430
Thailand	4,613	43	93	623

— Not available.

a. The projected export expansion is more than ten times the 1991 value of debt service of ODA assistance.

Sources: Debt service statistics drawn from the World Bank 1992c; net ODA assistance from OECD 1992a, table 37. Figures include assistance from multilateral organizations and Arab countries.

Notes

1. Official Development Assistance consists of flows to developing countries and multilateral institutions undertaken by the official sector, with the main objective of promoting economic development and welfare and with a concessional grant element of at least 25 percent.

2. These figures exclude technical cooperation grants and apply to all donor aid, including ODA to high-income countries. Source: OECD/DAC.

3. Additional exceptional demands have also arisen because of the drought in Africa: for instance, in December 1992 Zimbabwe received a US\$ 1.4 billion package, from donors coordinated by the World Bank, of largely concessional assistance.

4. Grants and concessional loans to some of the reforming socialist economies are not classified as ODA. Nevertheless, the concern remains that they may be funded out of diverted ODA.

5. Included under this umbrella are nonconcessional bilateral loans disbursed in conjunction with IMF programs and untied cofinancing with World Bank structural adjustment loans.

6. For net ODA excluding technical cooperation grants. Including those grants, the extra requirement would be 19 percent of 1991 net ODA.

7. Fourteen exporters were chosen to reflect the experience of countries at different stages of development; they include least developed countries such as Bangladesh and Haiti as well as more industrialized exporters such as

Korea and Malaysia. Two Eastern European countries (Hungary and Poland) were added to assess the importance of OECD trade barriers that these (former) socialist countries face.

8. Due to major departures from the MFN principle, developing countries may have conflicting objectives relating to further Uruguay Round tariff reductions. For example, countries benefiting from the GSP or receiving Caribbean Basin Initiative or Lomé Convention preferences may have a strong incentive to ensure that MFN duties are not cut further since this would reduce current tariffs preferences and result in export earnings losses.

9. Numerous studies that estimated nominal equivalents for NTBs indicate that the protective effect is often many times that of current MFN tariffs.

10. Although estimates are subject to some margin of error, the World Bank-UNCTAD "Software for Market Analysis and Restrictions to Trade" (SMART) model was developed to permit order-of-magnitude projections of trade barrier effects (see World Bank 1992a, Appendix C for a description of SMART). The SMART projections incorporate the effects of tariffs as well as NTBs for which reliable ad valorem equivalents exist. For the present exercise, NTB nominal equivalents were drawn (primarily from Laird and Yeats 1990) for OECD imports of textiles, clothing, footwear, iron and steel, sugar, vegetable oils and fats, fish, and several agricultural products.

11. For instance, ministries for foreign affairs, finance, trade and industry, and economic planning.

6

The international economic environment for developing countries

Together with a sound economic policy, the international economic environment is an important determinant of developing country growth. The principal elements of this environment—industrial country growth, world trade, real interest rates, and commodity prices—are largely exogenous to developing countries, that is, they *affect* developing countries but are largely *unaffected by* developing countries. They work through a variety of channels, including demand for developing country exports, developing country access to industrial country markets, terms of external finance, and terms of trade.

The outlook for this environment in the 1990s is in some respects worse, from a developing country viewpoint, than the 1980s situation and in some respects better. Long-run growth in the industrial countries is expected to be slow because of slow productivity growth. World trade, however, is projected to rise faster than OECD-country growth, in part because of trade between developing countries and in part because of the impact of regional arrangements. Long-term real interest rates are projected to remain high largely because of poor savings performance in some major industrial economies, but the trend of real commodity prices is projected to end its long-run decline, because of a continuing shift by developing countries out of primary production. And aid flows are projected to grow modestly in real terms but less fast than growth in the number of new claimants.

The considerable uncertainties attached to these expectations include the possibility of a prolonged recession in some G-7 economies and the rise of trade protectionism.

Current OECD activity

Steady growth of OECD economies and fewer barriers to entry into their markets are very important to developing countries. Unfortunately, neither situation is currently assured. On the one hand, it is possible that present hopes for improvement will be

dashed by a protracted recession in the industrial countries and a less than successful conclusion to the Uruguay Round of trade negotiations. On the other hand, present risks do not include a rise in inflationary pressures of the sort that were so destabilizing prior to the recessions of 1975 and 1982.

By 1992 the economies in six of the seven major industrial countries had converged to a disappointing rate of growth in the 1–2 percent range (table 6-1),¹ reflecting unexpectedly delayed recovery in the United States, a major slowdown in Japan, and relatively poor performance in Europe, especially outside Germany (table 6-2). This slow growth became self-reinforcing through international repercussions. By the end of 1992 the German economy had flattened out as well, and both Europe and Japan appear to be experiencing a very slow year in 1993, despite the recent wave of interest rate reductions. The U.S. economy picked up in the second half of 1992, but the recovery in North America remains patchy and uncertain. Projected growth rates for 1993 are low for a recovery period (around 2 percent year-on-year for the G-7 as a whole), and the range of uncertainty is especially wide in Europe.

In Europe, following the near collapse of the exchange rate mechanism in the fall of 1992, growth prospects now appear particularly uncertain and fragile. Inflationary pressures continue in Germany, leading to a high level of real interest rates in Europe that is unprecedented in a time of recession. Real GNP in the Western *Länder* of Germany is widely expected to decline from 1992 to 1993 while France and Italy may see little, if any, positive growth.

In the United States it appears that a sustainable recovery in growth of overall output may be under way. Some of the factors that have depressed U.S. growth in recent years will continue to have a depressing influence on consumer and business confidence: reduced defense spending, the deflation of asset values, and the accumulation of debt. Thus, forecasters are generally not optimistic that U.S. growth will much exceed 3 percent even by 1994,

Table 6-1 Comparison of forecasts of GDP/GNP for G-7 economies, 1992-94

Comparisons	NIESR (Feb. 93)	Consensus (Mar. 93)	DRI (Jan. 93)	IMF (Jan. 93)	OECD (Dec. 92)	Range
<i>GDP/GNP growth rates for 1992</i>						
G-7	1.5	1.6	1.5	1.5	1.5	1.5-1.6
United States	2.1	2.1	2.1	2.0	1.8	1.8-2.1
Japan	1.8	1.8	1.7	1.6	1.8	1.6-1.8
Germany	0.8	1.2	0.7	1.6	1.4	0.7-1.6
<i>GDP/GNP growth rates for 1993</i>						
G-7	2.2	1.9	2.1	2.1	2.0	1.9-2.2
<i>GDP/GNP growth rates for 1994</i>						
G-7	2.8	2.7	2.9	—	2.9	2.7-2.9

— Not available.

Notes: Generally, GDP growth rates are reported. The exceptions are for Japan and Germany for which GNP growth rates are reported by NIESR, Consensus, and DRI. Against Germany, only West German forecasts are reported by NIESR, Consensus, and DRI.

Sources: National Institute of Economic and Social Research (NIESR), London, NIGEM database, February 1993; Consensus Economics Inc. March 1993; DRI/McGraw-Hill 1993; International Monetary Fund 1993; OECD 1992b.

although in the light of the Clinton administration program, forecasters have been revising their short-term predictions upward during recent months.

In Japan the decline in stock prices in real terms has exceeded that of the U.S. stock market crash of 1929. This appears to have been a factor in the declining trend of GDP during 1992. The present Japanese recession is on the same scale as that which occurred in 1975, following the oil shock of 1974, but its effects are more pervasive, affecting small business as well as large and services as well as manufacturing. Despite recent fiscal stimulus and steady declines in the discount rate, most Japanese forecasts for near-term

growth remain well below the potential growth rate, which is estimated to be 3.5 percent.

In sum, the outlook for short-term growth in the industrialized nations is mixed and uncertain, with the biggest elements of downside risk centered in Europe.

Longer-term growth prospects for the G-7

Growth over the longer term in the G-7 economies is expected to be slow. The fundamental reasons are slow productivity growth and poor savings performance in some major economies. The world savings

Table 6-2 World growth summary

(percentage changes per year in real GDP)

Regions	Growth rates					
	1962-69	1969-72	1972-79	1979-82	1982-89	1989-92
World total	5.4	4.6	3.6	1.2	3.5	1.4
High-income countries	5.3	4.2	3.2	1.0	3.4	1.6
OECD high-income	5.3	4.1	3.1	1.0	3.4	1.5
G-7 countries	5.3	4.1	3.2	1.0	3.4	1.5
United States	4.3	2.7	2.7	-0.1	3.5	0.5
Japan	10.4	7.7	4.1	3.5	4.2	3.7
Germany ^a	4.3	4.2	2.8	0.4	2.5	2.4
Other industrial	5.0	4.7	2.6	1.1	2.9	1.6
Non-OECD high-income	6.9	8.5	6.3	2.2	5.7	3.8
LMICS ^b	6.1	6.4	5.5	2.1	3.7	0.5

a. Western *Länder* 1989-90; Unified 1991-92.

b. Including former Soviet Union and Republic of South Africa.

Source: World Bank staff estimates (for 1992); OECD National Account Statistics.

rate has fallen by more than 3 percent of GDP since the 1970s. The long-run consequence is that real interest rates tend to remain high, and investment and growth are depressed below their long-run potential.

The baseline forecast envisages G-7 growth at an average yearly rate of 2.7 percent over the period 1992–2002, significantly lower than the average rate over 1965–90 (table 6-3). This performance reflects the present trend rate of growth in labor productivity (output per workerhour in the business sector) in OECD economies of about 1.5 percent per year, as compared to about 4 percent before 1973.

In the near term, easier monetary conditions in the United States, now leading to expansion of bank credit, seem likely to combine with some short-term fiscal stimulus and the post-election revival in consumer confidence to produce a steady (if not spectacular) recovery in business confidence. Japan is likely to follow in the upturn, although with some delay, while lower interest rates (especially short-term) in Europe should assist a growth recovery there before mid-decade. Nevertheless, the recovery is unlikely to prevent further upward drift in unemployment rates over the next few years from already high levels, especially in Europe.

Despite the softer economy during 1993–2002 compared to the latter half of the 1980s, the forecast of inflation in the G-7 (in terms of local currency CPI) indicates about the same level, of 3.2 percent per year, because of actual or potential easing of monetary policies. In the United States, short-term interest rates have already come down. In Europe, devalua-

tions and pressures for relaxation of monetary conditions suggest that the influence of the German Bundesbank on monetary conditions throughout Europe will be weaker.

Export unit values of G-7 manufactures (MUV)—an important determinant of developing-country terms of trade—are likely to rise relatively slowly, probably at no more than 3 percent per year in dollar terms.² Because labor productivity rises faster in manufacturing than in services, the projected MUV trend is lower than the trend of overall inflation. Reduction in unit costs because of application of high technology and competitive pressures in foreign trade underlies high productivity in the manufacturing sector.

What are the implications of this scenario for developing countries? Analysis shows that in the short run a 1 percent decline in growth in the industrialized world is associated with an approximately 0.4 percent per year reduction in growth in the developing world. This implies that the short-term effect of recession in the industrialized nations on performance in the developing world is significant. Over the next two years, slow industrial country growth reflecting recession in Japan and Germany is likely to cost developing countries as much in lost export revenue as they receive in official development assistance. A sustained, medium-term shift in the growth rate of the industrialized world exerts much more leverage—on the order of 0.7 percent reduction in developing country growth per 1 percent reduction in OECD countries. Thus, low industrial country productivity exerts a significant long-term drag on developing country growth.

Table 6-3 Global indicators of external conditions affecting growth in the developing countries
(average annual percentage change except LIBOR)

Indicator	Trend		
	(1965–90)	1990–92	1992–2002
Real GDP in the G-7 countries	3.4	1.1	2.7
Inflation in the G-7 countries ^a	6.2	3.5	3.2
World trade	4.5	3.3	5.8
Real LIBOR			
US\$	—	1.3	3.1
DM	—	5.6	2.9
Yen	—	3.0	2.7
Price indices (US\$)			
Export price of manufactures (MUV)	6.5	3.0	2.8
Price of petroleum ^b	5.2	-12.8	0.8
Non-oil commodity price ^b	-2.4	-7.2	0.8

— Not available.

a. Consumer price index, in local currency, aggregated using 1988–90 GDP weights.

b. Based on World Bank indices and deflated by the export price of manufactures.

Source: World Bank, baseline forecast, February 1993.

World trade

The volume of world trade continued to show remarkable resilience in 1992, with volume growth estimates now ranging around 4 percent, some 2.5 percentage points faster than growth of world output.

During the period of recovery from the present slowdown, world trade seems likely to grow in the 6 percent to 8 percent range, especially if, as seems likely, there are strong effects from reductions in barriers within regions. Looking toward the second half of the present decade, the expected growth of world trade is more than 5 percent (table 6-3), with the trade of the non-OECD countries increasing substantially faster than the trade of OECD countries. A large part of this difference is accounted for by the dynamism of countries in East Asia, especially the so-called Chinese economic area (CEA) of China, Hong Kong, and Taiwan, China. In addition, the forecast assumes continued penetration of OECD markets by non-OECD countries and a trade policy climate sufficiently supportive to permit that penetration. The difference between world trade growth and world output growth during the coming decade is likely to exceed the difference observed in the 1980s, especially in view of the progress of regional trade agreements such as NAFTA.

The Uruguay Round and regionalism

The importance of a successful conclusion to the Uruguay Round for developing countries was stressed in the two previous *Global Economic Prospects and the Developing Countries*. The importance of a successful round is undiminished; that it still has not been concluded is of great concern. Of particular importance to developing countries are trade in services and intellectual property rights. A successful conclusion to the round is likely to result in increased imports of services by developing countries.

The risks from long-term postponement of the round have grown in recent months as various deadlines have passed. A lack of direction and increasing uncertainty have been evident at the multilateral level as have growing trade tensions at the bilateral level. Economic recession always increases the likelihood of increases in protection, and thus the poor prospects for Japan and Western Europe, as discussed herein, do not augur well for a rapid conclusion to the round. This is evident in the increasing number of pleas for issues to be renegotiated. The importance of resisting protectionist pressures thus takes on added urgency, particularly in light of continued trade liberalization in developing countries

and the need to open markets to formerly centrally planned economies.

The expansion of manufactures exports by developing countries continues to be rapid and to involve the development of strong trading links between developing country exporters and other developing countries as well as with developed countries. Indeed, a virtuous circle of increased trade independence and growth appears to be allowing buoyant growth to be maintained by the developing economies of East Asia and the Pacific and Southeast Asia, with lessened dependence on economic activity in the major industrial countries.

While progress has been slow on multilateral trade negotiations, negotiations over regional trade arrangements have become very popular—among developed and developing countries. Regionalism is again fashionable in the Americas, both between developing countries (for example, MERCOSUR) and between the developing south and the developed north (as suggested by interest for accession to the NAFTA and the twenty-nine framework agreements signed between the United States and Latin American and the Caribbean countries under the Enterprise for the Americas Initiative). In East Asia, existing regional arrangements are the focus of renewed attention (ASEAN), and new formal arrangements are being discussed. The European Community has been widening the scope of its trading agreements, reaching out to EFTA countries, to Eastern European countries, and possibly to the Maghreb. And in Africa there has been the development of the South African Development Coordination Conference.

Arguments can be made as to whether multilateral and regional trade arrangements are complementary. Thus far, multilateral and regional arrangements seem to have gone hand in hand. However, there are issues arising from recent steps toward regionalism that give cause for concern. Developing countries are negotiating trade agreements with different groups of countries. Such negotiations absorb scarce resources that may be better used in multilateral negotiations or in “protecting” the achievements of unilateral liberalization. Furthermore, negotiation of a number of complex and differentiated trading arrangements could frustrate trade rather than promote it. Successive agreements may not mesh easily with existing agreements. Moreover, each new agreement will erode the benefits accorded under previous ones, threatening to create political tension and instability in trade relations. The transaction costs of doing business across frontiers could soar, with the maze of qualifying rules of origin. These problems would be minimized if open-ended trade agreements were adopted with a minimum of industry-specific rules.

Other problems that have become apparent are the exclusion from the agreements of "difficult," usually highly-protected, industries, as in the Canada-United States agreement or the AFTA (ASEAN Free Trade Area), or the adoption of restrictive rules of origin to continue protection within the agreement for particular industries, as in the NAFTA. Rules of origin achieve this by requiring manufacturers to use inputs produced in the region. The NAFTA, for example, adopted more restrictive rules of origin than were established in the Canada-United States agreement in the cases of textiles, apparel, and automobiles. Since rules of origin are designed to influence sourcing decisions by manufacturers that wish to take advantage of preferential duty-free access in partner markets, it is to be expected that restrictive rules of origin will lead to some trade diversion with respect to inputs. What this means in practice is that one partner can impose its higher external barrier on an exporting partner.

Real interest rates

Short-term nominal interest rates in the United States and Japan are at a historic low at present, which is a source of relief for many severely indebted developing countries. However, the steepness of the yield curve in the United States and Japan indicates an expected rise in the medium term. Nominal long-term rates in the G-7 countries are higher than they were in the 1960s but lower than in the 1970s and 1980s.

Adjusted for estimates of expected future inflation, however, (derived using consensus forecasts), real interest rates of the G-7 countries are now much higher than in the 1960s and 1970s but lower than the extraordinary levels of the 1980s (table 6-4).³ For the G-7 in aggregate, real long-term rates are now about 3.3 percent as contrasted with -0.3 percent in the 1960s, 0.7 percent in the 1970s, and 5.9 percent in the 1980s.⁴ Thus, interest rates now are more than 250 basis points above the levels of the 1960s and 1970s but more than 250 basis points below the level of the 1980s.

Some of the decline in real rates since the 1980s reflects the waning of transitory influences that are unlikely to recur, particularly the increases in demand for debt capital, which fueled leveraged buy-out booms, inflated real estate values, and elevated price-earnings ratios of equities. Much of the decline, however, is probably cyclical. The G-7 output, after two years of slow growth in 1991 and 1992, is currently about 2.5 percent below trend, and investment demand (measured as a deviation from a medium-term moving average) is cyclically depressed to the extent of about US\$ 100 billion. At the same time private savings rates in the industrial countries have

Table 6-4 G-7 countries: long-term real rates of interest

Country	1960-69	1970-79	1980-89	1993 ^a
Germany	2.6	3.7	4.8	4.0
Japan	-1.3	1.9	4.4	2.2
United States	-0.2	0.1	6.4	2.2
Average G-7	-0.3	0.7	5.9	3.3

a. Latest month (January).

