Shifting Forms of Equity Finance for Developing Countries

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

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

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

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

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

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

Portfolio equity flows to developing countries surged in the early 1990s but began falling after 1995; as noted, they remained modest after the Asian crisis. FDI, meanwhile, exhibited an opposing trend: mergers and acquisitions (M&A) were few in the early 1990s but more frequent after 1995. These opposing trends are due in part to the wave of privatization in the early 1990s. After the first round of privatization, shares of privatized enterprises, especially in the utilities and energy sectors, were purchased by multinational companies. Thus, portfolio flows collapsed as M&A-related flows began to rise.

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

#### Trends in FDI flows in 2003

FDI flows to developing countries fell in 2003 for the second consecutive year. Net FDI flows are estimated to have been \$135 billion in 2003, a decline of 9 percent from 2002 and 26 percent from the peak level reached in 1999 (table 3.1). As a proportion of developing countries' GDP, FDI continued to decline—from 2.3 percent in 2002 to about 1.9 percent in 2003 (figure 3.1). This decline is a

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

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

*Note: e* = estimate. Numbers may not add up due to rounding. *Sources:* World Bank, *GDF*, various years, and World Bank staff estimates for 2003. marked contrast to the sharp improvement in portfolio equity and debt flows in 2003—and it is taking place at a time when global FDI is rising. Global FDI flows rose 6 percent in 2003 to an estimated \$690 billion, mostly because of the substantial surge in flows to the United States (figure 3.2).<sup>2</sup> As a result, developing countries' share in global FDI dropped to 19.6 percent in 2003 from 22.6 percent in 2002.

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

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



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





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



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

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

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

The concentration of FDI flows continued to dissipate in 2003 (as it has since 2001) despite the continuing rise in the share of FDI accounted for by China. The top 10 developing-country recipients of FDI are (in descending order) China, Brazil, Mexico, Argentina, Poland, the Czech Republic, Chile, the República Bolivariana de Venezuela, Thailand, and India.<sup>3</sup> These 10 accounted for about 69 percent of total FDI flows to developing countries in 2003, down sharply from the peak of 78 percent in 2000. FDI as a share of GDP in the top 10 recipients also fell to 2.4 percent in 2003 from 2.8 percent in 2002, but it was still higher than the average for developing countries (figure 3.4). A decline in the concentration of FDI largely reflects changes in some of the large FDI recipients. Four of the top 10 recipient countries-Argentina, Brazil, the Czech Republic, and Mexico-experienced a decline in FDI flows of 12 percent or more from the previous year. In contrast, the Russian Federation attracted more FDIit emerged as the top FDI recipient in Europe and



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

Central Asia but still was not one of the top 10 recipients worldwide.

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

#### Changes in the regional pattern of FDI

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

### Box 3.1 The sharp decline in direct investment in Brazil

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

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

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

a. See Latin Finance (2003).

b. Through mid-October.



#### Brazil's FDI and debt conversion, 1999–2003



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

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

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



Figure 3.5 Regional shares in FDI

Source: World Bank staff estimates.

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

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

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

#### A decline in South-South FDI

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

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

 \$ billions

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

*Note:* p = projection. The South-South estimates are based on 30 developing countries that account for more than 85 percent of total FDI flows to developing countries. *Source:* Aykut and Ratha 2003. is the other major source of South-South FDI; Russian FDI is concentrated in the natural resources and transportation sectors of the countries of the former Soviet Union (UNCTAD 2003b).