Sources: IMF *International Financial Statistics*; Consensus Economics Inc. *Consensus Forecasts of Inflation*.

increased by about 0.5 percent of GDP since 1990, adding at least US\$ 100 billion to the *ex ante* world supply of savings (box 6-1). This combination is probably depressing short-term rates by 200 basis points or more and long-term rates by a smaller but still significant margin.

The baseline forecast envisages a continuation of high real interest rates (particularly long-term rates) reflecting considerations of both a cyclical and a structural nature:

- The recession has caused G-7 deficits to widen by nearly 3 percent of GDP since 1989. Looking beyond the recession to the mid-1990s, government finances can be expected to improve, but evidence that efforts at long-term fiscal consolidation are bearing fruit is still insufficient at this point.
- Cyclical recovery of growth in G-7 gross fixed capital formation is forecast at 5-6 percent per year over 1994-95.
- Investment in the Eastern *Länder* of Germany is expected to remain at high levels for the next five years.
- As their restructuring and resource mobilization efforts bear fruit, potentially huge investment demand will arise from the formerly centrally planned economies such as Poland, former Czechoslovakia, and certain former Soviet republics.

The projected real interest rate of about 3 percent over the coming decade is higher than the level prevailing in the 1960s and 1970s and creates an estimated drag of about 0.8 percent per year on the growth rate of incomes in the G-7. For the developing countries this means less growth of exports. In addition, various developing countries are affected by higher costs of capital, weaker terms of trade, and higher debt service, depending on their varying situations regarding the financing of investment, the composition of exports, and the size and composition of external debt. Model simula-

Box 6-1. World savings rates

What is causing high real interest rates? High interest rates could signify either a fall of the world supply of savings or a rise in world demand for investment. In the former case the world savings rate (which must be equal to the world investment rate, *ex post*) must fall, whereas in the latter case the world savings rate must rise. Since the world savings rate has, in fact, fallen since the 1970s by more than 3 percent of GDP (table 6B-1), a fall in the world supply of savings is the more plausible explanation for the current high rate of interest. Were the rate of world savings out of income the same as in the 1970s, the supply of funds would be higher today by about US\$ 600 billion per year.

Partly reflecting the increase in the U.S. budget deficit, the costs of reconstructing Germany (a large part of

which is carried out off-government budget), and the growing public-sector deficits in many developing countries outside Asia, the world's public sector accounts for the entire reduction in the global savings rate, viewed at the global level of aggregation. (The declines in private savings rates in the G-7, especially in the United States and Japan, have been offset by rises in private savings rates in LMICs and elsewhere.) Of the reduction of public-sector savings from the 1970s to the 1980s, G-7 governments accounted for about half. Thus, it is plausible to suppose that future reduction of the world's interest rate would require a restoration of public-sector savings and that the G-7 would play a major role in this restoration.

Table 6B-1. The world and G-7 savings rate
(in percentage points of GDP)

Regions	1971-80	1981-90	1991
World			
Total	24.8	22.4	21.5
Public sector	5.2	2.8	1.8
Private sector	19.6	19.6	19.7
G-7 countries			
Total	23.7	21.7	21.1
Public sector	1.7	0.5	0.8
Private sector	22.0	21.2	20.3
United States			
Total	20.0	17.5	14.8
Public sector	1.0	-0.9	-2.2
Private sector	19.0	18.4	17.0
Germany (Western Länder)			
Total	25.2	23.6	21.8
Public sector	3.3	0.8	0.9
Private sector	21.9	22.8	20.9
Japan			
Total	34.9	31.6	34.2
Public sector	7.5	6.7	9.3
Private sector	27.4	24.9	24.9
LMICs			
Total	27.0	24.0	22.0
Public sector	13.5	9.0	4.2
Private sector	13.5	15.0	17.8

a. Both savings and GDP are aggregated in current U.S. dollars.
Source: World Bank.

tions show that, everything considered, developing countries probably stand to lose between 0.5 and 1 percent per year of growth of income in the medium term as a consequence of continued high interest rates in the world. Low-income countries would tend to be affected less than average and middle-income more.

Although the continuation of tight world capital markets is not good news for developing countries, the fact that interest rates are likely to remain some 250 basis points above the levels of the 1960s and 1970s should be kept in perspective. Countries that are able to improve the investment climate through appropriate policies can see a remarkably rapid de-

Table 6-5 Indices of commodity prices

(in constant U.S. dollars, 1990 = 100)

Item	1970	1980	1992	1995	2000
Petroleum	24.4	199.0	76.0	71.1	84.5
Commodities (excluding energy)	172.9	168.2	86.1	89.1	94.5
Metals and minerals	165.5	133.8	83.4	79.5	84.6
Foods	195.6	197.4	85.4	92.7	97.9
Nonfood agriculture	170.5	178.7	82.0	87.7	93.2

Source: World Bank projections.

cline in risk premiums—for example, Mexican borrowers tapping the Eurobond market succeeded in halving the premium paid on medium-term debt, from about 500 basis points to about 250 basis points over comparable U.S. treasuries during the period 1989–92. Also, if, as projected here, the terms of trade of developing countries reverse their historical decline and stabilize, or rise a little, the effective real interest rate paid by many developing countries will

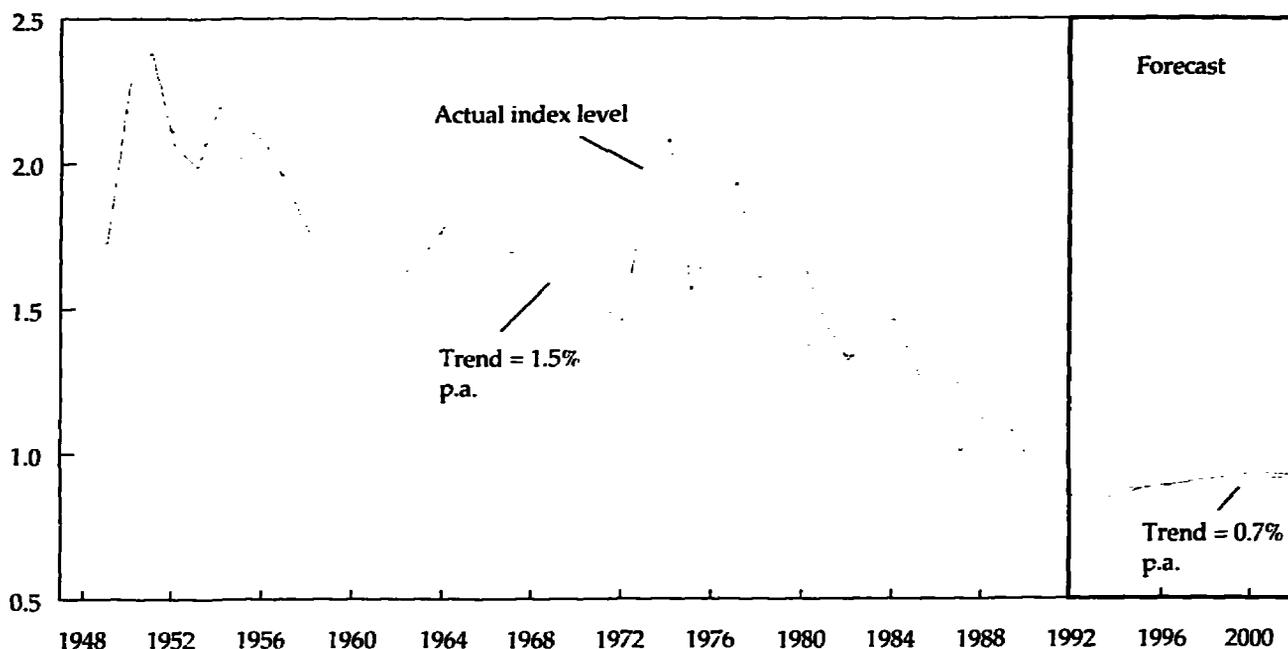
fall substantially even if interest rates in the G-7 stay high.

Commodity prices

Primary commodities still represent about half the export proceeds of developing countries. Over the whole forecast period, the prices of primary commodities are expected to be approximately stable in

Figure 6-1 Real non-oil commodity prices, 1948–2002^a

(index 1987 = 1)



a. Index of thirty-three non-oil commodity prices deflated by the MUV index. 1987 = 1.0

Source: World Bank projections.

real terms, ending the downward trend of the last twenty years (table 6-5). The baseline forecast calls for some increase in food and beverage prices from deeply depressed levels, but prices of other commodities are unlikely to show any sustained recovery in real terms. Also, the price of oil remains approximately constant in real terms. Major factors underlying these projections are, first, a continuing long-run decline in the production of perennial crops, especially coffee and cocoa, where production costs often exceed world prices, and new plantings have fallen; and, second, in the latter half of the decade, a decline in petroleum production by both OPEC and non-OPEC producers.

Crude oil prices are expected to remain nearly constant in nominal terms for the next few years and, thus, decline in real terms—from 76 in 1992 to 71.1 in 1995 (1990 = 100). Although OECD industrial activity is expected to pick up after 1994, oil supplies should be ample to forestall price increases for some time. However, in the latter half of the decade it is expected that prices will show a trend upwards in real terms as production begins to decline in several OPEC and non-OPEC producers. Petroleum consumption is expected to increase on average by 1.3 percent over the long term. Fastest growth should be seen in the low- and middle-income countries (but excluding Eastern Europe and the CIS), with their share growing from 28 percent in 1991 to 36 percent by the year 2005. Increased use of motor transport will be the main reason for this growth.

Nonfuel primary commodity prices have fallen sharply in real terms since the early 1980s (figure 6-1). The World Bank's nonfuel commodity price index almost halved over this period—declining from 168.2 in 1980 to 86.1 in 1992 (1990 = 100). Prices in 1992 were by far at their lowest level since the starting point for the index in 1948. Prices of all major commodity groups have fallen, but the largest decline was in the beverages group, the constant-dollar beverage price index having fallen 68 percent since 1986.

In 1993 beverage prices are expected to improve but will be more than offset by declines in the constant-dollar prices of cereals, agricultural raw materials, and metals. From 1994 onward the aggregate, nonfuel index is expected to increase, although only slowly—from 86.6 in 1993 to 94.2 in the year 2000. Increases in beverage prices will be supported by

upturns in all other groups, with the exception of vegetable fats and oils (table 6-5).

This turnaround in the trend in real prices, albeit slight, is conditional mainly on two assumptions: that there will be a sustained upturn in economic activity in the industrial countries and that production growth in the perennial crops, particularly cocoa and coffee, will continue to decline in some countries. However, events could turn out to be different and the expected upturn in prices not take place. Planning based on commodity prices should recognize the large degree of uncertainty associated with them. For its sensitivity analysis of projects and programs, the World Bank uses wide ranges in its commodity price forecasts. For example, for constant dollar forecasts of coffee, cocoa, and petroleum prices, the range of prices three years ahead with a 70 percent probability of occurrence is typically plus or minus 25 percent or more of the projected most likely price. Commodity prices can be expected to remain volatile.

Notes

1. Based on estimates of 1992 G-7 growth by the National Institute of Social and Economic Research (NIESR), London; Consensus Economics Incorporated, London; Data Resources Incorporated/McGraw-Hill, Lexington, MA.; the International Monetary Fund; and OECD. The exception was the United Kingdom, with negative growth.

2. The present forecast of the MUV index (which is in dollars) assumes that the real (inflation-adjusted) effective exchange rate of the dollar remains roughly unchanged after 1993. A real appreciation of the dollar would tend to lower this index.

3. For purposes of the inflation adjustment, representative long-term instruments are treated as ten-year bonds, and the inflation adjustment is the realized yearly rate of increase in the CPI over the corresponding period. The CPI forecasts for the next ten years are derived from *Consensus Forecasts of Inflation*.

4. As would be expected from the fact that the bonds of different major governments are close substitutes in portfolios, all these long-term real rates are highly correlated over time, which adds significance to their average across countries. Long-term real interest rates need not be highly correlated if exchange rate movements are expected to deviate significantly from relative inflation rates over a ten-year period or if risk premiums vary over time.

Developing-country prospects in growth and external finance

7

Synopsis

The baseline forecast projects growth in developing country GDP (excluding the former Soviet Union and Eastern Europe) of 5.3 percent per year, more than 1 percent above the rate of the 1980s and 1970s and 0.5 percent below the rate of the 1960s (table 7-1). For the FSU and Eastern Europe the projection is 1.8 percent, reflecting expected recovery in the latter half of the decade. Furthermore, the differential growth rate of developing countries (low- and middle-income, excluding the FSU and Eastern Europe) over high-income countries, on a per capita basis, is projected to outpace in the 1990s its level of the 1980s and 1970s. The forecast implies a differential of 1.2 percent in the period 1992–2002 (developing country growth of 3.4 percent compared with high-income country growth of 2.2 percent), compared to –0.5 percent during 1982–92 and 0.5 percent during 1973–82.

The downside risks in this forecast are substantial, however. Aside from the risks of weaker developing country policy performance, an external environment could be envisaged in which recession was protracted in Germany, Japan, and elsewhere; high industrial country unemployment led to growing protectionism; and real commodity prices continued to fall. Nominal interest rates would tend to fall, but real interest rates might not follow because of low savings in major industrial countries. The expected recovery in developing country growth would be seriously delayed (by two years or longer) and its rate much reduced (by 1.6 percent of GDP per year during 1992–2002). This downside scenario is elaborated further below.

The comparatively optimistic baseline forecast is based on three main factors: a marginally improved international economic environment, stronger developing country policies, and a restoration of access to external finance after debt restructuring.

The international economic environment for developing countries is expected to be better in the

1990s than in the 1980s, despite lower prospective growth in the high-income countries, because world trade is expected to grow faster, real interest rates to be lower, and real commodity prices to stop declining. Additionally, a number of countries have been able to deal with their debt overhangs. As discussed in the preceding chapter, the volume of world trade is projected to grow at an annual rate of 5.8 percent in the 1990s compared to 3.7 percent in the 1980s; real interest rates (a weighted average for Germany, Japan, and the United States) to average 2.8 percent compared with 4.0 percent; and real non-oil commodity prices to grow at a rate of 0.8 percent compared to negative 3.1 percent. The oil price is forecast to grow at a real rate of 0.8 percent (equivalent to 3.8 percent nominal rate), compared to a sharp fall in the 1980s.

Developing country policies have undergone a tremendous transformation in recent years that will bear fruit through the 1990s. Most notable are trade liberalization and abandonment of import substitution; correction of overvalued real exchange rates; fiscal consolidation and improved management of public finances (for example, reformed tax structure and collection); lower inflation and strengthening of central banks; and reduced role for the state in industry, commerce, and finance, including privatization programs and greater reliance on price and market mechanisms.

The restoration of access to external finance following debt restructuring has been discussed in chapter 1. For many heavily indebted developing countries the 1980s were characterized by a wrenching shift from positive to negative net transfers, which resulted in enforced import compression and hasty, inefficient cutbacks in domestic investment. In the 1990s the possibility has materialized of a virtuous circle of increased external finance, investment, and growth. Additionally, official finance is playing an important role in sustaining the reform effort of countries ranging from the formerly centrally planned, to the war ravaged, to Sub-Saharan African

Table 7-1 Developing country growth summary

Region	GDP			GDP per capita		
	1970-92	1982-92	1992-2002	1970-92	1982-92	1992-2002
All developing countries	3.8	2.7	4.7	1.7	0.8	2.9
LMICs excluding FSU	4.1	3.4	5.2	1.9	1.3	3.3
LMICs excluding EEUR/FSU	4.3	3.8	5.3	2.1	1.7	3.4
Low-income countries	5.2	6.1	6.3	3.0	4.0	4.4
China and India	5.8	7.4	6.9	3.8	5.6	5.4
Middle-income countries	3.3	1.5	3.9	1.4	-0.3	2.3
Excluding EEUR/FSU	3.8	2.7	4.6	1.4	0.4	2.5

Source: World Bank, baseline forecast, February 1993.

countries with weak infrastructure and disadvantaged export markets.

The external financing outlook for countries with market access (mainly middle-income plus a few large low-income) is for increasing access to private-source funds sufficient to finance the higher growth. (For developing countries as a whole, domestic investment is expected to rise faster than domestic savings, implying a greater use of external finance.) For aid-reliant countries, particularly new claimants, the outlook is less promising. In the baseline projections, slowly growing (in real terms) aid funds are distributed largely to existing recipients.

Environmental management

Without sound national policies and effective management, the developing world's growing scale of economic activity in the 1990s could pose serious challenges for environmental management, with accelerated economic growth increasingly putting pressure on the natural environment. Industrial and energy-related pollution (local and global), deforestation caused by commercial logging, and overuse of water resources are the result of economic expansion that fails to take account of the value of the environment. However, the adverse impact of economic growth on environmental degradation can be greatly reduced, and the physical limitation of natural resources need not necessarily constrain growth. Rising incomes combined with sound policies and institutions can form the basis for environmentally sustainable development.

The challenge for developing countries is to build the recognition of environmental scarcity into their decisionmaking process by paying attention to incentives affecting human behavior and policies overcoming market and policy failures. With effective policies and institutions, developing countries can achieve sustainable growth in the coming decades.

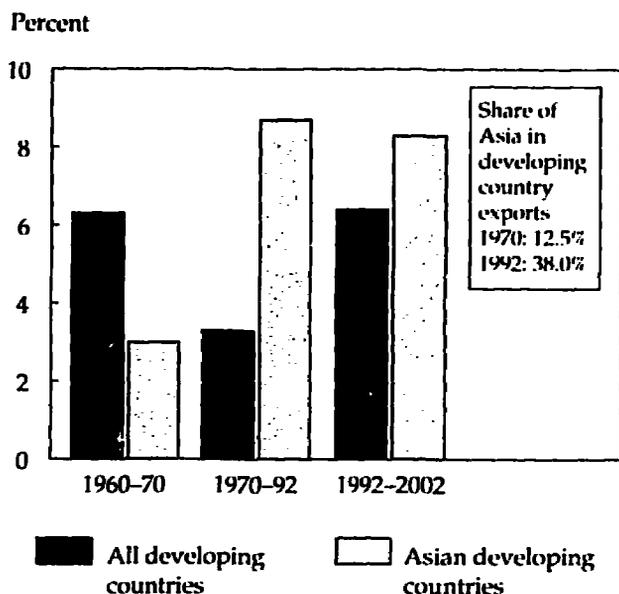
Developing-country trade prospects

Developing-country export growth is expected to pick up strongly in the coming years, at a rate almost twice as fast in the 1990s as during the two preceding decades (1970-90), on average. To a large extent this acceleration is the result of the growing importance of East Asia: persistently fast-growing Asian exports are now weighted far more heavily in the developing country totals than used to be the case (figure 7-1). For Asia there is expected to be little tapering off in its above-average export growth, as emerging "growth triangles" (triplets of geographically-associated countries, typically with complementary factor endowments) boost intraregional market shares. Viewed by region, the most notable improvements in performance will be in Latin America, reflecting domestic policies, and in the Middle East and North Africa, where oil exports were curbed by high or rising prices in the 1970s and 1980s. Sub-Saharan Africa's exports (which in 1990 were still about 90 percent concentrated in primary commodities), while showing some pickup in 1993-94, will continue in the medium term to grow more slowly than the developing country mean. Eastern Europe and the FSU may barely recoup their recent contractions in exports by the end of the decade.

What are the implications for imports? The fastest growing developing-country markets for imports will be those countries whose own exports are doing well, supporting good growth of overall income, improving creditworthiness, and, hence, attracting large infusions of capital. Imports into China and India together are expected to grow twice as fast as world trade in the 1990s. By 2002 the Chinese Economic Area (CEA, comprising China, Hong Kong, and Taiwan, China) will be importing more, in dollar value, than Japan. The rest of Asia will grow almost as fast as China and India.

Latin America's import growth, following a surge of more than 20 percent in 1991, will consistently

Figure 7-1 Growth of export volume of developing countries
(average annual percent change)



Source: World Bank projections.

outpace world trade growth during the next ten years and indeed show some tendency to accelerate after 1994, assuming the forecast recovery in Brazil.

Even though Eastern Europe and the FSU may be importing little more in 2000 than in 1990, developing countries as a group will be persistently increasing their shares in world imports.

Supply-side sources of growth

Although the international economic environment is likely to help developing country growth prospects in the next decade, the predominant growth stimulus in these countries is expected to be generated from within. This is best examined from the perspective of the supply-side sources of growth. The rate of growth of potential output in an economy can be traced to two sources—first, the rate of expansion of productive resources, namely labor and capital; and second, improvements in the efficiency with which these resources are combined in production. The latter source can also be called the growth of total factor productivity (TFP) (box 7-1). In terms of labor, its projected growth is not considered an important factor underlying the projected acceleration of GDP growth in developing countries in the next decade. In fact, the growth rate of the labor force in developing countries during the 1990s is expected to decline marginally when compared to the rate of the 1980s.

Reductions in birth rates and fertility rates, which had already occurred in the late 1970s and 1980s, are expected to translate into slower labor force growth in the years to come. Especially noteworthy are the changes in China, India, and Mexico, where the annual growth rates of the labor force are projected to be 1.8 percent, 1.7 percent, and 2.7 percent, respectively, compared with the actual rates for the 1980s of 2.1 percent, 2.0 percent, and 3.1 percent, respectively.

The implied growth rate of the capital stock, however, is projected to be more rapid in the 1990s than in the 1980s for most developing countries. Here the projections suggest that two kinds of broad forces will be at work: increased availability of savings, on the one hand, and a rising demand for investment resources, on the other. Underlying both forces is the implicit view of an ongoing improvement in the institutional and policy framework in developing countries. Reforms in macroeconomic and trade policies, as well as programs to restructure financial systems and reduce the size of the public sector, are all expected to raise domestic savings rates, encourage inflows of equity and portfolio capital, and strengthen incentives to invest.

In most countries, however, it is the rate of TFP growth that is the most important source of GDP growth implicit in the projections for the 1990s. For a sample of about fifty developing countries, the implicit average TFP growth was nearly zero in 1980–91 but is expected to rise to 1.1 percent a year in 1991–2002. What could possibly stimulate this acceleration in efficiency growth? Among the important factors are likely to be the expansion of trade and an increase in the level of education of the labor force.

The liberalization of trade policies in developing countries and the expansion of demand in industrial country markets are together expected to lay the foundation for an acceleration of export growth. As noted earlier, exports of manufactures are expected to grow at a significantly higher pace, and the average share of trade in GDP is expected to rise. The evidence suggests that the greater the openness of an economy (measured by the share of trade in GDP), the higher that economy's TFP growth tends to be. There could be several reasons why: first, export opportunities tend to pull capital and labor resources into more productive occupations; second, better export performance permits higher levels of imports of capital goods (machinery and equipment), which, in turn, provide access to the latest production technologies that these imports embody. Third, export rivalry and import competition encourage innovation and competitiveness; and fourth, trade opens new channels of information that help keep track of new products, the latest production and managerial tech-

of TFP and the performance of developing countries since 1960

in economics is labor productivity, output per unit labor. It is a partial measure only one of several factor inputs process. The concept of total factor productivity generalizes this notion to encompass all inputs usually expressed as the ratio of output to a measure of labor as well as capital, land, and other inputs.

The focus of interest is not on levels but on growth rates of output (GDP), the price level (P). Under commonly used assumptions that production technology exhibits constant returns to scale and that firms use appropriate weights for forming the aggregate measure are the respective value added and capital in output. In this analysis, at the highest (economywide) level where the factor inputs are measured, after necessary adjustments, the main elements that affect TFP growth rate are: quality of labor, capital stock, increased skills of the labor force, and sectoral allocation of resources, and technological progress that is not already embodied in the capital stock.

From this analysis, the factor shares for labor and capital are estimated to be 60 percent for labor and 40 percent for capital. Studies of income shares suggest that the estimates are within a 10 percentage point range, and variations within this range likely affect the broad conclusions. The capital stock series are derived from the perpetual inventory method from investment data for most countries. The forecasts of output and price level are part of the baseline forecast for the period 1980-91. The labor inputs are proxied by the working-age population taken from ILO

data. The methodology adopted to estimate the growth rates for twenty-two high-income economies and middle-income economies for 1960-91. The results show that although developing countries have, on average, lower growth rates than have high-income

economies, this has been solely due to a more rapid accumulation of capital and a faster growth of the labor force. Indeed, the growth of TFP in developing countries has been lower than that in high-income economies (0.3 percent in the period 1960-91 compared to 1.1 percent in high-income economies).² In addition, the results point to a trend of declining TFP growth in developing countries, from 1.3 percent per year in 1960-73, to 0.6 percent per year in 1973-80, to 0.1 percent a year in 1980-91.

But the trend in TFP growth in developing countries as a whole masks considerable regional differences. For example, the Latin America and Caribbean region made TFP gains in the 1.5 percent per year range during the 1960s but exhibited zero TFP growth in the 1970s and nearly 1 percent annual decline following the debt crisis. TFP growth was virtually stagnant in Sub-Saharan Africa during 1960-70 but has shown a modest upturn in the 1980s. In sharp contrast, TFP growth for East Asia and the Pacific has been significantly higher than that of other developing regions, especially in the 1970s and 1980s when it was also double that of the high-income economies. And in East Asia and the Pacific, TFP growth averaged 0.8 percent per year in the 1960s but halved after the 1973 oil shock; it recovered subsequently to reach 1.7 percent per year in the 1980s.

A central feature of the forecast in this book is a reversal in the overall developing country trend through gradual recovery in Latin America, acceleration of the macroeconomic and trade reforms in Sub-Saharan Africa, and continued steady economic performance in East Asia and the Pacific.

1. With the above data, the growth rate of TFP, g_t^t , is computed as

$$g_t^t = g_y^t - [\alpha g_l^t + (1 - \alpha) g_k^t]$$

where g_t^t stands for the OLS growth rate of x in logarithmic percentage changes during period t , y is GDP, l is labor, k is capital, α is share of labor in the output, taken to be 60 percent, and t is 1980-91 and 1992-2002. (For presentation purposes, the logarithmic percentage changes have been converted to arithmetic ones.)

2. The numbers reported are median estimates.

market and consumer trends, and technological changes.

Expansion of the labor force are also expected to have a positive effect on TFP growth. The expansion of the workforce in developing countries has been rising steadily over the past few years of schooling in 1970 to 3.7 years in 1987, the last year for which data are available. Economies require continued expansion in the education and skill level of the labor force if they are to remain competitive

in international markets. Better educated labor helps firms absorb and adjust rapidly to changes in technology, product mix, and work practices. Even labor-intensive industries in developing countries can be more competitive internationally if they have better educated labor.

To summarize, economic and institutional reforms already under way in many developing countries are expected to raise GDP growth in the 1990s by accelerating capital accumulation and promoting production efficiency. Three factors—higher savings and

investment, improvements in the average level of education, and increased openness in trade—can provide a potent combination for boosting the international competitiveness of these economies and quickening the pace of economic development.

Prospects by region

The foregoing picture (table 7-2) conceals a wide variation by region. For some regions, past reforms and ready access to external finance offer the hope of sustained growth. For others, poor infrastructure, weak human skills, macroinstability, and the uncertainty over fundamental structural reforms continue to pose problems.

In *Latin America*, GDP growth of around 4 percent per year is achievable in the 1990s if countries can persevere in improved domestic policies and, in the case of Brazil, adopt credible policies of macroeconomic stabilization. The evidence from Chile and Mexico, to date, has given other countries the impetus to embark on policy reforms directed toward increasing domestic savings, keeping inflation in check, improving public finance (especially increasing revenues), liberalizing trade, and inducing foreign capital and flight capital to return. The baseline projections assume that this trend will continue, and it is expected that the domestic savings-to-GDP ratio will rise by more than 4 percentage points (table 7-3).

The investment-to-GDP ratio in the 1990s is expected to rise by about 5 percentage points compared to the depressed levels in the 1980s. It is expected that increased investment will come more from the private sector, the result of privatization programs in a number of countries (Argentina, Chile, and Mexico), which have attracted both local and foreign investors. However, public investment in infrastructure—which had been neglected in the 1980s—is also expected to complement private investment.

Foreign savings (the counterpart to the current account deficit) in the 1990s are projected to run at about the same level as in the 1970s and, paradoxically, not much higher than in the 1980s. Two factors in the current decade reconcile this outlook with

expected higher investment: lower interest rates will mean lower interest payments abroad, and capital flight is not expected to occur as it did in the latter part of the 1970s and in the 1980s. Whereas most external capital originated from private creditors (mostly commercial banks) in the 1970s and from official creditors in the 1980s, it is expected that a greater reliance on foreign direct investment will occur in the 1990s. Portfolio capital is expected to become an increasing source of foreign capital, although not on the scale of the past few years (1989–92), while it is also expected that there will be some return of lending from commercial banks in the form of project finance associated with infrastructure.

There are downside risks to these projections. First, the regional aggregates are heavily influenced by the performance of Brazil and, thus, by the uncertainty attached to that country's envisaged policy turnaround. Second, the amount of external capital may be less than expected because of some countries' unwillingness or inability to implement necessary policy reforms on a timely basis. Third, the accelerated export growth envisioned—a key assumption in the baseline—may not materialize because of slower export market growth in the near term and, in some countries, because of a lack of supporting infrastructure. Without an improved export performance, the high rates of import growth (recently being financed by large capital inflows into countries such as Argentina, Mexico, and Venezuela) will prove to be unsustainable. Fourth, higher than projected interest rates may raise net factor payments and reduce the amount of domestic savings available for investment.

In an extreme case, it could be argued that there is the possibility of another external financing crisis in this region if the international environment deteriorates, although this would be a different type of problem, stemming from the volatility of some of the newer capital flows. The principal safeguard against a renewed crisis must be perseverance in policy reform; other safeguards include the greater share of equity in external finance and improved fiscal positions.

In *Sub-Saharan Africa*, GDP growth is projected to rise—thanks to the projected break in the declining

Table 7-2 Forecast summary: all developing countries
(percent per year)

<i>Growth rates</i>	1970–80	1980–90	1990–2000	1982–92	<i>Baseline</i> 1992–2002
GDP	5.2	3.1	3.7	2.7	4.7
Consumption per capita	3.4	1.0	1.9	0.8	2.6
GDP per capita	3.0	1.1	1.9	0.8	2.9

Source: World Bank, baseline forecast, February 1993.

Table 7-3 Forecast summary: Latin America and the Caribbean
(percent per year)

Growth rates	Baseline	
	1982-92	1992-2002
GDP	1.9	3.9
Consumption per capita	-0.1	1.6
GDP per capita	-0.2	2.1

Source: World Bank, baseline forecast, February 1993.

trend of real commodity prices—but to remain among the lowest in developing countries (table 7-4). In about fifteen countries, accounting for about half the region's output, a strong commitment to adjustment policies is already in place, providing the basis for growth acceleration that is likely to be enhanced by less unfavorable external conditions. In another ten countries, accounting for 25 percent of the region's output, a diminishing of civil strife would be the key to economic progress, turning the GDP declines of the past decade into small but sustainable increases during the next. Nevertheless, extremely low savings ratios (averaging about 13 percent of GDP in the 1980s), along with factor payments of another 3 percent to repay loans and profit remittances from past borrowing and investment, make prospective investment ratios the lowest among developing countries (about 16 percent in the 1980s). These conditions are insufficient to allow output growth to be much higher than population growth in the 1990s, even under the current baseline assumption that domestic policies in most countries will improve in the 1990s.

Export growth is expected to increase in response to more liberalized trade regimes, but the current composition of exports, with its heavy reliance on commodity goods, along with the lack of adequate supporting infrastructure, will limit Africa's ability to raise its export potential rapidly. Although the initial response in countries that have implemented

Table 7-4 Forecast summary: Sub-Saharan Africa
(percent per year)

Growth rates	Baseline	
	1982-92	1992-2002
GDP	2.0	3.7
Consumption per capita	-1.3	0.4
GDP per capita	-1.1	0.6

Note: Excludes Republic of South Africa.

Source: World Bank, baseline forecast, February 1993.

structural reforms (such as Ghana and Uganda) has been favorable, it is now evident that this growth spurt cannot be sustained without heavy investment in infrastructure, both physical and managerial-labor skills.

External financing in the 1990s will continue to be dominated by credit on concessional terms from official sources—about two-thirds of all external financing—while foreign private investment is expected to rise in its share of total financing from about 20 percent (in the 1970s and 1980s) to about 25 percent. The prospects for attracting foreign investment are limited to a few of the large countries associated with natural resources (for example, Côte d'Ivoire, Ghana, Kenya, Nigeria, Uganda, and Zimbabwe), while the majority of countries will have limited access to this source of financing until supply bottlenecks can be addressed (through better infrastructure, including telecommunications and air and land services).

The outlook for Sub-Saharan Africa is especially fragile, with the biggest risks being a continuation of the deterioration in the terms of trade and continuation of political unrest. There are some factors that need to be addressed.

First, the baseline projection assumed no major adverse conditions with respect to the weather and internal conflicts. Serious environmental degradation over the course of past decades (for example, the high level of wood usage for fuel has caused an encroachment of the Sahara desert on to previously productive land) has made Africa more susceptible to droughts than any other continent.

Second, the potential impact of the AIDS epidemic on economic growth is serious, although it has not yet been quantified for many countries. In Malawi it has been estimated that between 20-30 percent of the active labor force may be infected, while in Uganda it has been recognized as a serious problem. Resources are already being diverted from other priority areas to AIDS-related treatment, but with limited available resources other diseases long thought of as being under control (such as tuberculosis) are increasing. The severe health and other social problems facing most countries in Africa will divert resources from badly needed infrastructure and labor-skill development.

Third, the high level of ODA flows to Africa may not be forthcoming as easily as in the 1980s because of an increase in demand from other countries (such as Viet Nam and some of the FSU states) and increasing donor scrutiny of domestic policies. Although a continuation of past resource flows has been incorporated into the baseline projections, there is risk of a lower availability, which could result in severe reductions in investment and consumption.

Poverty is expected to increase. Even in the baseline projection, the number of poor in Africa would increase from about 200 million in 1990 to roughly 300 million by 2000. This projected 50 percent increase is the largest among developing regions and will undoubtedly place greater pressure on governments to divert resources for provision of a *social safety net*.

The low-case scenario for the international environment carries very gloomy implications for this region: lower growth in the industrial world in the near term would undoubtedly mean further declines in commodity prices. In addition, budget constraints in the industrial countries would affect the supply of ODA. Since Africa is particularly dependent on primary commodities, the prospect would be one of negative growth of per capita GDP and consumption and rising sociopolitical tensions. The number of poor could easily double under this scenario.

In *East Asia*, GDP is expected to grow at about 7.3 percent annually during the 1990s, slightly less than during the 1980s but significantly higher than the average for developing countries as a whole (table 7-5). China, which accounts for half of the region's production and two-thirds of the population, is a principal cause of the region's high growth prospects. A second reason for high expected growth is the expected continuation of high savings rates. Growth is not uniformly high for all countries in the region, however: China, Korea, Malaysia, and Thailand are expected to grow in the 7-8 percent range annually; Fiji, Indonesia, Philippines, and Viet Nam are expected to grow in the 4.5-7 percent range while Myanmar and Papua New Guinea may experience about 3 percent annual growth.

Exports are still a central driving force behind this high growth projection although domestic demand is expected to become more important in some of the higher-income countries, such as Korea and Thailand. Trade within the Asia region is expected to compensate for slower growth in industrial countries.

Domestic savings (as a ratio to GDP) in the region are among the highest in the world, rising from about 28 percent in the 1970s to 32 percent in the 1980s and

to an expected average of 36 percent in the 1990s. This expectation forms the basis for investment also to rise, to average almost 38 percent annually in the 1990s. The solid creditworthiness of most of these economies is expected to afford them good access to the international capital markets. In particular, strong inflows of FDI are expected both to finance manufactures exporters and to enhance domestic efficiency. Korea, Malaysia, and Thailand will seek external finance to tackle infrastructure bottlenecks, Indonesia and the Philippines to support economic reform.

The principal risks—and they are sizable—to this optimistic outlook are increased trade protectionism in major industrial countries and a prolonged Japanese recession.

Rapid growth in the 1980s has already had its effects on poverty in the region, where the number of poor below the poverty line has fallen from 180 million in 1985 to around 170 million in 1990, and continued fast growth in the 1990s should allow the number of poor to decline to around 70 million by the end of the decade.

Fourth growth pole

The dynamism of the East Asian economies is an important factor in understanding the optimistic projections for developing country growth and trade, despite a comparatively indifferent performance by OECD economies. Within East Asia, the CEA is arguably becoming the "fourth growth pole" of the global economy (box 7-2). The key characteristics of this growth pole may be identified as follows: large and growing economic mass, strongly affecting other economies; persistence of medium-term growth in the face of shifting external circumstances; and high degree of sustainability of long-term growth, as illustrated by the following points:

- CEA imports are almost two-thirds as large as Japan's and could exceed them by the year 2002 according to present growth trends.
- It is likely that China's GDP valued at national prices (converted to dollars at the official foreign exchange rate) greatly understates China's relative economic size. But even with this measure, CEA's GDP by 2002 will rank well ahead of that of France, Italy, and the United Kingdom, and it will be three to four times the size of India's GDP or that of the FSU.
- If output of goods and services were valued at standard ICP and if current price relationships remained unchanged, the CEA would rank far ahead of both Germany and Japan in GDP by 2002 and would be approaching the size of the

Table 7-5 Forecast summary: East Asia
(percent per year)

Growth rates	Baseline	
	1982-92	1992-2002
GDP	8.0	7.3
Consumption per capita	5.2	5.9
GDP per capita	6.4	5.9

Source: World Bank, baseline forecast, February 1993.