### The shifting composition of FDI toward services

FDI flows in services rose during the second half of the 1990s to overtake FDI in manufacturing. By 2002 services accounted for nearly half of the FDI stock in developing countries (figure 3.6). As conventionally defined, the service sector includes electricity, gas, water, transport, communication, construction, wholesale and retail trade and repairs, hotels and restaurants, transport, storage and communications, finance and insurance, real estate, renting, business services, public administration, defense, education, health, social services, social and personal service activities, and recreational, cultural, and sporting activities. Unlike the primary and manufacturing sectors, where

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

Percent



*Note:* Estimated by accumulating available FDI flows by sector. Sectoral FDI data for countries in South Asia are not available. Data taken from country sources. Data definitions may vary according to the country's classification system.

a. FDI flows to Africa were approximated by the outflows of the continent's major investors, including France, the Netherlands, the United Kingdom, and the United States. *Sources:* World Bank staff calculations based on data collected

from the U.N. Economic Commission for Latin America and the Caribbean based on country sources for Latin American countries; National Bureau of Statistics of China, various years; ASEAN for other Asian countries; and OECD, UNCTAD, and country sources for East Europe and Central Asia.

output is tradable, services are mostly nontradable and require close proximity between producers and consumers. That is, they are "location-bound."<sup>11</sup> This characteristic makes FDI in services especially vulnerable to currency and regulatory risks; it played an important role in the decline of FDI over the last two consecutive years.

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

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

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

### Table 3.3 Average share of services in FDI flowsand in GDP

Percent FDI GDP Services share in: 37 East Asia and Pacific 32 55 58 Europe and Central Asia Latin America and the Caribbean 55 62 29 52 Africa Memo item:

69

70

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

High-income OECD

# Box 3.2 FDI for call centers

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

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

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

*Changes in investment and trade policy.* The composition of FDI is influenced by restrictions on ownership, entry, and performance.<sup>12</sup> In the 1980s developing countries with abundant natural

resources but insufficient capital and technology encouraged FDI in the primary sector (UNCTAD 1998). Other developing countries, especially in Asia, tried to attract export-oriented FDI through free-trade zones and export-performance requirements (UNCTAD 2002). During the last decade, impediments, including restrictions on forms of investment and the degree of foreign ownership, have been gradually eased through unilateral liberalization policies, bilateral and regional investment agreements, and commitments under the World Trade Organization and the General Agreement on Trade in Services.<sup>13</sup>

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

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

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



Note: The indicator is calculated based on limits on foreign ownership, restrictions on foreign personnel and operational freedom, and screening requirements in OECD countries. It ranges from 0 (least restrictive) to 1 (most restrictive). *Source:* Golub 2003. liberalization of infrastructure services, detailed in chapter 6, began in most developing countries in the early 1990s, as governments sought to attract capital and technology and to improve quality and cost-efficiency. The 1990s also saw considerable progress in capital-account liberalization and financial-market reforms in most developing countries. Countries in Latin America, Eastern Europe, and elsewhere removed barriers to entry and other impediments for foreign banks as part of the process of liberalizing their financial markets.<sup>15</sup> In Asia such changes were especially rapid after the financial crisis of 1997–98.

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

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

### Recent declines in FDI flows to the service sector

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

In addition to the winding down of privatization, service-sector FDI in Latin America was affected by deterioration of the investment climate in the region. First, starting with Argentina and

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



Sources: See figure 3.6.

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

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

Because it relies primarily on domestic demand, FDI in services is highly sensitive to changes in the investment climate (for example, regulatory environment or the exchange rate), whereas the primary and manufacturing sectors have the benefit of exporting to international markets. According to data for 1999-2002, countries with a better investment climate attracted not only more FDI, but also more FDI in services. For example, the share of services FDI in total FDI was 61 percent in countries with a better-than-average investment climate, compared to 34 percent in countries with a below-average investment climate (table 3.4). According to a recent IMF-World Bank survey (2003), companies concerned about the recent deterioration of investment climate in some developing countries plan to rely more on local-currency

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

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

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

borrowing as a way of hedging against exchangerate fluctuations.<sup>17</sup> To hedge against regulatory risks, many companies are trying to obtain international arbitrage agreements or political risk insurance (box 3.3).