Box 7-2 Global significance of a fourth growth pole

If present expectations are valid, the global economy will be influenced in many ways by the development of the Chinese Economic Area as a growth pole.

As a leading market, the CEA will raise the potential growth rate of many countries, especially those whose exports to the CEA represent a significant share of GDP, such as Malaysia (6.3 percent), other ASEAN countries and Korea (about 3 percent), Chile (1.8 percent), Japan (1.3 percent), and ten other large countries that are now exporting more than 1 percent of their GDP to the CEA.

As a competitor, the CEA will displace output in other developing countries, as China itself diversifies beyond its present export staples of clothing, footwear, and toys, among other things. Industries of emerging comparative advantage for the CEA will be lower-technology, labor-intensive products such as furniture, plastics, basic tools, and electrical equipment—benefitting from

China's low-wage but skilled labor. Countries such as Malaysia and Thailand will be adjusting to the CEA's inroads by moving into heavy industry and technology-intensive products.

The correlations of CEA short-term growth rates and those of the G-3 nations are relatively low: about 0.2, as compared with about 0.4 among the G-3. Correlations of country growth rates with the world's growth rate confirm this point: this correlation for China is 0.2 whereas those for Germany, Japan, and the United States are in the range of 0.7 (for the period 1966-91). Therefore, the CEA will contribute to the short-term stability in global economic activity. Even in the present global slowdown, the CEA is a significant short-term countercyclical force in the Pacific Basin. (This does not imply, however, that the CEA's growth performance could readily withstand a protracted loss of U.S. or other major markets.)

United States—although in per capita terms its income would still be only a fraction of that in the United States (table 7-6). The potential size of the CEA market is thus huge.

- The CEA has very large holdings of international reserves, and although these aggregates are highly volatile, they are expected to continue to rise as a result of current account surpluses and continued capital inflow during the next few years.
- The CEA's growth rate, which has averaged in excess of 7 percent a year since 1962 and which is expected to maintain or exceed this level over

the next ten years, is more persistent than that of major industrial countries.

- Potential sustainability of long-term growth depends in part on how far a country has progressed along its potential path of development. As already noted, the CEA's output per capita in 2002 will still be low (even on an ICP basis). Other structural ratios such as share of population in agriculture, capital-labor ratios, and natural resource endowments suggest that the CEA will still be at an early stage of development in 2002 and, thus, could potentially sustain a leadership role in growth for a very long time.

Table 7-6 GDP comparisons for four economies: market price and standard international price estimates

(trillions of U.S. dollars)

Country	At market prices		At standard international prices		
	1991	2002	1990 ^a	2002 ^b	Per capita income (US\$)
Chinese Economic Area	0.6	2.5	2.5	9.8	7,300
United States	5.5	9.9	5.4	9.7	36,000
Japan	3.4	7.0	2.1	4.9	37,900
Germany	1.7	3.4	1.3	3.1	39,100

a. The source of these estimates is World Bank *World Development Report 1992* (except Taiwan, China). Estimates vary widely, however. The ICP estimate for China in 1990 may be conservative. For instance, the Summers and Heston ICP estimate for 1985 was US \$2.6 trillion for China alone (Summers and Heston 1988).

b. Per capita figures are in parentheses, expressed in thousands of U.S. dollars. In making the ICP projections, it is simply assumed that GDP at ICP will increase at a similar percentage rate as GDP at market prices. This growth rate is an upper bound for the CEA because ICPs tend to rise more slowly than market prices at official exchange rates as relative income per capita rises (reflecting the higher relative price of services in high-income economies).

Source: World Bank, baseline forecast, February 1993.

In *South Asia* growth is dominated by the outlook for the Indian economy, where an average growth rate of about 5 percent annually in the 1990s is projected, with slower growth in the near term as India undergoes adjustment, and faster growth in the second half of the 1990s as these reforms bear fruit (table 7-7).

The savings-to-GDP ratio in South Asia was low in the 1970s but has been steadily increasing—to about 17.5 percent in the 1980s—and is expected to continue this trend to average about 21 percent annually in the 1990s. Transfers from official sources and workers' remittances have been as high as 3 percent of GDP and have allowed the investment-to-GDP ratio to stand at about 4 percentage points higher than the savings ratio.

The importance of workers' remittances is expected to decline in the 1990s compared to the 1980s as a result of experience in the Middle East during the Gulf crisis. Instead, savings held in the Middle East by workers residing there prior to 1990 have found their way into the economies in the South Asia region, largely in the form of foreign account bank deposits, with the potential for equity investment. Additionally, the region is expected to attract substantial inflows of portfolio equity capital as stock markets are opened up and investor protection and trading and settlement procedures are improved. The South Asia region has traditionally attracted little FDI but could potentially attract large amounts if it were to undertake thorough regulatory reform.

Two key assumptions underpin the projections for India and, hence, for the region. First, export growth is expected to accelerate to around 8 percent annually in the 1990s compared to about 5.6 percent in the 1980s, in spite of India losing between 15–20 percent of its export market in the FSU. Second, it is projected that India will be able to sustain a current account deficit equivalent to about 1.4 percent of GDP, financed mainly from private investors and creditors. Weakness in export performance or less foreign investor confidence will cause a substantial lowering of growth rates below the baseline.

Table 7-7 Forecast summary: South Asia
(percent per year)

Growth rates	Baseline	
	1982–92	1992–2002
GDP	5.2	5.3
Consumption per capita	3.1	2.7
GDP per capita	2.9	3.4

Source: World Bank, baseline forecast, February 1993.

The largest number of poor in the world live in the South Asia region, estimated at 560 million in 1990, compared to 530 million in 1985. The current baseline projection for the region suggest that the number of poor is expected to decline by the end of the decade, but, at around 500 million, the area will remain with the greatest concentration of poverty. Undoubtedly there are serious downside risks that this reduction will not materialize. If export growth were less favorable than projected and if external finance became a more serious constraint (because of creditworthiness concerns), growth in the region would decline by around 0.6 percent annually, and the number of poor would rise.

In the *Middle East and North Africa* growth prospects are mixed. Some acceleration from 1.6 percent per year in 1982–92 to over 4 percent annually in 1992–2002 is projected, mainly because of an expected rise in oil prices in the second half of the 1990s and continued recovery from the 1991 Gulf crisis. Iran (30 percent of the region's GDP) and Morocco are projected to grow in the 4.5–5 percent range per year; Algeria, Egypt, and Tunisia in the 3–4 percent range annually; and Saudi Arabia in the 2–3 percent range (table 7-8).

Export growth is mainly determined by oil exports and is assumed to average around 4 percent annually, sufficiently low to allow oil prices to rise in the second half of the 1990s. A central player will be Iran where huge reserves of natural gas are expected to be exploited in the longer run, supplementing its plans to bring oil production back to the levels of the late 1970s. In Egypt, non-oil exports are expected to increase in response to the privatization reforms, while in Morocco, export growth is expected to slow to around 6.5 percent in the 1990s, compared to 8.6 percent in the second half of the 1980s.

Risks of lower oil prices in the short term, perhaps due to a breakdown of OPEC discipline, place the oil-dependent economies in this region in a vulnerable situation. For countries such as Algeria and Egypt this could undermine the implementation of policy

Table 7-8 Forecast summary: Middle East and North Africa
(percent per year)

Growth rates	Baseline	
	1982–92	1992–2002
GDP	1.6	4.5
Consumption per capita	-0.9	0.8
GDP per capita	-1.5	1.6

Source: World Bank, baseline forecast, February 1993.

reforms. The number of poor is expected to increase from 70 million in 1990 to around 90 million by the end of the decade, under the baseline forecast.

In *Europe and Central Asia* forecasts of growth are subject to the greatest degree of uncertainty. Under the base scenario, GDP growth is expected to accelerate from zero percent annual growth in the 1980s to over 2 percent annually in the 1990s, thanks to structural reforms and the move to a market economy. Most of this growth is expected to take place at the end of the decade and would merely return production to the levels of the 1980s. Hungary, Poland, and the former Czechoslovakia, however, are expected to return to positive growth earlier. There are great risks that the process of recovery and growth may be even longer than currently envisioned in the baseline (table 7-9).

Most developing countries in this region have recently adopted fundamental reform policies to transform centrally planned economies with predominantly state-owned industries into more dynamic and private sector-led economies. Comprehensive price liberalizations have already taken place, which lay the foundation for a better allocation of resources through market incentives. Typically, such reforms have led to sharp falls in output, associated with domestic enterprise restructuring and trade reorientation, with the extent and timing of recovery highly uncertain.

If the reforms succeed, as the baseline forecast assumes, the economies of Eastern Europe and Central Asia are expected to attain a trend in growth in GDP of about 4–5 percent by the second half of the decade. The principal risk that could undermine this forecast is that political and social pressures could halt reform. Unemployment and the bankruptcy of state enterprises will generate pressures for credit that in the absence of monetary control could lead to hyperinflation.

In such a situation of great uncertainty, the continuing external financial support of the official sector (in the form of food aid, export credits, concessional

loans, debt relief, and general balance of payments financing) is vital. Coupled with macroeconomic stabilization and enterprise reform, such support can help sustain reform, leading eventually to renewed private sector confidence. This support is assumed in the projections.

The number of poor in these formerly centrally planned economies is expected to rise sharply in the near term, especially in some of the poorer Central Asian economies of the FSU. However, there are no reliable estimates of the extent of poverty.

Downside scenario

The principal external risks to the foregoing projections are that there would be a prolonged recession in Germany and Japan, a continuing rise in OECD unemployment along with a failure of some OECD countries to improve public savings performance, and growing protectionism in the industrial countries. This would result in developing country growth of about 1.6 percent of GDP lower during 1992 to 2002 (figure 7-2).

This kind of downside scenario could be associated with the following unfavorable near-term developments in the three largest economies:

Germany. Delayed recovery in the Eastern German *Länder*, combined with recession in the West, may lead to larger government deficits as well as stronger wage-push pressure in both the East and West, caused in part by disappointed expectations. Such forces could delay expected cuts in interest rates, leaving the rest of Europe with higher financial risk.

Japan. Recovery of reasonable growth is achieved, helped by fiscal stimulus, but it would be later (1995) and at a slower pace. The corrections to the phenomenal boom of the late 1980s (cumulative gross fixed investment over the four years 1986 to 1989 amounted to about US\$ 3 trillion)¹ take longer than expected. Private investor and consumer confidence and the ability of the financial sector to lend in the wake of the collapse of asset values may be impaired, as export markets weaken further.

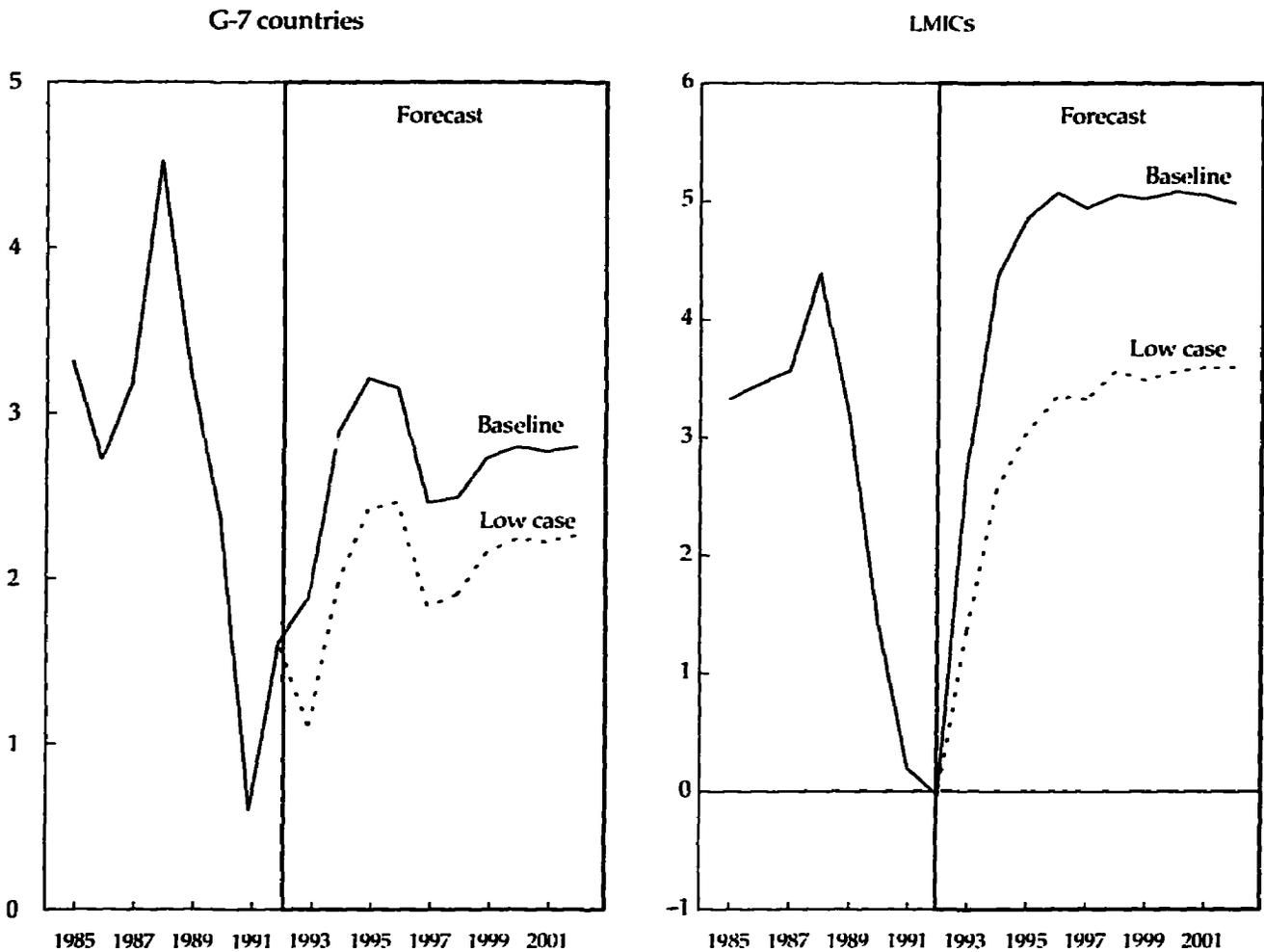
United States. Recovery continues but at a slower pace than the baseline forecast, as the “old” problems of the reduction of defense spending and the overhang of commercial real estate combine with the “new” problems of slower exports to depress growth. The Clinton administration’s fiscal program may lead to frustrated expectations if the program taken as a whole—the spending side as well as the tax side—is not firmly implemented. The cost of such an outcome would be higher long-term real interest rates than in the baseline, receding consumer and investor confidence, and GDP growth during 1993–94 about 1 percent lower than in the baseline.

Table 7-9 Forecast summary: developing countries in Europe and Central Asia
(percent per year)

Growth rates	1982–92	Baseline
		1992–2002
GDP	–0.4	2.1
Consumption per capita	–1.1	1.4
GDP per capita	–1.3	1.4

Source: World Bank, baseline forecast, February 1993.

Figure 7-2 Comparison of baseline and low-case scenarios, GDP: 1985–2002
(average annual percentage change)



Source: World Bank projections.

The combination of higher real interest rates, lower OECD growth, declining real prices for non-oil commodities, and a sharp fall in the growth of world trade (table 7-10) reduces the growth rate of developing country GDP in the low case. Longer-term aspects of the downside scenario include the following:

- The differential of world trade growth over the G-7's GDP growth falls from 3.1 percent in the baseline to 1 percent—a level only slightly above that of the 1980s. The reduced protectionism envisaged in the baseline in the form of a successful Uruguay Round is more than undone in the low case.
- Export prices of manufactured goods are nearly flat.

- The real price of oil does not rise after 1995.
- Real non-oil commodity prices decline at a rate of about 1 percent per year (as they did during 1965–80), which is nevertheless a less steep decline than in the 1980s, thanks to growing developing country demand, especially from Asia.
- Inflation rates in the major industrial countries are about 2 percent lower than projected in the baseline, and the level of nominal short-term interest rates is about 150 basis points lower. Real interest rates are thus 50 basis points higher.

Most of these factors weaken the balance of payments position of developing countries as a group, although some factors are positive for some countries. Growth of developing country exports falls by

Table 7-10 Comparison of baseline and low case: key indicators, 1992–2002
(percentage changes per year)

	1965–80	1980–90	1992–2002		
			Baseline	Low	Difference
G-7 GDP	3.7	3.0	2.7	2.0	-0.7
G-3 real LIBOR	2.0	4.5	3.0	3.5	0.5
World trade (volume)	5.0	3.7	5.8	3.0	-2.8
Real price of oil	12.4	-6.6	0.8	0	-0.8
Real price of non-oil commodities	-1.1	-5.0	0.8	-1.0	-1.8

Source: World Bank, baseline forecast, February 1993.

2.7 percent per year in volume terms during the next ten years, relative to the baseline. Slower export growth combined with terms-of-trade losses are instrumental in driving the collective merchandise trade balance into bigger deficit, by a difference of US\$ 16 billion per year over the decade. This impact is unevenly distributed, with Sub-Saharan Africa, Latin America and the Caribbean, and the Middle East and North Africa being hurt by falling real commodity prices, while Asia and Europe have terms-of-trade gains (largely as a consequence of their relative export concentration in manufactures). Lower nominal rates of interest help to offset the terms-of-trade losses by reducing debt service, especially for Latin America.

If developing countries cut back their domestic demand and imports consistent with historical relationships (“the unmanaged model-based estimate”), their collective current account deficit would rise substantially by roughly US\$ 40 billion annually. This rise would find its counterpart in an equal increase in the external financing requirement (aside from any changes in foreign exchange reserves).

How could an individual developing country cope with this additional, compensatory financing requirement? One possibility is that additional external finance may not be available because of creditworthiness concerns on the part of creditors. In that event, the country would be forced to compress its imports. A second possibility is that additional external finance may not be considered desirable because a debtor country considers it imprudent to increase its external liabilities. In that event, the country would undertake adjustment (a reduction in domestic demand or a depreciation of the real exchange rate, or both). A third possibility is that additional external finance is forthcoming and is used by the country to finance the external change. In that event, imports would be maintained, but indebtedness would rise.

In addition to each of these possibilities there is the danger that external strains might undermine the

resolve to pursue policy reforms. Policy slippage, for instance reversal of trade liberalization or fiscal laxity, would itself reduce growth.

For developing countries as a whole, all of these outcomes will be present. Without attempting to forecast country responses in detail, one case is to keep the aggregate current account of the balance of payments unchanged—that is, to assume there is no change in the amount of external financing (relative to the baseline). In that case, model simulations indicate that GDP growth would fall by 1.6 percent per year, relative to the baseline forecast, over the period 1992–2002.

The response to a downside scenario is likely to vary considerably from region to region because of varying vulnerability to poorer performance in the industrial countries. Latin America fares badly in growth prospects because of an above-average decline in export growth and a potential inability to attract external finance in times of difficulty. In Sub-Saharan Africa it is assumed that additional concessional finance is made available in the low case so that the reduction in import growth is less than that of exports; clearly this is an optimistic assumption. However, if this does not materialize, per capita GDP (and consumption) would decline in Sub-Saharan Africa at an alarming rate. The Middle East and North Africa would likely suffer a significant loss in exports but could cushion the blow through external borrowing on the basis of anticipated oil revenues. South Asian exports, too, would suffer significantly, but the adverse impact on investment and growth is likely to be the most muted of any region except East Asia. Europe and Central Asia (which includes the FSU) are vulnerable to protectionist sentiment, particularly in the European Community, with serious repercussions on growth, reflecting in part its need to import capital goods. Finally, East Asia is also vulnerable to protectionism.

The reduction in export growth of developing countries affects their GDP growth directly (column three in table 7-11) as well as indirectly through the tightened

Table 7-11 Developing countries: effects on trade and output of the low case for the global economy, 1992–2002

(percentage changes per year: low-case less baseline)

Regions	Volume		GDP (3)
	Exports (1)	Imports (2)	
All developing countries	-2.7	-2.7	-1.6
Latin America and the Caribbean	-3.3	-3.6	-2.1
Sub-Saharan Africa ^a	-3.0	-2.7	-2.1
East Asia and the Pacific	-2.5	-2.7	-1.1
South Asia	-2.7	-2.6	-1.3
Middle East and North Africa	-2.7	-2.1	-1.7
Europe and former Soviet Union	-2.6	-2.4	-2.0

a. Excludes Republic of South Africa.

Source: World Bank, baseline forecast, February 1993.

current account constraint and the need to contain domestic absorption. The corresponding fall in GDP growth is greatest in Latin America and Sub-Saharan Africa, which register the weakest export performance and which traditionally have exhibited the greatest difficulty in adjusting domestic savings and production structures to external shocks. The fall in GDP growth is least in East Asia (particularly China), where in the long run the capacity to adjust the savings rate and to maintain investment growth has been demonstrated. In all regions, import growth falls relative to GDP growth, partly a reflection of the less liberal trade regime assumed in this scenario.²

Cumulative differences in growth effects across regions are important for per capita incomes ten years hence (table 7-12). If the low case prevails, real income per capita in both Sub-Saharan Africa and Europe and Central Asia will be lower in 2002 than

in 1992. In Latin America and the Caribbean and the Middle East and North Africa, real per capita incomes will be about the same. But in East Asia and South Asia they will be much higher, albeit not as high as in the baseline forecast. This underlines an important consequence of a poor global economy for development: it tends to intensify the poverty of weak economies while hurting strong economies less.

Notes

1. By way of comparison, gross fixed investment in the United States over the same period also amounted to US\$ 3 trillion but in an economy nearly twice as large.

2. Historical long-run "elasticities" of LMIC imports with respect to GDP averaged about 1.3 in the 1970s and 1980s. The average "elasticity" in the shift from the baseline to the low case is somewhat higher (1.7).

Table 7-12 Per capita GDP in the baseline and low case

(1987 U.S. dollars, based on market prices and exchange rates)

Regions	1992 estimate	2002	
		Baseline	Low
All developing countries	823	1,100	944
Latin America and the Caribbean	1,731	2,132	1,751
Sub-Saharan Africa ^a	348	369	301
East Asia and the Pacific	585	1,037	926
South Asia	355	498	438
Middle East and North Africa	1,941	2,281	1,925
Europe and Central Asia	1,701	1,960	1,641

a. Excludes Republic of South Africa.

Source: World Bank, baseline forecast, February 1993.

Statistical appendix



Table 1

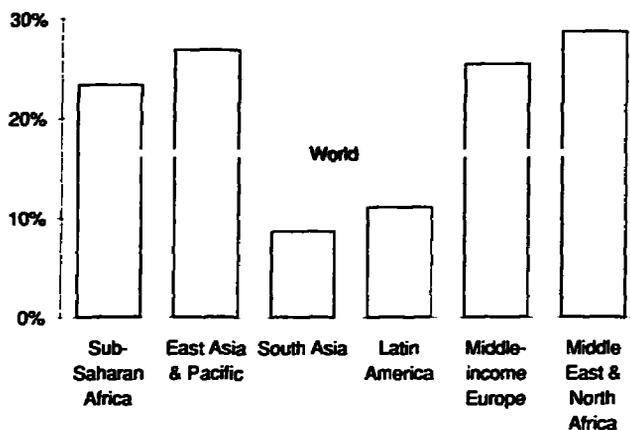
Exports of goods, 1991

Statistical Appendix

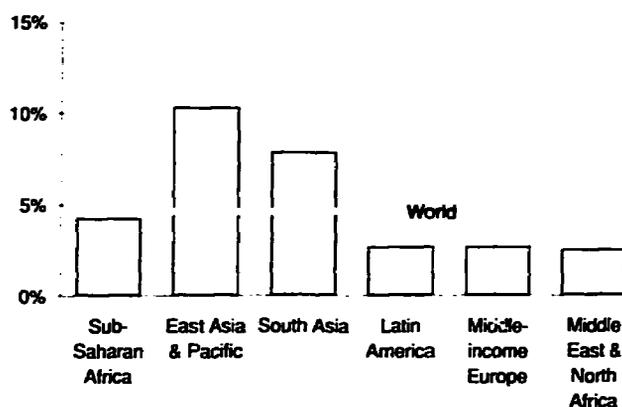
Merchandise exports, US \$ millions; average annual growth rate 1981-1991 (%); Effective market growth (EMG) 1981-1991 (%)

Exports Growth EMG				Exports Growth EMG				Exports Growth EMG			
Low-income				Lower middle-income				Upper middle-income			
Bangladesh	1,718	7.8	2.6	Algeria	11,790	3.5	2.5	Argentina	11,975	1.9	2.6
Benin	..	..	3.0	Bolivia	849	6.0	1.8	Botswana	..	..	2.7
Bhutan	..	..	..	Bulgaria	..	..	1.6	Brazil	31,610	3.6	2.8
Burkina Faso	..	..	3.8	Cameroon	1,272	3.5	2.8	Gabon	3,183	7.4	2.5
Burundi	92	3.9	2.4	Chile	8,552	5.7	3.1	Greece	8,647	4.4	2.4
Central African Rep.	133	2.1	3.1	Colombia	7,269	14.2	2.3	Hungary	10,180	1.8	2.0
Chad	..	..	3.2	Congo	1,455	5.8	2.3	Korea	71,672	11.8	3.4
China	72,875	11.3	4.6	Costa Rica	1,490	5.3	2.2	Mexico	27,120	2.0	2.4
Egypt, Arab Rep.	3,887	3.0	2.3	Côte d'Ivoire	3,011	4.2	2.7	Oman	635	10.0	5.8
Ethiopia	276	-0.2	2.5	Czechoslovakia	16,317	-0.6	1.9	Portugal	16,326	11.2	2.6
Ghana	992	6.3	2.5	Dominican Rep.	658	-3.9	2.3	Saudi Arabia	54,736	-1.9	3.5
Guinea	..	..	2.5	Ecuador	2,957	5.3	2.2	South Africa	24,164	2.0	3.1
Guinea-Bissau	28	4.9	2.5	El Salvador	367	-2.3	2.1	Trinidad & Tobago	1,985	-1.3	2.0
Haiti	103	-4.8	2.1	Guatemala	1,202	-0.1	2.2	Uruguay	1,574	2.9	2.5
Honduras	679	-0.6	2.4	Iran, Islamic Rep.	..	..	3.1	Venezuela	15,127	0.8	2.3
India	17,664	8.0	2.8	Jamaica	1,081	1.7	2.1	Yugoslavia	13,953	-1.9	2.0
Indonesia	28,997	5.0	4.4	Jordan	879	5.7	1.3				
Kenya	1,203	3.1	3.0	Malaysia	34,300	11.3	4.7	High-income			
Lao PDR	..	..	..	Mauntius	1,193	10.3	2.5	Australia	37,724	4.5	4.1
Lesotho	..	..	2.8	Morocco	4,278	6.3	2.5	Austria	41,082	6.5	2.3
Madagascar	344	0.2	2.8	Panama	333	-0.9	2.3	Belgium	118,222	4.9	2.6
Malawi	470	3.7	2.7	Papua New Guinea	1,361	6.7	3.7	Canada	124,797	5.8	2.5
Mali	354	9.7	3.5	Paraguay	737	11.7	2.1	Denmark	35,687	5.1	2.5
Mauritania	438	4.1	2.5	Peru	3,307	1.7	3.0	Finland	23,081	2.5	2.4
Mozambique	..	..	..	Philippines	8,754	3.8	3.6	France	212,868	3.7	2.6
Nepal	238	8.2	3.1	Poland	14,903	4.6	1.9	Germany	401,848	4.0	2.5
Nicaragua	268	-2.6	2.3	Romania	..	..	2.1	Hong Kong	29,738	4.4	4.6
Niger	385	4.3	2.4	Senegal	977	5.1	2.5	Ireland	24,240	7.2	2.5
Nigeria	12,071	4.0	2.4	Syrian Arab Rep.	..	..	2.0	Israel	11,891	7.0	2.8
Pakistan	6,528	10.5	3.2	Thailand	28,324	14.7	3.6	Italy	169,365	3.1	2.6
Rwanda	..	..	3.5	Tunisia	3,709	6.2	2.3	Japan	314,396	3.5	3.9
Sierra Leone	145	3.7	2.5	Turkey	13,594	4.1	2.1	Netherlands	133,527	4.6	2.5
Sri Lanka	2,629	6.6	2.6					New Zealand	9,269	3.5	3.5
Sudan	329	-2.6	3.7					Norway	34,037	8.0	2.4
Tanzania	394	-3.7	3.5					Singapore	58,872	9.3	4.3
Togo	292	5.9	2.8					Spain	60,135	7.5	2.5
Uganda	200	-3.7	2.6					Sweden	55,043	3.6	2.6
Yemen Rep.	..	..	2.8					Switzerland	61,468	3.3	2.8
Zambia	1,082	2.2	4.2					United Kingdom	185,095	3.0	2.7
Zimbabwe	1,779	2.0	4.1					United States	397,705	5.0	3.3

Merchandise exports as share of GDP, 1991



Annual growth rate of exports, 1981-91



Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.

Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Table 3

Foreign direct investment, 1991

Statistical Appendix

Net inflows of foreign direct investment (FDI), US\$ millions; FDI share of gross domestic investment (GDI) (%)

	FDI	Share		FDI	Share		FDI	Share
Low-income			Lower middle-income			Upper middle-income		
Bangladesh	1.4	0.1	Algeria	0.3	0.0	Argentina	2,439.0	15.1
Benin	..	..	Bolivia	52.0	7.5	Botswana	38.2	..
Bhutan	..	..	Bulgaria	4.0	0.1	Brazil	1,600.0	2.0
Burkina Faso	..	..	Cameroon	35.0	2.0	Gabon	125.1	10.0
Burundi	0.9	0.4	Chile	576.0	9.8	Greece	1,135.0	9.7
Central African Rep.	-5.3	..	Colombia	457.0	7.2	Hungary	1,462.1	24.4
Chad	..	..	Congo	..	..	Korea	1,116.0	1.0
China	4,366.0	3.3	Costa Rica	141.9	11.1	Mexico	4,762.0	7.4
Egypt, Arab Rep.	253.0	3.8	Côte d'Ivoire	46.1	4.7	Oman	150.0	8.7
Ethiopia	..	..	Czechoslovakia	599.9	5.8	Portugal	2,448.5	..
Ghana	14.8	1.6	Dominican Rep.	145.0	12.0	Saudi Arabia	1,271.0	7.3
Guinea	36.0	2.1	Ecuador	85.0	3.4	South Africa	-7.4	..
Guinea-Bissau	..	..	El Salvador	25.3	3.1	Trinidad & Tobago	169.2	17.7
Haiti	13.6	..	Guatemala	90.7	7.0	Uruguay	..	..
Honduras	44.7	6.2	Iran, Islamic Rep.	..	..	Venezuela	1,914.0	19.2
India	..	..	Jamaica	127.0	11.2	Yugoslavia	..	..
Indonesia	1,482.0	3.6	Jordan	-11.9	..			
Kenya	43.3	2.5	Malaysia	4,072.6	24.2	High-income		
Lao PDR	..	..	Mauritius	19.0	2.5	Australia	4,833.4	8.5
Lesotho	7.5	1.2	Morocco	319.9	5.2	Austria	606.7	1.4
Madagascar	13.7	6.3	Panama	-61.5	..	Belgium	..	..
Malawi	..	..	Papua New Guinea	290.0	27.1	Canada	4,533.9	3.9
Mali	3.5	0.6	Paraguay	80.0	5.2	Denmark	1,552.5	7.2
Mauritania	..	..	Peru	-7.0	..	Finland	-232.9	-0.9
Mozambique	22.5	4.0	Philippines	544.0	6.1	France	15,235.3	6.0
Nepal	..	..	Poland	291.0	1.7	Germany	6,590.8	2.0
Nicaragua	..	..	Romania	40.0	0.4	Hong Kong	..	..
Niger	..	..	Senegal	..	..	Ireland	99.5	1.1
Nigeria	712.4	12.8	Syrian Arab Rep.	..	..	Israel	243.7	1.7
Pakistan	257.2	3.0	Thailand	2,014.0	5.6	Italy	2,403.4	1.0
Rwanda	4.6	2.3	Tunisia	150.3	4.9	Japan	1,370.0	0.1
Sierra Leone	..	..	Turkey	810.0	3.9	Netherlands	4,308.3	7.0
Sri Lanka	104.5	5.0				New Zealand	444.5	5.9
Sudan	..	..				Norway	-438.6	..
Tanzania	..	..				Singapore	3,583.7	24.0
Togo	..	..				Spain	10,502.2	7.9
Uganda	1.0	0.3				Sweden	6,347.8	15.6
Yemen Rep.	..	..				Switzerland	2,561.4	4.1
Zambia	..	..				United Kingdom	21,536.6	13.5
Zimbabwe	..	..				United States	11,500.0	1.3

Table 3a International borrowing: bond issuance and bank lending, 1991 (millions of US\$)

	Bonds	Total
Argentina	725	725
Brazil	1,212	1,230
China	263	2,595
Czechoslovakia	278	278
Greece	1,894	2,528
Hong Kong	111	1,495
Hungary	1,238	1,378
India	150	240
Indonesia	294	5,527
Korea, Rep.	2,446	6,094
Malaysia	190	412
Mexico	2,130	5,554
Pakistan	0	96
Poland	0	5
Portugal	273	722
South Africa	338	338
Taiwan, China	179	834
Thailand	31	1,842
Turkey	640	2,280
Venezuela	581	581
Zimbabwe	0	170

Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.

Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Ratio of FDI to GDI, 1991

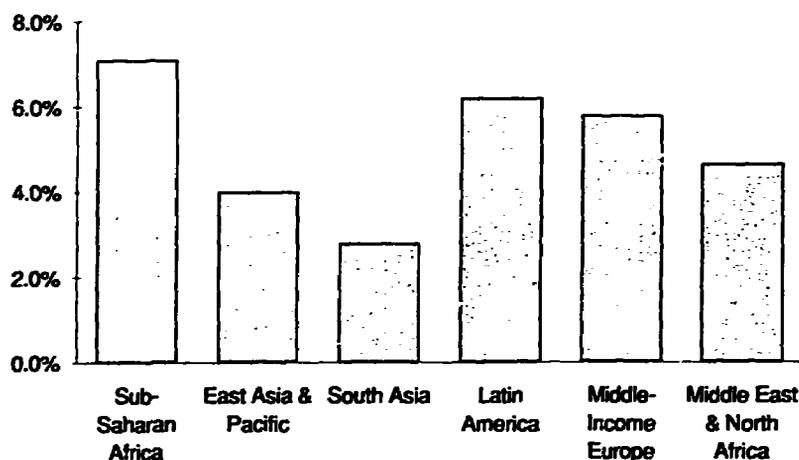


Table 4

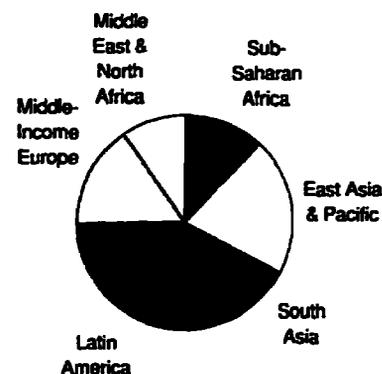
External financing ratios, 1991

Statistical Appendix

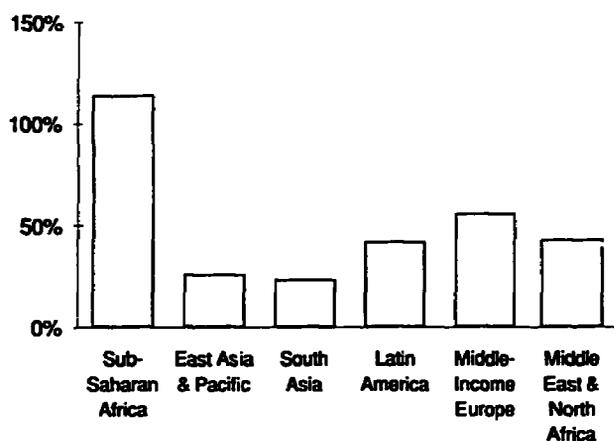
Present value of debt service (PV) as a share of GNP (%); present value of debt service as a share of exports of goods and services (XGS) (%)