### Box 3.3 Political risk insurance

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

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

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

The advantages that public agencies offer include long periods of coverage (up to 20 years), wide country coverage,

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

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

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

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

#### The composition of FDI financing

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

# Box 3.4 Components of FDI

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

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

a. Countries compile the FDI composition data through annual surveys (Falzoni 2000). In the IMF's balance-of-payments database, out of 140 developing countries in 2000, the number that reported equity capital, reinvested earnings, and intercompany loans were 97, 62, and 71, respectively. and large, equity proved more resilient than intercompany debt and reinvested earnings (figure 3.9).<sup>18</sup>

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

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



Source: IMF Balance of Payments Statistics Database.

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



Source: IMF Balance of Payments Statistics Database.

 Table 3.5
 Composition of FDI by region, 1995–2002

 Percent
 Percent

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

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

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

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

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

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





Source: IMF Balance of Payments Statistics Database.

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





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

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

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

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

#### Factors affecting the composition of FDI

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

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

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

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



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

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

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

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

### Box 3.5 Factors affecting dividend repatriation

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

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

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

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

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

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

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



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

\$ billions







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

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

### Trends in portfolio equity flows to developing countries

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

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

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

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

#### Table 3.6 Net inward portfolio equity flows to developing countries, 1995–2003 *s billions*

Note: e = estimate. Numbers may not add up due to rounding.

a. Argentina, Brazil, Chile, China, Colombia, the Arab Republic of Egypt, Hungary, India, Indonesia, Lithuania, Malaysia, Mexico, Morocco, Philippines, Poland, the Russian Federation, South Africa, Thailand, Turkey, and the República Bolivariana de Venezuela.

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

#### Figure 3.15 Portfolio equity flows, 1990–2003



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

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

Net portfolio equity flows to South Asia rose dramatically in 2003, mainly in response to optimism about growth in India. Flows to East Asia and the Pacific also rose sharply because of a sharp increase in activity to China—notably the China Life transaction, valued at more than \$3 billion. Latin America and the Caribbean received about the same amount of portfolio equity in 2003 as last year. Flows appear to have increased in Argentina and Chile from negative levels last year, and to

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



*Note:* The discontinuity in the gross flows data is intentional. Two huge deals involving China Mobile in 2000 are treated as outliers in this representation of the relationship between portfolio equity flows and stock prices.

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

have remained unchanged in Brazil,<sup>26</sup> reflecting the effects of interest rate cuts, stabilization of the exchange rate, and incipient recovery in the economy. The stabilization in portfolio equity flows to Brazil also reflects a pause in the migration of local companies to international exchanges (see the following section). Net portfolio equity flows to Europe and Central Asia rose only modestly, due to a sharp fall in flows to the Russian Federation. The Yukos controversy in the last quarter of the year raised concerns about government interference in the privatized entities, sapping international portfolio equity. Net portfolio equity flows to Sub-Saharan Africa benefited from a marked economic recovery in South Africa. The Middle East and North Africa continued to rely on debt financing.

#### Gross portfolio equity flows

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

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

#### Cross-listing and delisting of stocks

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



### Figure 3.17 Sectoral composition of gross flows in 2003

Source: Dealogic Bondware.

### Figure 3.18 Currency composition of gross flows in 2003



Source: Dealogic Bondware.

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

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



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

Note: Figures are end-of-year values. For 2003, data are as of November. Data for 1990 for Hungary and Poland correspond to 1991. Data for 1995 for Russia, the Slovak Republic, and Slovenia correspond to 1996. Source: Emerging Markets Database. affect small firms' ability to raise funding in the domestic stock market. That can, in turn, reduce international equity flows to these firms.

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

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

#### Privatization and portfolio equity flows

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

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





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

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

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



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



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

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

The slowdown in privatization and the 10percent-ownership rule (discussed above) are not the only reasons why portfolio equity flows to developing countries are smaller than flows of FDI and debt. Other reasons include underdeveloped stock markets (and weak corporate governance), macroeconomic volatility in developing countries, and "home bias" in developed countries. The post-Asian crisis divergence between FDI and portfolio equity flows also owes something to the special resilience of FDI, which derives from the ability of direct investors (usually multinational corporations with established brand names) to withstand market risks through global production and marketing networks.