PV/GNP		PV/XGS	PV/GNP		PV/XGS	PV/GNP		PV/XGS
Low-income			Lower middle-income			Upper middle-income		
Bangladesh	26.9	294.1	Algeria	55.3	215.3	Argentina	72.6	449.8
Benin	37.9	168.4	Bolivia	64.5	328.1	Botswana	13.6	19.3
Bhutan	19.7	55.7	Bulgaria	71.0	231.1	Brazil	26.2	324.6
Burkina Faso	21.4	165.3	Cameroon	55.2	225.6	Gabon	83.3	146.1
Burundi	38.1	361.8	Chile	61.8	153.3	Greece	..	..
Central African Rep.	40.4	373.9	Colombia	42.3	183.7	Hungary	80.8	181.4
Chad	24.0	120.5	Congo	155.7	332.7	Korea	14.4	46.5
China	13.3	80.9	Costa Rica	65.5	163.0	Mexico	39.0	226.4
Egypt, Arab Rep.	65.5	199.5	Côte d'Ivoire	206.3	525.6	Oman	26.9	..
Ethiopia	38.2	437.4	Czechoslovakia	25.1	68.4	Portugal	47.4	119.6
Ghana	43.6	245.7	Dominican Rep.	61.4	207.3	Saudi Arabia	..	..
Guinea	68.7	247.3	Ecuador	113.0	353.8	South Africa	..	..
Guinea-Bissau	247.6	..	El Salvador	28.4	174.7	Trinidad & Tobago	49.5	103.3
Haiti	17.1	165.5	Guatemala	27.7	139.8	Uruguay	47.2	174.3
Honduras	86.7	277.1	Iran, Islamic Rep.	9.2	57.4	Venezuela	63.1	185.1
India	20.0	260.2	Jamaica	114.3	181.2	Yugoslavia	..	100.9
Indonesia	61.2	206.8	Jordan	206.1	304.1			
Kenya	63.7	246.0	Malaysia	45.7	52.4			
Lao PDR	31.9	266.7	Mauritius	32.9	46.4			
Lesotho	22.7	40.7	Morocco	73.8	312.2			
Madagascar	103.0	542.8	Panama	127.1	104.5			
Malawi	41.9	158.6	Papua New Guinea	75.5	150.5			
Mali	61.2	332.1	Paraguay	35.5	114.1			
Mauritania	172.6	353.1	Peru	54.8	447.7			
Mozambique	320.5	1,064.1	Philippines	66.9	213.3			
Nepal	23.9	173.0	Poland	77.9	285.9			
Nicaragua	537.6	2,680.7	Romania	6.0	39.2			
Niger	45.8	316.0	Senegal	44.1	163.9			
Nigeria	105.1	251.0	Syrian Arab Rep.	83.2	..			
Pakistan	37.2	228.0	Thailand	38.1	90.3			
Rwanda	21.7	294.2	Tunisia	60.6	136.5			
Sierra Leone	121.1	..	Turkey	47.0	208.5			
Sri Lanka	46.0	149.6						
Sudan	..	3,622.9						
Tanzania	188.5	902.6						
Togo	58.3	128.1						
Uganda	60.7	903.5						
Yemen Rep.	..	..				
Zambia	..	537.5						
Zimbabwe	45.9	145.3						

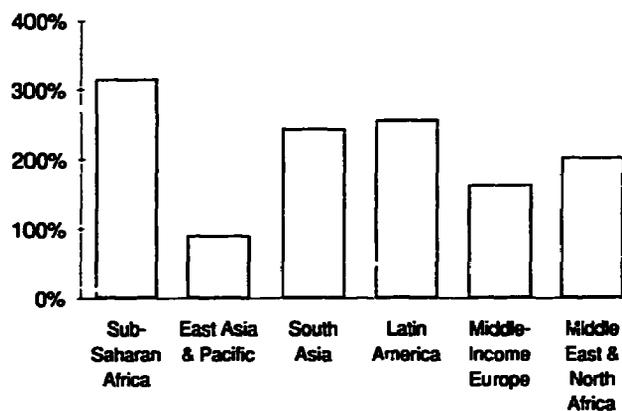
Present value of debt, 1991



Ratio of present value of debt to GNP, 1991



Ratio of present value of debt to exports of goods and services, 1991



Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.

Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Table 5

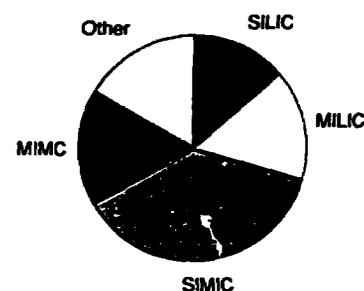
Structure of long-term debt, 1991

Statistical Appendix

Share of long-term debt (%): concessional debt; nonconcessional debt at variable interest rates; nonconcessional debt at fixed interest rates

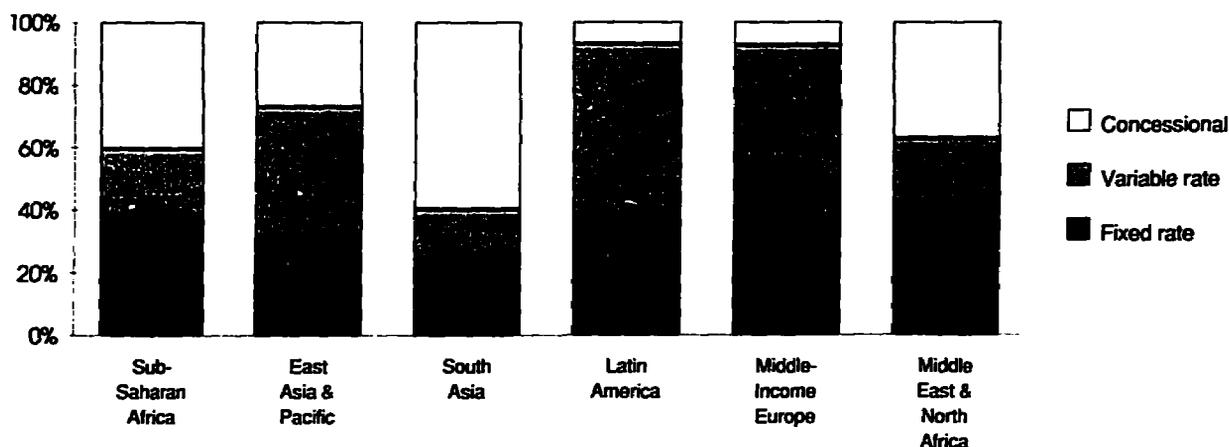
	Concessional			Nonconcessional				Concessional			Nonconcessional							
	Concessional	Variable	Fixed	Concessional	Variable	Fixed		Concessional	Variable	Fixed	Concessional	Variable	Fixed					
Low-income													Lower middle-income			Upper middle-income		
Bangladesh	98.2	0.0	1.8	Algeria	3.7	41.6	54.7	Argentina	1.2	58.3	40.5							
Benin	83.3	2.1	14.6	Bolivia	46.7	24.2	29.1	Botswana	40.8	14.5	44.7							
Bhutan	81.0	0.0	19.0	Bulgaria	0.0	73.0	27.0	Brazil	3.1	71.8	25.1							
Burkina Faso	85.1	0.0	14.9	Cameroon	28.6	18.6	52.8	Gabon	28.1	10.2	61.7							
Burundi	94.3	0.0	5.7	Chile	2.5	76.6	20.9	Greece	..	..	..				
Central African Rep.	86.0	0.1	13.9	Colombia	6.3	50.7	43.1	Hungary	0.4	56.4	43.2							
Chad	88.8	0.0	11.2	Congo	43.3	27.3	29.4	Korea	16.0	41.8	42.2							
China	21.2	33.1	45.7	Costa Rica	25.4	32.1	42.5	Mexico	1.3	45.9	52.9							
Egypt, Arab Rep.	41.3	11.5	47.2	Côte d'Ivoire	15.6	65.7	18.7	Oman	12.3	59.7	28.1							
Ethiopia	85.8	2.9	11.3	Czechoslovakia	0.0	33.3	66.7	Portugal	4.7	27.0	68.4							
Ghana	80.1	2.6	17.4	Dominican Rep.	34.8	31.5	33.7	Saudi Arabia	..	..	..				
Guinea	76.9	7.2	16.0	Ecuador	10.0	61.0	29.0	South Africa	..	..	..				
Guinea-Bissau	77.3	0.2	22.5	El Salvador	62.3	14.1	23.6	Trinidad & Tobago	3.1	51.7	45.2							
Haiti	92.1	0.6	7.3	Guatemala	30.8	16.8	52.4	Uruguay	2.3	60.1	37.6							
Honduras	40.2	21.7	38.1	Iran, Islamic Rep.	3.3	84.7	12.0	Venezuela	0.3	62.7	37.1							
India	46.3	21.0	32.7	Jamaica	32.3	25.7	42.1	Yugoslavia	4.5	75.1	20.4							
Indonesia	34.8	43.1	22.2	Jordan	39.0	28.2	32.8											
Kenya	49.3	20.2	30.4	Malaysia	13.8	52.2	34.0											
Lao PDR	99.5	0.0	0.5	Mauritius	40.6	32.8	26.6											
Lesotho	81.2	0.0	18.8	Morocco	27.0	52.5	20.5											
Madagascar	63.3	6.1	30.6	Panama	11.6	61.3	27.1											
Malawi	84.2	3.4	12.5	Papua New Guinea	27.4	52.7	20.0											
Mali	97.2	0.3	2.5	Paraguay	37.1	16.8	46.1											
Mauritania	81.9	5.6	12.5	Peru	15.5	27.8	56.6											
Mozambique	69.2	3.7	27.1	Philippines	31.9	41.7	26.4											
Nepal	93.8	0.0	6.2	Poland	3.5	67.7	28.8											
Nicaragua	34.5	25.9	39.6	Romania	5.7	5.0	89.3											
Niger	54.9	16.5	28.6	Senegal	67.0	4.4	28.6											
Nigeria	3.2	31.8	65.0	Syrian Arab Rep.	88.2	0.0	11.8											
Pakistan	71.0	14.4	14.6	Thailand	20.2	56.6	23.2											
Rwanda	99.5	0.0	0.5	Tunisia	39.8	23.4	36.8											
Sierra Leone	62.4	1.1	36.6	Turkey	19.1	35.5	45.4											
Sri Lanka	83.4	5.6	11.0															
Sudan	47.5	19.6	32.9															
Tanzania	66.9	5.5	27.6															
Togo	68.2	3.3	28.5															
Uganda	71.5	1.3	27.2															
Yemen Rep.	91.8	1.5	6.7															
Zambia	52.7	12.0	35.2															
Zimbabwe	34.7	26.8	38.4															

Long-term debt outstanding and disbursed, 1991



SILIC -- Severely indebted low-income
 SIMIC -- Severely indebted middle-income
 MILIC -- Moderately indebted low-income
 MIMIC -- Moderately indebted middle-income

Structure of long-term debt, 1991



Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.

Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Table 6

Concessional aid flows, 1991

Concessional flows per capita (\$); grant share of concessional flows (%)

Conc/Pop Grant/Conc

Low-income		
Bangladesh	17.5	55.2
Benin	49.2	61.0
Bhutan	25.3	73.7
Burkina Faso	36.1	59.5
Burundi	37.0	59.7
Central African Rep.	5.5	35.5
Chad	34.8	52.5
China	0.9	25.0
Egypt, Arab Rep.	78.9	79.4
Ethiopia	11.2	78.0
Ghana	62.4	60.9
Guinea	61.5	38.0
Guinea-Bissau	89.0	67.4
Haiti	26.7	80.7
Honduras	115.3	77.7
India	3.6	18.2
Indonesia	13.4	12.4
Kenya	45.2	73.9
Lao PDR	24.2	51.9
Lesotho	47.2	56.5
Madagascar	45.2	64.9
Malawi	43.8	56.9
Mali	34.8	69.0
Mauritania	77.0	63.0
Mozambique	53.4	87.4
Nepal	16.3	50.6
Nicaragua	224.7	85.5
Niger	35.3	89.2
Nigeria	2.0	72.7
Pakistan	9.6	38.5
Rwanda	39.6	64.4
Sierra Leone	19.0	41.3
Sri Lanka	46.5	25.0
Sudan	21.1	76.3
Tanzania	37.3	73.3
Togo	41.6	58.2
Uganda	25.1	59.5
Yemen Rep.	19.0	35.8
Zambia	117.1	71.7
Zimbabwe	32.3	70.9

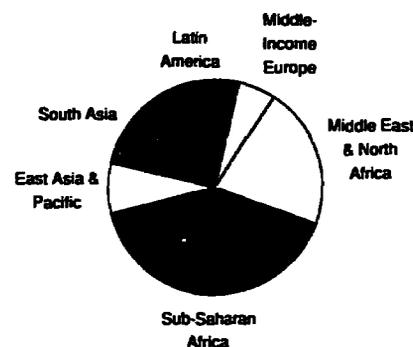
Conc/Pop Grant/Conc

Lower middle-income		
Algeria	12.1	25.3
Bolivia	104.0	78.9
Bulgaria	..	..
Cameroon	31.8	71.0
Chile	7.3	99.0
Colombia	1.9	82.3
Congo	30.0	55.1
Costa Rica	49.7	53.9
Côte d'Ivoire	26.3	81.0
Czechoslovakia	..	..
Dominican Rep.	9.9	56.3
Ecuador	16.8	30.9
El Salvador	35.1	61.3
Guatemala	8.3	64.6
Iran, Islamic Rep.	1.6	75.3
Jamaica	164.6	62.8
Jordan	253.8	43.3
Malaysia	20.8	15.1
Mauritius	61.8	23.5
Morocco	35.5	60.6
Panama	35.6	100.0
Papua New Guinea	92.5	75.7
Paraguay	25.9	19.3
Peru	27.2	33.1
Philippines	20.9	30.5
Poland	0.7	..
Romania	..	..
Senegal	84.7	82.6
Syrian Arab Rep.	45.4	19.2
Thailand	10.8	35.7
Tunisia	51.7	33.7
Turkey	29.1	68.9

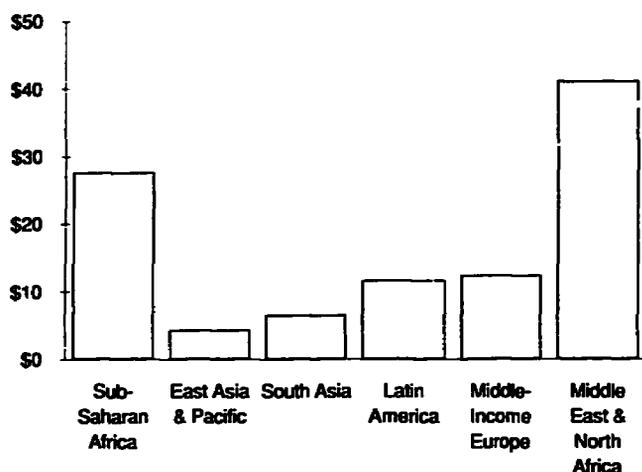
Conc/Pop Grant/Conc

Upper middle-income		
Argentina	1.2	100.0
Botswana	76.2	62.6
Brazil	0.4	69.7
Gabon	34.2	85.4
Greece	..	..
Hungary	0.1	..
Korea	6.2	2.2
Mexico	1.9	40.0
Oman	41.3	4.5
Portugal	55.5	2.7
Saudi Arabia	..	..
South Africa	..	..
Trinidad & Tobago	3.1	100.0
Uruguay	5.5	58.8
Venezuela	0.3	100.0
Yugoslavia	2.6	96.8

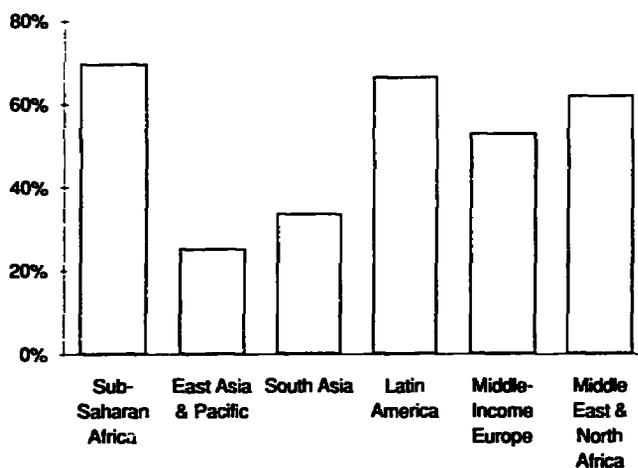
Official grants, 1991



Concessional flows per capita, 1991



Grant share of concessional flows, 1991



Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.
Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Table 7

Interest and exchange rate impacts, 1991

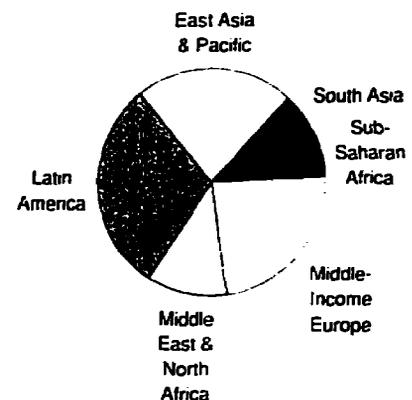
Ratio of interest rate impacts to exports of goods and services (%); ratio of exchange rate impacts to exports of goods and services (%)

Exchange Interest		
Low-income		
Bangladesh	8.4	0.0
Benin	-1.2	0.0
Bhutan	0.0	0.0
Burkina Faso	-0.6	0.0
Burundi	0.0	0.0
Central African Rep.	-1.5	0.0
Chad	-0.8	0.0
China	1.5	0.4
Egypt, Arab Rep.	-0.4	0.7
Ethiopia	-0.7	0.4
Ghana	0.4	0.1
Guinea	-1.6	0.0
Guinea-Bissau	..	..
Haiti	-0.4	0.0
Honduras	0.2	1.7
India	1.2	0.6
Indonesia	3.8	0.5
Kenya	-1.1	0.2
Lao PDR	1.8	0.0
Lesotho	-0.2	0.0
Madagascar	1.4	1.0
Malawi	0.0	0.4
Mali	-3.6	0.0
Mauritania	-1.4	0.0
Mozambique	-11.5	0.0
Nepal	1.9	0.0
Nicaragua	-12.6	4.9
Niger	-1.5	0.0
Nigeria	-0.5	3.1
Pakistan	2.2	0.3
Rwanda	0.0	0.0
Sierra Leone	..	..
Sri Lanka	2.3	0.0
Sudan	-21.9	0.0
Tanzania	-7.9	0.0
Togo	-0.8	0.0
Uganda	-6.6	0.5
Yemen Rep.	..	..
Zambia	-4.0	0.3
Zimbabwe	-1.1	0.6