#### Underdeveloped stock markets

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

#### Macroeconomic volatility

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





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





Note: Most assets from 1990; some emerging assets start at 1993. Source: Wilmot and Mielczarski 2003. bankruptcy—another reason why investors may prefer debt over equity.

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

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

### Box 3.6 Emergingmarket stocks—a separate asset class?

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

ETFs on emerging-market equity are relatively scarce, but their popularity is increasing (box 3.7)

#### Home bias

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

#### Prospects for 2004–2005

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

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

#### The growing popularity of exchange-traded funds Box 3.7

**Global ETFs** 

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

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

#### On October 31, 2003 Assets under Average daily Average daily Country Total management volume volume listings (number of managers) (\$ billions) (million shares) (\$ billions) U.S. (8) 117 129.4 147 8.20 14 0.40 Europe (14) 158 17.3 27.8 Japan (4) 18 0.10 5 Canada (2) 16 4.9 1 0.04 Korea, Republic of (4) 5 0.5 2 0.02 Australia (2) 4 0.6 1 0.01 South Africa (2) 4 0.7 . . 0.01 4 Hong Kong (2) 4.3 6 India (3) .5 0.1 Israel (1) 2 0.5 Singapore (1) 6 0.2

Note: . . = negligible.

Total (35)

Source: Morgan Stanley Research.

340

gains tax, due to low trading of underlying stocks, and the flexibility of trading ETFs at intra-day prices instead of at end-of-the-day prices. Finally, ETFs have strict transparency guidelines.

186.7

8.7

183

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

#### Average expense ratios for mutual funds and ETFs



1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003

Source: Morgan Stanley Research, London.

Assets managed by ETFs, 1993–2003





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

	2002	2003	2004	200
FDI (net)	147	135	152	165
East Asia and Pacific	55	57	65	74
Europe and Central Asia	33	26	31	32
Latin America and the Caribbean	45	37	38	40
Middle East and North Africa	3	2	2	2
South Asia	4	5	6	7
Sub-Saharan Africa	8	9	10	10
Portfolio equity (gross)	11	19	22	27

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

Source: World Bank staff estimates.

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

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

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

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

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

The prospect for FDI in Africa remains limited, reflecting modest growth potential, underdeveloped infrastructure, political risks, and low labor productivity. Nevertheless, firm oil prices and strategic considerations in some source countries (including China) may increase FDI in the oil sector in Africa. South Africa will remain the preferred destination for FDI (IMF-World Bank 2003). Countries in North Africa and Middle East may attract new oil-related investments, but security problems remain a major issue.

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

### Annex A FDI Forecasting Model

HE FORECASTS OF FDI FLOWS presented in this chapter are based on an econometric model that uses the following explanatory variables: three-year moving average of the GDP growth rate of the top seven industrial countries, the major suppliers of FDI; the difference between the GDP growth rate of developing countries (three-year moving average) and that of the G-7 countries as a proxy for investors' expectations about excess rates of return in the medium term from investments; the growth rate of exports of goods and services (lagged one year) to reflect a country's attractiveness to export-oriented, efficiency-seeking investors; the rating of Institutional Investor magazine as a proxy of the investment climate; the price of oil to capture oil-related foreign investment; the volatility of oil prices (represented by their oneyear rolling standard deviation) as a proxy for global economic uncertainty; and the lagged dependent variable (FDI/GDP) representing the persistence of FDI flows over time. The model uses panel data for 1991-2002 for 30 developing countries that accounted for more than 80 percent of FDI flows to developing countries in 2002.

Regression results are summarized in table 3A.1. Predictions of FDI/GDP for the 2004–05 period were obtained by forecasting growth rates of FDI as implied by the model and applying the obtained growth rates to estimated FDI figures for 2003. The model is the same as that used in last year's edition of *Global Development Finance* (World Bank 2003).

### Table 3A.1 Regression results of FDI forecasting model

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

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

## Annex B Top 25 International Equity Deals in 2003

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

Source: Dealogic Bondware.