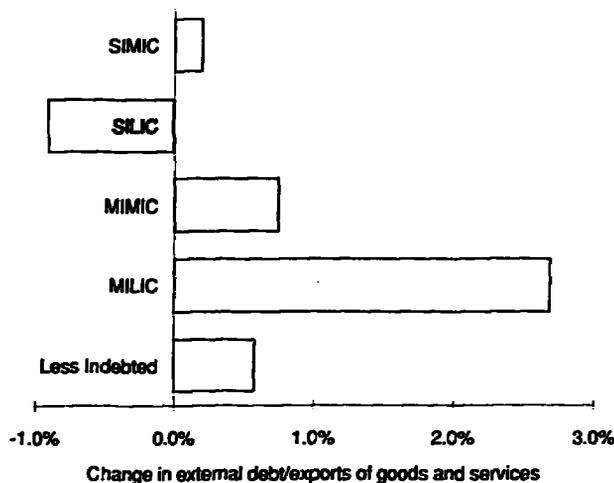
Exchange Interest		
Lower middle-income		
Algeria	1.3	4.5
Bolivia	1.5	1.0
Bulgaria	0.3	3.1
Cameroon	-1.4	0.0
Chile	0.4	11.6
Colombia	-0.3	3.2
Congo	-2.7	0.2
Costa Rica	-0.2	1.1
Côte d'Ivoire	-1.9	0.1
Czechoslovakia	-0.1	0.5
Dominican Rep.	0.5	0.1
Ecuador	1.1	3.7
El Salvador	-0.1	0.8
Guatemala	-0.2	0.0
Iran, Islamic Rep.	0.0	0.0
Jamaica	-0.1	0.9
Jordan	0.1	1.3
Malaysia	0.7	0.3
Mauritius	-0.5	0.4
Morocco	0.1	6.7
Panama	0.2	0.0
Papua New Guinea	1.3	0.2
Paraguay	0.5	0.0
Peru	-0.2	0.2
Philippines	3.5	1.0
Poland	-1.6	1.1
Romania	0.0	0.0
Senegal	-0.9	0.2
Syrian Arab Rep.	..	..
Thailand	0.9	0.1
Tunisia	0.5	0.4
Turkey	0.4	1.4

Exchange Interest		
Upper middle-income		
Argentina	0.6	7.3
Botswana	-0.1	0.0
Brazil	0.3	7.7
Gabon	-0.9	0.1
Greece	..	..
Hungary	1.9	4.3
Korea	0.4	0.1
Mexico	0.7	3.4
Oman	..	..
Portugal	0.3	1.0
Saudi Arabia	..	..
South Africa	..	..
Trinidad & Tobago	2.1	2.2
Uruguay	0.2	2.5
Venezuela	-0.1	3.2
Yugoslavia	-0.7	2.6

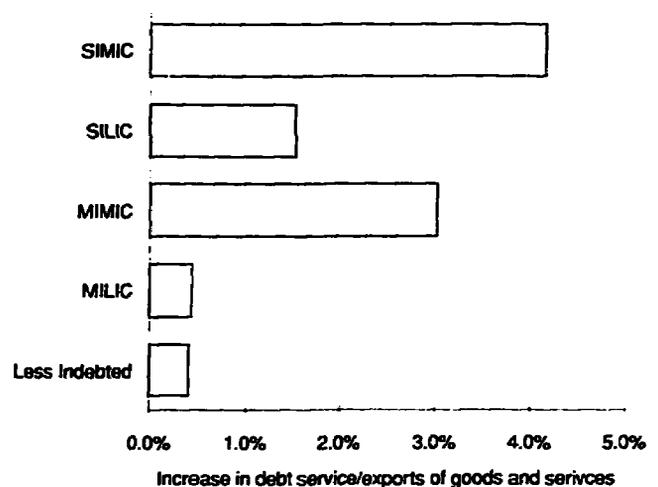
Total debt service, 1991



Exchange rate impacts, 1991



Interest rate impacts, 1991



Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.

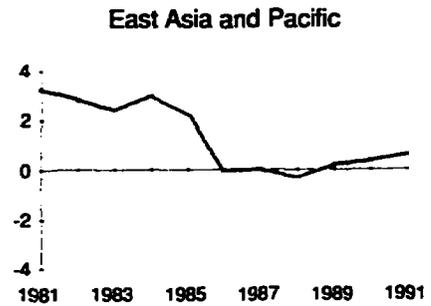
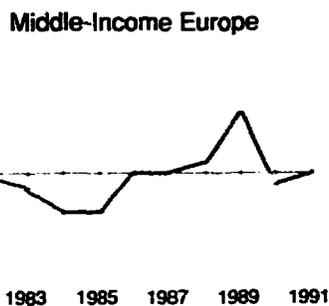
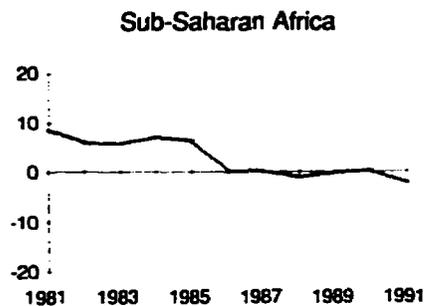
Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Table 8

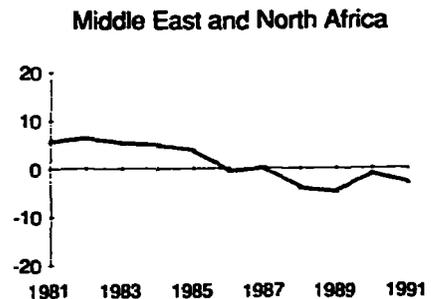
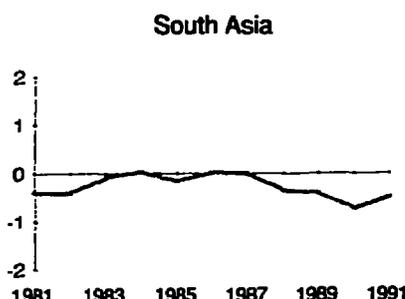
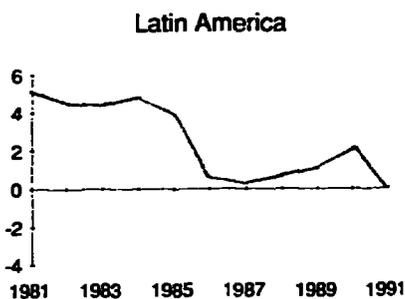
Terms of trade, 1991

Barter terms of trade index, 1987=100; ratio of terms of trade effect to GNY in constant 1987 prices (%)

	Index	Ratio		Index	Ratio		Index	Ratio
Low-income			Lower middle-income			Upper middle-income		
Bangladesh	105	0.4	Algeria	95	-0.7	Argentina	113	1.5
Benin	..	..	Bolivia	73	-5.6	Botswana	..	..
Bhutan	..	..	Bulgaria	88	..	Brazil	119	1.6
Burkina Faso	..	..	Cameroon	..	..	Gabon	79	-19.8
Burundi	65	-3.0	Chile	122	5.7	Greece	107	0.9
Central African Rep.	111	1.1	Colombia	84	-3.3	Hungary	102	0.9
Chad	..	..	Congo	99	-0.7	Korea	108	2.6
China	111	1.7	Costa Rica	109	2.7	Mexico	100	0.0
Egypt, Arab Rep.	93	-0.6	Côte d'Ivoire	79	-9.4	Oman	72	..
Ethiopia	71	..	<i>Czechoslovakia</i>	..	..	Portugal	112	..
Ghana	72	-5.8	Dominican Rep.	112	1.0	Saudi Arabia	79	..
Guinea	73	..	Ecuador	90	-2.6	South Africa	86	-4.0
Guinea-Bissau	69	-11.4	El Salvador	103	0.2	Trinidad & Tobago	97	-1.3
Haiti	77	-0.7	Guatemala	103	0.3	Uruguay	105	1.0
Honduras	113	1.4	Iran, Islamic Rep.	..	..	Venezuela	101	0.3
India	100	0.0	Jamaica	91	-3.3	<i>Yugoslavia</i>	107	3.5
Indonesia	101	0.4	Jordan	116	2.0			
Kenya	103	0.3	Malaysia	93	-4.8			
Lao PDR	..	..	Mauritius	115	6.0			
Lesotho	78	..	Morocco	98	-0.3			
Madagascar	93	-1.2	Panama	..	..	
Malawi	115	3.3	Papua New Guinea	80	-10.7			
Mali	86	-2.4	Paraguay	..	..	
Mauritania	121	7.0	Peru	59	-6.1			
Mozambique	..	..	Philippines	91	-1.9			
Nepal	85	..	Poland	104	1.1			
Nicaragua	99	-0.1	Romania	66	..			
Niger	81	-3.7	Senegal	103	0.5			
Nigeria	81	-7.1	Syrian Arab Rep.	..	..	
Pakistan	80	-2.9	Thailand	91	-3.2			
Rwanda	85	..	Tunisia	95	-1.4			
Sierra Leone	70	-10.5	Turkey	108	0.9			
Sri Lanka	87	-3.8						
Sudan	84	-0.3						
Tanzania	105	..						
Togo	116	2.5						
Uganda	88	-0.5						
Yemen Rep.	82	..						
Zambia	67	-26.9						
Zimbabwe	85	..						



Terms of trade effect
as percentage of GNY, 1981-1991
1987 = 0
(Note differences in scale.)



Czechoslovakia refers to the former Czechoslovakia; disaggregated data are not yet available.
Yugoslavia refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

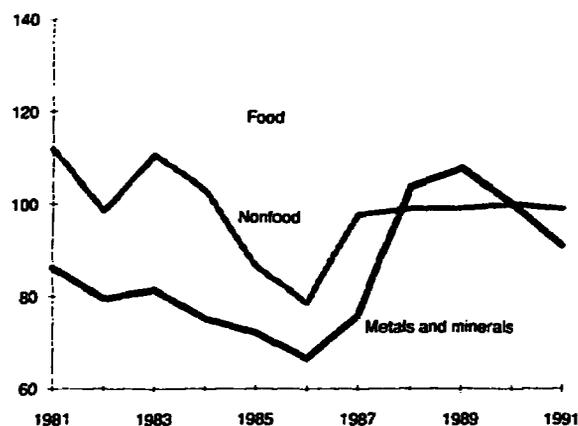
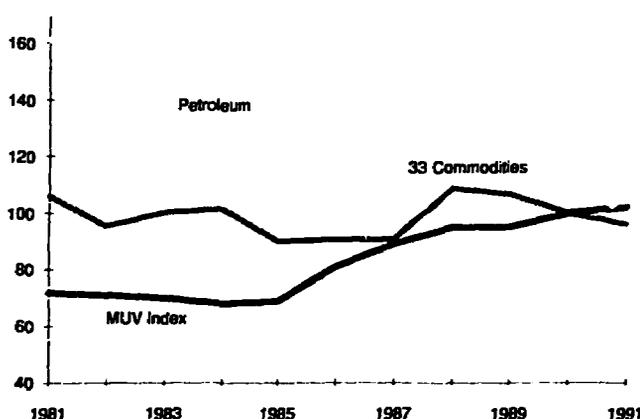
Table 9

MUV, LIBOR, and commodity prices

Statistical Appendix

		1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
G-5 unit value index of manufactures 1/		72	71	70	68	69	81	89	95	95	100	102
LIBOR 2/		17	14	10	11	9	7	7	8	9	8	6
Commodity price indexes 3/	weights											
Petroleum		161	146	132	129	125	63	81	64	77	100	81
33 commodities excl. energy		106	95	100	101	90	91	91	109	107	100	96
Agriculture	67.7%	122	107	115	119	104	107	98	112	106	100	98
Food	53.2%	125	110	117	124	109	116	98	115	109	100	97
Nonfood	14.4%	112	98	111	103	87	79	98	99	99	100	99
Timber	5.2%	74	74	69	80	65	72	105	111	107	100	105
Metals and minerals	27.1%	86	80	81	75	72	67	76	104	108	100	91
Commodity prices	units											
Agriculture												
Cocoa	cents/kg	208	174	212	240	225	207	199	159	124	127	120
Coffee	cents/kg	287	309	291	319	323	429	251	303	239	197	187
Tea	cents/kg	202	193	233	346	198	193	171	179	202	203	184
Sugar	cents/kg	37	19	19	11	9	13	15	22	28	28	20
Banana	\$/mt	401	374	429	370	380	382	365	478	547	541	560
Rice	\$/mt	483	293	277	252	216	211	230	301	320	287	314
Palm oil	\$/mt	571	445	501	729	501	257	343	437	350	290	339
Soybean oil	\$/mt	507	447	527	724	572	342	334	463	432	447	454
Cotton	cents/kg	185	160	185	179	132	106	165	140	167	182	168
Rubber	cents/kg	125	100	124	110	92	95	112	129	112	102	101
Other												
Logs	\$/cm	156	156	145	167	136	151	221	234	225	210	222
Sawnwood	\$/cm	314	302	304	307	276	266	276	307	422	524	472
Urea	\$/mt	216	159	135	171	136	107	117	155	132	157	172
Metals and minerals												
Copper	\$/mt	1,742	1,480	1,592	1,377	1,417	1,374	1,783	2,602	2,848	2,662	2,339
Aluminum	\$/mt	1,263	992	1,439	1,251	1,041	1,150	1,565	2,551	1,951	1,639	1,302
Phosphate rock	\$/mt	50	42	37	38	34	34	31	36	41	41	43
Steel products index (1990=100)		82	70	66	70	60	61	72	94	105	100	98
Energy												
Crude petroleum	\$/bbl	34	31	28	28	27	14	17	14	16	21	17
Coal	\$/mt	57	52	45	49	47	44	36	37	41	42	42

Primary commodity price indexes (1990 = 100)



Notes

1/ Unit Value Index (MUV index) in US dollar terms (1990=100) of manufactures exported from the G-5 countries (France, Germany, Japan, UK, and US), weighted by the countries' exports to developing countries.

2/ London interbank offered rate on six-month US dollar deposits.

3/ Indexes are in current US dollar terms (1990=100); 33 commodity price index is weighted by developing country export values.

Table 10

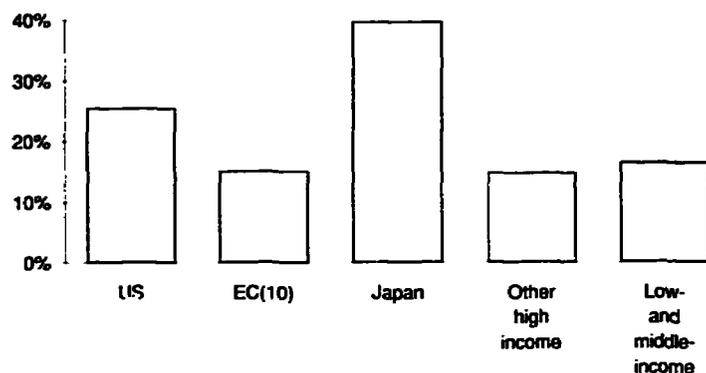
Direction of merchandise trade, 1991

Statistical Appendix

Percentage of world trade

From:	High-income countries					Low- and middle-income countries 2/								All
	USA	EC(10)	Japan	Other HIC	All HIC	East Asia	South Asia	Europe	MENA	SSA	LAC	All LMICs		
All high-income	10.9	29.2	3.9	15.9	59.9	6.9	0.8	4.2	2.7	1.4	3.5	19.5	79.4	
USA	..	2.3	1.4	4.1	7.7	1.5	0.1	0.3	0.4	0.1	1.8	4.2	11.9	
EC(10)	3.0	21.4	0.9	6.5	31.9	1.3	0.3	3.1	1.7	0.9	1.0	8.3	40.2	
Japan	2.8	1.1	..	2.2	6.1	2.3	0.1	0.2	0.3	0.1	0.3	3.3	9.4	
Other high-income	5.1	4.4	1.5	3.1	14.1	1.9	0.2	0.7	0.4	0.2	0.4	3.8	17.9	
All LMICs 1/	3.7	5.2	2.5	3.7	15.1	1.5	0.4	1.5	0.7	0.4	1.0	5.5	20.6	
East Asia & Paci	1.4	0.8	1.4	2.4	5.9	0.9	0.1	0.2	0.2	0.1	0.1	1.6	7.5	
South Asia	0.2	0.2	0.1	0.1	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.9	
Latin America	1.4	0.7	0.2	0.2	2.6	0.2	0.0	0.1	0.1	0.0	0.7	1.0	3.7	
All countries	14.5	34.4	6.3	19.6	75.0	8.4	1.2	5.7	3.5	1.8	4.5	25.0	100.0	

Share of merchandise imports from low- and middle-income countries, 1991



Direction of merchandise exports, 1991

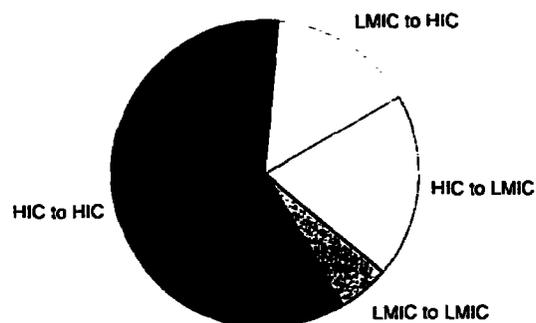


Table 11

Growth of merchandise trade, by direction, 1981-91

Average annual growth rate (%)

From:	High-income countries					Low- and middle-income countries 2/								All
	USA	EC(10)	Japan	Other HIC	All HIC	East Asia	South Asia	Europe	MENA	SSA	LAC	All LMICs		
All high-income	5.4	5.1	7.9	5.7	5.5	7.9	2.1	3.2	-7.1	-4.6	1.3	1.2	4.4	
USA	..	4.1	7.1	7.0	6.0	7.8	1.8	1.1	-4.5	-5.7	3.6	3.1	5.0	
EC(10)	4.0	5.2	13.5	4.9	5.2	9.4	2.5	5.0	-7.1	-3.9	-0.7	-0.1	4.1	
Japan	5.1	6.8	..	4.9	5.4	6.2	-1.5	-3.9	-13.0	-7.3	-3.2	0.2	3.5	
Other high-income	6.7	5.0	6.0	6.1	5.9	9.6	4.3	0.7	-4.8	-4.0	0.7	2.9	5.2	
All LMICs 1/	5.6	5.5	6.5	7.7	6.1	8.7	3.5	0.5	-1.9	3.5	2.1	2.3	5.0	
East Asia and Pacific	11.0	10.1	8.7	11.5	10.4	14.3	7.5	8.1	2.4	7.4	7.0	9.7	10.3	
South Asia	13.1	13.0	9.2	9.7	11.6	9.9	5.2	3.7	-2.8	-2.0	11.2	2.9	8.2	
Latin America	4.5	2.0	4.7	2.9	3.5	8.9	-0.6	-5.3	-1.2	-7.6	2.1	0.9	2.7	
All countries	5.5	5.2	7.3	6.0	5.6	8.0	2.6	2.3	-6.1	-3.1	1.5	1.4	4.5	

1/ Low- and middle-income countries: some regions not shown because of limited data availability.