#### Notes

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

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

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

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

5. Including Angola, Nigeria, and Sudan.

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

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

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

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

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

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

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

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

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

15. During the 1990s, most Latin American countries introduced a series of financial reforms to dismantle state controls over the sector and to stem barriers to entry of foreign banks. As a result, the share of foreign banks increased to 61 percent in 2001 from 13 percent in 1995 and 8 percent in 1990 (United Nations 2003). In Eastern and Central Europe, foreign firms were heavily involved in the privatization of

banks, telecommunications companies, and utilities. Countries in Asia and Africa also have gradually reduced barriers against foreign firms, although more slowly than in Latin America and Eastern and Central Europe.

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

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

18. Brazil stopped compiling reinvested earnings data after 1998.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### References

- Aggarwal, Reena, Leora Klapper, and Peter D. Wysocki. 2003. "Portfolio Preferences of Foreign Institutional Investors." Policy Research Working Paper 3101, World Bank, Washington, D.C. July.
- Aharony, Joseph, and Itzhak Swary. 1980. "Quarterly Dividend and Earnings Announcements and Stockholders Returns: An Empirical Analysis." *Journal of Finance* 35(March): 1–12.
- Altshuler, Rosanne, and Harry Grubert. 2003. "Repatriation Taxes, Repatriation Strategies and Multinational Financial Policy." NBER Working Paper 8144, National Bureau of Economic Research, Cambridge, Mass.

- Asquith, Paul, and David W. Mullins. 1983. "The Impact of Initiating Dividend Payments on Shareholders' Wealth." *Journal of Business* 56(1): 77–96.
- AT Kearney. 2003. "FDI Confidence Index." AT Kearney, Inc., Alexandria, Virginia.
- Aykut, Dilek, and Dilip Ratha. 2003. "South-South FDI Flows in the 1990s." Development Finance Group, World Bank, Washington, D.C. Processed.
- Bekaert, G., C. Harvey, and R. L. Lumsdaine. 1999. "Dating the Integration of World Equity Markets." NBER Working Paper W6724, National Bureau of Economic Research, Cambridge, Mass. September.
- Bekaert, Geert. 1995. "Market Integration and Investment Barriers in Emerging Equity Markets." World Bank Economic Review 9(1): 75–107.
- Christophe, Stephen E. 2002. "The Value of U.S. MNC Earnings Changes from Foreign and Domestic Operations." *Journal of Business* 75(1): 67–94.
- Christophe, Stephen, and Ray J. Pfeiffer, Jr. 2002. "The Valuation of MNC International Operations During the 1990s." *Review of Quantitative Finance and Accounting* 18(2): 119–38.
- Claessens, Stijn, Simeon Djankov, and Daniela Klingebiel. 2000. "Stock Markets in Transition Economies." Financial Sector Discussion Paper 5. Social Science Research Network. http://ssrn.com/abstract=240703.
- Claessens, Stijn and Moon-Whoan Rhee. 1994. "The Effects of Barriers on Equity Investment in Developing Countries." World Bank Policy Research Working Paper 1263. Washington, D.C. March.
- Davies, Ronald B., and Christopher J. Ellis. 2001. "Competition in Taxes and Performance Requirements for Foreign Direct Investment." Economics Department Working Papers 2001-4. University of Oregon, Eugene.
- Demirguc-Kunt, Asli, and Harry Huizinga. 1995. "Barriers to Portfolio Investment in Emerging Stock Markets." *Journal of Development Economics* 47(August).
- Denis, D., D. Denis, and K. Yost. 2001. "Global Diversification, Industrial Diversification, and Firm Value." Working paper, Krannert Graduate School of Management, Purdue University, West Lafayette, Ind.
- Desai, Mihir A., C. Fritz Foley, and James R. Hines, Jr. 2002. "Repatriation Taxes and Dividend Distortions." *National Tax Journal* 54(4): 829–51.
  - 2003a. "A Multinational Perspective on Capital Structure Choice and Internal Capital Markets." NBER Working Paper 9715, National Bureau of Economic Research, Cambridge, Mass. May.
- 2003b. "Chains of Ownership, Regional Tax Competition, and Foreign Direct Investment." In Heinz Herrmann and Robert Lipsey, eds., Foreign Direct Investment in the Real and Financial Sector of Industrial Countries. Berlin: Springer-Verlag.
- 2003c. "Dividend Policy Inside the Multinational Firm." NBER Working Paper 8698. National Bureau of Economic Research, Cambridge, Mass.
- Errunza, V., K. Hogan, and M.-W. Hung. 1999. "Can the Gains from International Diversification Be Achieved without Trading Abroad?" *Journal of Finance* 54: 2075–3007.

- Esperanca, J. P. 1992. "International Strategies in the European Service Sector: A Comparative Study." In M. Casson, ed., International Business and Global Integration: Empirical Studies. London: Macmillan.
- Falzoni, Anna. 2000. "Statistics on Foreign Direct Investment and Multinational Corporations: A Survey." Center for Economic Policy Research Working Paper, London. http://www.cepr.org/research/networks/fdimc/ Papers/Data.pdf.
- Fama, Eugene F., and Harvey Babiak. 1968. "Dividend Policy: An Empirical Analysis." *Journal of the American Statistical Association* 63(24): 1132–61.
- French, Kenneth R., and James M. Poterba. 1991. "International Diversification and International Equity Markets." *American Economic Review* 81(2): 222–26.
- Fuhr, Deborah A. 2003. "Exchange Traded Funds, Global Summary." Morgan Stanley Equity Research, Europe, January.
- Golub, Stephen S. 2003. "Measure of Restrictions on Inward Foreign Direct Investment for OECD Countries." OECD Economics Department Working Paper 357. Organisation for Economic Co-operation and Development, Paris.
- Gurbert, Harry. 1998. "Taxes and the Division of Foreign Operation Income Among Royalties, Interest, Dividends and Retained Earnings." *Journal of Public Economics* 68(2): 269–90.
- Healy, Paul, and Krishna Palepu. 1988. "Earnings Information Conveyed by Dividend Initiations and Omissions." *Journal of Financial Economics* 21(2): 149–75.
- Henry, P. B. 2000. "Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices." *Journal* of Finance 55: 529–46.
- IMF (International Monetary Fund). 1993. Balance of Payments Manual. 5th ed. Washington, D.C.
- IMF (International Monetary Fund) Balance of Payments Statistics Database (2003).
- IMF-World Bank (International Monetary Fund and World Bank). 2003. Foreign Direct Investment in Emerging Market Countries. Washington, D.C.
- Jensen, Michael J. 1986. "Agency Cost of Free Cash Flow, Corporate Finance, and Takeovers." *American Economic Review* 76(2): 323–39.
- John, Kose, and Joseph Williams. 1985. "Dividends, Dilution, and Taxes: A Signaling Equilibrium." *Journal of Finance* 40: 1053–69.
- J. P. Morgan Securities. 2003. "Introducing the Homeland Investment Act." Economic and Policy Research, New York.
- La Porta, Rafael, Florencio Lopez de Silanes, Andrei Shleifer, and Robert W. Vishny. 1997. "Legal Determinants of External Finance." *Journal of Finance* 52(3): 1131–50.
- Latin Finance. 2003. *Latin Finance* 2003. Miami: Latin Finance Publications.
- Lehmann, Alexander and Ashoka Mody. 2004. "International Dividend Repatriations." IMF Working Paper 04-05, International Monetary Fund, Washington, D.C.
- Levine, Ross, and Sergio Schmukler. 2003. "Migration, Spillovers, and Trade Diversion: The Impact of Internationalization on Domestic Stock Market Activity."

NBER Working Paper 9614, National Bureau of Economic Research, Cambridge, Mass.