2/ HIC -- High-income countries; LMIC -- Low- and middle-income countries; MENA -- Middle East and North Africa; SSA -- Sub-Saharan Africa; LAC -- Latin America and Caribbean

Table 12

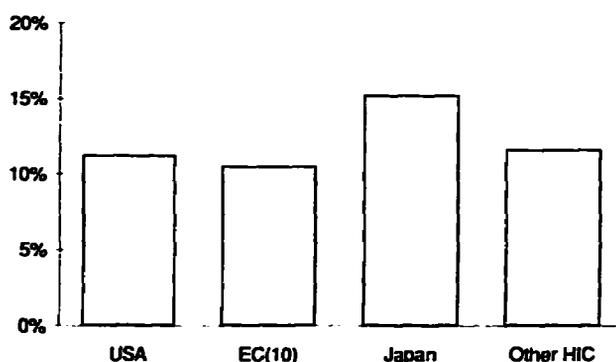
Direction of trade in manufactures, 1991

Statistical Appendix

Percentage of world trade

From:	To: High-income countries					Low- and middle-income countries 2/								All
	USA	EC(10)	Japan	Other HIC	All HIC	East Asia	South Asia	Europe	MENA	SSA	LAC	All LMICs		
All high-income	12.7	30.5	3.1	18.6	64.9	7.7	0.8	4.6	3.0	1.6	4.0	21.7	86.6	
USA	..	2.5	1.2	4.8	8.4	1.5	0.1	0.2	0.4	0.2	2.1	4.4	12.8	
EC(10)	3.6	22.6	1.1	7.6	34.8	1.6	0.4	3.4	1.9	1.0	1.1	9.5	44.3	
Japan	3.7	1.5	..	2.9	8.2	2.8	0.1	0.2	0.4	0.2	0.5	4.2	12.4	
Other high-income	5.4	3.9	0.8	3.3	13.5	1.7	0.2	0.7	0.4	0.2	0.3	3.6	17.1	
All LMICs 1/	2.6	2.6	1.1	3.3	9.7	0.8	0.2	1.3	0.5	0.3	0.7	3.8	13.4	
East Asia and Pacific	1.6	0.8	1.0	2.6	6.0	0.6	0.1	0.2	0.2	0.1	0.2	1.4	7.3	
South Asia	0.2	0.3	0.1	0.1	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.8	
Latin America	0.7	0.2	0.1	0.1	1.1	0.1	0.0	0.0	0.0	..	0.5	0.7	1.7	
All countries	15.4	33.1	4.2	21.9	74.6	8.4	1.0	5.9	3.5	1.9	4.7	25.4	100.0	

Growth of manufactured imports from low- and middle-income countries, 1981-91



Growth of manufactured exports, by direction, 1981-91

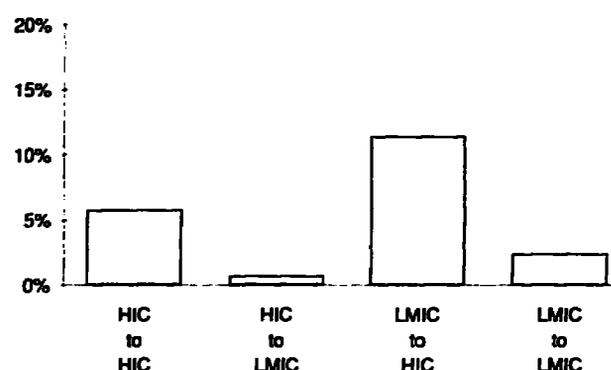


Table 13

Growth of trade in manufactures, by direction 1981-91

Average annual growth rate (%)

From:	To: High-income countries					Low- and middle-income countries 2/								All
	USA	EC(10)	Japan	Other HIC	All HIC	East Asia	South Asia	Europe	MENA	SSA	LAC	All LMICs		
All high-income	5.9	5.6	11.2	5.4	5.8	8.6	1.8	3.4	-8.5	-5.3	0.9	0.7	4.4	
USA	..	6.4	10.6	7.2	7.4	10.4	2.8	4.9	-6.2	-4.4	4.4	4.0	6.2	
EC(10)	4.3	5.5	13.0	4.5	5.3	8.2	1.5	4.7	-8.1	-4.9	-1.9	-0.9	3.9	
Japan	5.3	7.1	..	5.0	5.6	6.5	-0.9	-3.6	-12.0	-6.9	-3.1	0.3	3.7	
Other high-income	7.8	4.8	9.7	5.3	6.3	12.6	5.0	1.0	-7.8	-6.3	-2.3	2.0	5.3	
All LMICs 1/	11.2	10.5	15.2	11.6	11.4	16.1	3.9	1.1	-3.7	3.0	3.6	2.4	8.1	
East Asia & Pacific	12.9	12.2	16.6	12.7	13.2	18.3	6.6	11.7	1.3	10.1	13.4	10.7	12.8	
South Asia	14.8	15.5	18.3	11.3	14.5	19.1	9.5	5.8	-6.0	0.4	19.7	4.7	11.3	
Latin America	7.8	4.6	6.9	8.3	6.9	13.1	9.6	3.4	-4.7	-5.3	1.9	1.8	4.7	
All countries	6.7	5.9	12.2	6.2	6.4	9.1	2.2	2.7	-7.8	-4.4	1.2	1.0	4.9	

1/ Low- and middle-income countries: some regions not shown because of limited data availability.

2/ HIC -- High-income countries; LMIC -- Low- and middle-income countries; MENA -- Middle East and North Africa; SSA -- Sub-Saharan Africa; LAC -- Latin America and Caribbean

Technical notes

The principal sources for the data contained in this statistical annex are the World Bank's central databases and the U.N.'s commodity trade database.

The classification of economies by income group and region follows the World Bank's standard definitions (see country classification tables that follow), except that aggregates for Sub-Saharan Africa exclude the Republic of South Africa and all regional aggregates refer to low- and middle-income economies. Small economies and those for which there are no available data for 1991 have been omitted from the tables. Because of the lack of data for the republics of the former Soviet Union, these countries are not shown and are not included in any of the aggregates. The region labeled "Middle-Income Europe" refers to Europe and Central Asia excluding the former Soviet Union. For the years before 1991 the data for Germany refer to the Federal Republic of Germany before unification. Data for Belgium include Luxembourg. In tables 10 through 13, the EC(10) aggregate refers to the ten high-income members of the European Community and excludes Portugal and Greece.

Most data are for 1991, but figures in italics indicate 1990 data. If data for both 1990 and 1991 are missing, the not-available symbol (..) is used. Growth rates are for the eleven-year period 1980-90; when fewer than ten observations are available, the growth rate is reported as not available. Current price data are reported in U.S. dollars.

Notes on tables

Tables 1 and 2. Merchandise exports and imports exclude trade in services. Regional aggregates include intraregional flows. Growth rates are based on constant price data. Effective market growth is the trade-weighted import growth rate of the country's trading partners. Comparative data for the world share and growth of trade include high-income countries.

Table 3. Foreign direct investment refers to the net inflows of investment from abroad. Outward investment is excluded, but negative flows may result from divestment. Portfolio investment is excluded. Gross domestic investment includes changes in inventory.

Table 4. The present value of scheduled debt service is the discounted value of future debt service; discount factors are based on interest rates charged by OECD countries for officially supported export credits. IBRD loans and IDA credits are discounted using the most recent IBRD lending rate. For more information on the present-value methodology, consult World Bank 1992c.

Tables 5 and 6. Long-term debt includes public, publicly guaranteed, and private nonguaranteed external debt having a maturity of more than a year, but excludes IMF credits. Concessional debt is debt with an original grant element of 25 percent or more. Variable interest rate debt includes all long-term, nonconcessional debt whose terms depend upon movements of a key market rate. This item conveys information about a borrower's exposure to changes in international interest rates. Nonconcessional fixed-rate debt is calculated as a residual. For complete definitions, see World Bank 1992c.

Table 7. Exchange rate impacts are measured by the change in long-term external debt caused by exchange rate revaluation. Interest rate impacts are the change in debt service caused by changes in interest rates for variable rate debt. Both impacts are measured from end-of-year 1990 to end-of-year 1991. Exports of goods and services include net worker remittances.

Table 8. Implicit price deflators are calculated from current and constant price data for merchandise trade. The "barter terms of trade" are calculated as the ratio of the export price deflator to the import deflator. The index base is 100 in 1987. The "terms of trade effect" is calculated as the difference between exports deflated by the import price deflator and constant price exports. This measures the income gain or loss caused by a change in the terms of trade. To "normalize" this indicator, it is divided by gross national income. It has a value of zero in 1987.

Table 9. See notes at the bottom of the table. Commodity price data are collected by the International Economics Department of the World Bank.

Tables 10, 11, 12, and 13. Merchandise trade flows have been calculated from the U.N.'s commodity trade database supplemented by World Bank estimates.



Classification of economies

Table 1 Classification of economies by income and region, 1992-93

Income group	Subgroup	Sub-Saharan Africa ^a		Asia		Europe and Central Asia		Middle East and North Africa		
		East & Southern Africa	West Africa	East Asia and Pacific	South Asia	Eastern Europe and Central Asia	Rest of Europe	Middle East	North Africa	Americas
Low-income		Burundi Comoros Ethiopia Kenya Lesotho Madagascar Malawi Mozambique Rwanda Somalia Sudan Tanzania Uganda Zaire Zambia Zimbabwe	Benin Burkina Faso Central African Rep. Chad Equatorial Guinea Gambia, The Ghana Guinea Guinea-Bissau Liberia Mali Mauritania Niger Nigeria São Tomé and Príncipe Sierra Leone Togo	Cambodia China Indonesia Lao PDR Myanmar Solomon Islands Viet Nam	Afghanistan Bangladesh Bhutan India Maldives Nepal Pakistan Sri Lanka			Yemen, Rep.	Egypt, Arab Rep.	Guyana Haiti Honduras Nicaragua
	Lower	Angola Djibouti Mauritius Namibia Swaziland	Cameroun Cape Verde Congo Côte d'Ivoire Senegal	Fiji Kiribati Korea, Dem. Rep. Malaysia Marshall Islands Micronesia, Fed. Sts. Mongolia Papua New Guinea Philippines Thailand Tonga Vanuatu Western Samoa		Albania Armenia Azerbaijan Bulgaria Czechoslovakia ^b Georgia Kazakhstan Kyrgyzstan Moldova Poland Romania Tajikistan Turkmenistan Ukraine Uzbekistan	Turkey	Iran, Islamic Rep. Iraq Jordan Lebanon Syrian Arab Rep.	Algeria Morocco Tunisia	Belize Bolivia Chile Colombia Costa Rica Cuba Dominica Dominican Rep. Ecuador El Salvador Grenada Guatemala Jamaica Panama Paraguay Peru St. Lucia St. Vincent
Middle-income		Botswana Mayotte Reunion Seychelles South Africa ^a	Gabon	American Samoa Guam Korea, Rep. Macao New Caledonia		Belarus Estonia Hungary Latvia Lithuania Russian Federation Yugoslavia ^a	Gibraltar Greece Isle of Man Malta Portugal	Bahrain Oman Saudi Arabia	Libya	Antigua and Barbuda Argentina Aruba Barbados Brazil French Guiana Guadeloupe Martinique Mexico Netherlands Antilles Puerto Rico St. Kitts and Nevis Suriname Trinidad and Tobago Uruguay Venezuela
	Upper									
No. of low- & middle-income economies: 162		26	23	25	8	22	6	9	5	38

(Table continues on the following page)

Table 1 (continued)

Income group	Subgroup	Sub-Saharan Africa ^a		Asia		Europe and Central Asia		Middle East and North Africa			
		East & Southern Africa	West Africa	East Asia and Pacific	South Asia	Eastern Europe and Central Asia	Rest of Europe	Middle East	North Africa	Americas	
High-income	OECD countries			Australia Japan New Zealand			Andorra Austria Belgium Denmark Finland France Germany Iceland Ireland Italy Luxembourg Netherlands Norway San Marino Spain Sweden Switzerland United Kingdom			Canada United States	
	Non-OECD countries			Brunei French Polynesia Hong Kong Singapore OAE ^d			Channel Islands Cyprus Faeroe Islands Greenland	Israel Kuwait Qatar United Arab Emirates		Bahamas Bermuda Virgin Islands (US)	
Total no. of economies:		201	26	23	33	8	22	28	13	5	43

- a. For some analysis, South Africa is not included in Sub-Saharan Africa.
b. Refers to the former Czechoslovakia; disaggregated data are not yet available.
c. Refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.
d. Other Asian economies—Taiwan, China.

Definitions of groups

These tables classify all World Bank member economies, plus all other economies with populations of more than 30,000.

Income group: Economies are divided according to 1991 GNP per capita, calculated using the *World Bank Atlas* method. The groups are: low-income, \$635 or less; lower-middle-income, \$636–2,555;

upper-middle-income, \$2,556–\$7,910; and high-income, \$7,911 or more.

The estimates for the republics of the former Soviet Union should be regarded as very preliminary; their classification will be kept under review.

Table 2 Classification of economies by major export category and indebtedness, 1992-93

Group	Low- and middle-income							High-income		
	Low-income			Middle-income				Not classified by indebtedness	OECD	non-OECD
	Severely indebted	Moderately indebted	Less indebted	Severely indebted	Moderately indebted	Less indebted				
Exporters of manufactures			China	Bulgaria Poland	Hungary	Czechoslovakia* Korea, Dem. Rep. Korea, Rep. Lebanon Macao Romania	Armenia Belarus Estonia Georgia Kyrgyzstan Latvia Lithuania Moldova Russian Federation Ukraine Uzbekistan	Belgium Canada Finland Germany Ireland Italy Japan Luxembourg Sweden Switzerland	Hong Kong Israel Singapore OAE*	
Exporters of nonfuel primary products	Afghanistan Burundi Equatorial Guinea Ethiopia Ghana Guinea-Bissau Guyana Honduras Liberia Madagascar Mauritania Myanmar Nicaragua Niger São Tomé and Príncipe Somalia Tanzania Uganda Viet Nam Zaire Zambia	Guinea Malawi Rwanda Togo	Chad Solomon Islands Zimbabwe	Albania Argentina Bolivia Côte d'Ivoire Cuba Mongolia Peru	Chile Costa Rica Guatemala Papua New Guinea	Botswana French Guiana Guadeloupe Namibia Paraguay Reunion St. Vincent Suriname Swaziland	American Samoa	Iceland New Zealand	Faeroe Islands Greenland	
Exporters of fuels (mainly oil)	Nigeria			Algeria Angola Congo Iraq	Gabon Venezuela	Iran, Islamic Rep. Libya Oman Saudi Arabia Trinidad and Tobago	Turkmenistan		Brunei Qatar United Arab Emirates	
Exporters of services	Cambodia Egypt, Arab Rep. Sudan	Benin Gambia, The Haiti Maldives Nepal Yemen, Rep.	Bhutan Burkina Faso Lesotho	Jamaica Jordan Panama	Dominican Rep. Greece	Antigua and Barbuda Barbados Cape Verde Djibouti El Salvador Fiji Grenada Kiribati Malta Martinique Netherlands Antilles Seychelles St. Kitts and Nevis St. Lucia Tonga Vanuatu Western Samoa	Aruba	United Kingdom	Bahamas Bermuda Cyprus French Polynesia	
Diversified exporters	Kenya Lao PDR Mali Mozambique Sierra Leone	Bangladesh Central African Rep. Comoros India Indonesia Pakistan Sri Lanka		Brazil Ecuador Mexico Morocco Syrian Arab Rep.	Cameroon Colombia Philippines Senegal Tunisia Turkey Uruguay	Bahrain Belize Dominica Malaysia Mauritius Portugal South Africa Thailand Yugoslavia*	Azerbaijan Kazakhstan Tajikistan	Australia Austria Denmark France Netherlands Norway Spain United States	Kuwait	

(Table continues on the following page)

Table 2 (continued)

Group	Low- and middle-income						High-income		
	Low-income			Middle-income			Not classified by indebtedness	OECD	non-OECD
	Severely indebted	Moderately indebted	Less indebted	Severely indebted	Moderately indebted	Less indebted			
Not classified by export category							Gibraltar Guam Isle of Man Marshall Islands Mayotte Micronesia, Fed. Sts. New Caledonia Puerto Rico		Andorra Channel Islands San Marino Virgin Islands (US)
No. of economies 201	30	17	7	21	16	47	24	21	18

a. Refers to the former Czechoslovakia; disaggregated data are not yet available.

b. Other Asian economies—Taiwan, China.

c. Refers to the former Socialist Federal Republic of Yugoslavia; disaggregated data are not yet available.

Definitions of groups

These tables classify all World Bank member economies, plus all other economies with populations of more than 30,000.

Major export category: Major exports are those that account for 50 percent or more of total exports of goods and services from one category, in the period 1987–89. The categories are: nonfuel primary (SITC 0, 1, 2, 4, plus 68), fuels (SITC 3), manufactures (SITC 5 to 9, less 68), and services (factor and nonfactor service receipts plus workers' remittances). If no single category accounts for 50 percent or more of total exports, the economy is classified as *diversified*.

Indebtedness: Standard World Bank definitions of severe and moderate indebtedness, averaged over three years (1989–91) are used to classify economies in this table. Severely indebted means either of the two key ratios is above critical levels: present value of debt service to GNP (80 percent) and present value of debt service to exports (220 percent). Moderately indebted means either

of the two key ratios exceeds 60 percent of, but does not reach, the critical levels. For economies that do not report detailed debt statistics to the World Bank Debtor Reporting System, present-value calculation is not possible. Instead the following methodology is used to classify the non-DRS economies. Severely indebted means three of four key ratios (averaged over 1988–90) are above critical levels: debt to GNP (50 percent); debt to exports (275 percent), debt service to exports (30 percent); and interest to exports (20 percent). Moderately indebted means three of four key ratios exceed 60 percent of, but do not reach, the critical levels. All other low- and middle-income economies are classified as less-indebted.

Not classified by indebtedness are the republics of the Former Soviet Union and some small economies for which detailed debt data are not available.



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