- Lewis, Karen K. 1999. "Trying to Explain Home Bias in Equities and Consumption," *Journal of Economic Literature* (June): 571–608.
- Lintner, John. 1956. "Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes." *American Economic Review* 46: 97-113.
- Markusen, James, Thomas F. Rutherford, and David Tarr. 2000. "Foreign Direct Investment in Services and the Domestic Market for Expertise." NBER Working Paper 7700, National Bureau of Economic Research, Cambridge, Mass.
- Miller, Merton, and Kevin Rock. 1985. "Dividend Policy under Asymmetric Information." *Journal of Finance* 40: 1031–51.
- Morgan Stanley. 2003. "U.S.-Listed Index-Linked ETF Product Overview and Applications." Equity Research Report. New York.
- Murphy, Kevin J. 1985. "Corporate Performance and Managerial Remuneration." *Journal of Accounting and Economics* 7: 11–42.
- National Bureau of Statistics of China. Various years. China Statistical Yearbook. Beijing.
- OECD (Organisation for Economic Co-operation and Development). OECD Benchmark Definition of Foreign Direct Investment. 3rd ed. Paris.
- Portes, Richard, and Helene Rey. 2002. "The Determinants of Cross-Border Equity Transaction Flows." NBER Working Paper 7336, National Bureau of Economic Research, Cambridge, Mass. July.
- Pulatkonak, M. and G. Sofianos. 1999. "The Distribution of Global Trading in NYSE-Listed Non-U.S. Stocks." NYSE Working Paper 99-03. New York.
- Roberts, Joanne. 2001. "Challenges Facing Service Enterprises in a Global Knowledge-Based Economy: Lessons from the Business Services Sector." PREST Discussion Paper 01-03, University of Manchester, U.K. http:// les.man.ac.uk/PREST/Publications/DP\_PDFs/ PRESTDP01-03.pdf.
- Saunders, Anthony, and Ingo Walters. 2002. "Are Emerging Market Equities a Separate Asset Class?" Journal of Portfolio Management 28(3).
- Tse, Raymond Y. C. 2001. "China's Real Estate Market and the Asian Financial Crisis." *Emerging Markets Quarterly* 4(4): 51–59.
- UNCTAD. Various years. World Investment Report. New York.
- -----. 1998. World Investment Report. New York.
- ------. 2002. World Investment Report. New York.
- ———. 2003a. "China: An Emerging FDI Outward Investor." Research Note, New York. http://r0.unctad.org/en/ subsites/dite/fdistats\_files/pdfs/China\_Researchnote. pdf.
- 2003b. "Outward FDI from Central and Eastern European Countries." Research Note, New York.http:// r0.unctad.org/en/subsites/dite/pdfs/CEE\_outward\_en. pdf.
- United Nations. 2001. "Investment and Economic Reform in Latin America." Economic Commission for Latin America and the Caribbean, Santiago, Chile.

—. 2003. "Foreign Investment In Latin America and the Caribbean 2002." Economic Commission for Latin America and the Caribbean, Santiago, Chile.

- Wagner, Daniel. 2002. "Political Risk Insurance in Asia: Who Purchases It, Where and Why." International Risk Management Institute, Dallas, Texas. http://www. IRMI.com/expert/articles/wagner009.asp
- Wilmot, Jonathan, and Paul Midezarski. 2003. "Global Markets Outlook." Credit Suisse First Boston.
- World Bank. Various years. *Global Development Finance*. Washington, D.C.
- ——. Various years. World Development Indicators. Washington, D.C.
- —. 1994. Global Economic Prospects 1995. Washington, D.C.

- —. 2001. *Global Economic Prospects* 2002. Washington, D.C.
- —. 2002a. Global Development Finance 2002. Washington, D.C.
- . 2002b. Global Economic Prospects 2003. Washington, D.C.
- ——. 2003. Global Development Finance 2003. Washington, D.C.
- Zhang, Xiaoyang. 1999. "Real Estate Investment in China— Legal Review and Analysis of Foreign Investors' Participation." Murdoch University Electronic Journal of Law 6(2). http://www.murdoch.edu.au/elaw/issues/v6n2/ zhang62\_text.html.