# International Financial Integration of China and India

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The goal of this chapter is to assess how the increasing economic prominence of China and India is reshaping the international financial system. These countries have grown strongly over the last decade and projections suggest this trend will continue (see chapter 1). Although restrictions remain, both countries gradually have adopted more market-oriented policies and have liberalized both inward and outward capital flows across their borders.

To analyze the implications of the emergence of the Giants for the global financial system, we consider several dimensions of their international financial integration: net foreign asset positions, gross holdings of foreign assets and foreign liabilities, and the equity-debt mix on international balance sheets. We also analyze the importance of domestic developments and policies related to their domestic financial systems for both the current configuration of their external assets and liabilities and the dynamics of the international financial integration of China and India.<sup>1</sup> We thus discuss the effects of three different interrelated domestic factors in each economy: (1) financial

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<sup>1.</sup> In the other direction, it is clear that international financial integration fundamentally influences the functioning of the domestic financial system. That relationship, however, is not the focus of this chapter.

liberalization and exchange rate/monetary policies, (2) evolution of the financial sector, and (3) impact of financial reform on savings and investment rates. Finally, we assess the current international financial impact of these countries and probe how their increasing weight in the international financial system will affect the rest of the world over the medium term.

Three salient features emerge from the analysis of China's and India's international financial integration. First, regarding size, China and India still have only a small global share of privately held external assets and liabilities (with the exception of China's foreign direct investment [FDI] liabilities). Second, in terms of composition, these countries' international financial integration is highly asymmetric. On the asset side, they both hold mostly low-yield foreign reserves (that is, by 2004 these countries accounted for 20 percent of global official reserves). Equity instruments feature more prominently on the liability side, primarily taking the form of FDI in China and portfolio equity liabilities in India. Third, although neoclassical models would predict these countries to be net borrowers in the international financial system, given their level of economic development, over the last decade both China and India have reversed their large net liability positions, with China even becoming a net creditor. Their debtor and creditor positions in the world economy are small. We argue that domestic financial developments and policies, including the exchange rate regime, are essential factors in explaining these patterns of integration with the international financial system and in projecting future integration.

Those three characteristics of China's and India's current engagement with the global financial system have offered these countries some important benefits in recent years. Accumulating reserves has insured against the risk of international financial crises and has enabled these countries to maintain stable exchange rates. FDI inflows to China have contributed to technology transfer, and portfolio equity inflows to India have facilitated the rapid expansion of its stock market, while the domestic financial sectors of both countries have been mostly insulated from the potentially destabilizing impact of greater cross-border debt flows. Finally, improving net foreign asset positions may have been a prudent response in the wake of India's crisis in the early 1990s and, more recently, the 1997–98 Asian financial crisis.

The current strategy nonetheless entails considerable opportunity costs in terms of the pattern of net resource flows, the "long-debt, short-equity" financial profile, the constraints on domestic monetary autonomy, and the insulation of the domestic banking sector from external competitive pressures. In particular, the benefits of reserve accumulation come with a cost arising from the return differential; on average, these countries pay more on their liabilities than they earn on their assets. Moreover, as our analysis will highlight, domestic financial development alters the current strategy's cost–benefit ratio because the rationale for financial protectionism declines and the potential gain from a more liberal capital account regime increases.

Looking to the future is a difficult task, and projections on the evolution of China's and India's international financial positions are conditional on changes in their domestic financial systems, among other things. Nevertheless, we project that further progress in domestic financial reform and liberalization of the capital account will lead to a restructuring of these countries' international balance sheets. In particular, further financial liberalization will widen opportunities for foreign investment and expand the international investment alternatives for domestic residents, with the accumulation of external assets and liabilities by the private sectors in these countries likely to grow. With these changes we may expect to see a diminution in the compositional asymmetries of external liabilities, with a greater dispersion of inflows among the FDI, portfolio equity, and debt categories. On the asset side, there should be a marked increase in the acquisition scale of nonreserve foreign assets. With the projected increase in their shares in world gross domestic product (GDP), China and India are set to become major international investing nations.

Although projections about net balances are subject to much uncertainty, institutional reforms and further domestic financial development would put pressure on the emergence of significant current account deficits in both countries in the medium or long term, all else being equal. Accordingly, if taken together with a possible deceleration in their rates of reserve accumulation, the roles of China and India in the global distribution of external imbalances could undergo a substantial shift in the coming years. These changes will have significant implications for other participants in the international financial system.

The analysis in this chapter builds on several strands of the existing literature. A number of recent contributions have highlighted the importance of domestic financial reform for the evolution of these countries' external positions.<sup>2</sup> The roles of China and India in the international financial system

<sup>2.</sup> Among other sources on China, see Blanchard and Giavazzi (2005); Chamon and Prasad (2005); Lim, Spence, and Hausmann (2006); Goodfriend and Prasad (2006); Ju and Wei (2006); and Prasad and Rajan (2006). Among other sources on India, see Kletzer (2005) and Patnaik and Shah (forthcoming).

have been much debated, with opinions divided between those who consider the current role of these countries (together with other emerging Asian economies) as large-scale purchasers of reserve securities to be essentially stable in the medium to long run, and those who believe that the current configuration is a more transitory phenomenon.<sup>3</sup>

Relative to the existing literature, we make a number of contributions. First, we provide a side-by-side examination of China's and India's current degrees of international financial integration, with a focus on the levels and compositions of their international balance sheets. Although we put these countries together in the analysis because of their size and growing economic importance, many differences remain and are highlighted in the chapter. Second, we provide a comparative account of the development of their domestic financial sectors, and we show how distinct policies in the two countries help explain differences in their external capital structures.<sup>4</sup> Third, we conduct a forward-looking assessment of how future reforms in their domestic financial sectors will affect the evolution of international balance sheets, with an emphasis on highlighting the broader impact on the international financial system.

The rest of the chapter is organized as follows. The next section documents the basic stylized facts of the international financial integration of China and India. We then briefly link that to the developments in the countries' domestic financial sectors. The fourth section analyzes the impact of their international integration on the global financial system. The final section offers some concluding remarks.

# **Basic Stylized Facts**

To document the major trends in China's and India's international financial integration, we study the international balance sheet of each country.<sup>5</sup> Bal-

<sup>3.</sup> Dooley, Folkerts-Landau, and Garber (2003) famously dubbed this configuration the "Bretton Woods II" system; Caballero, Farhi, and Gourinchas (2006) provided theoretical support. Although this hypothesis has a broad appeal in explaining the stylized facts of recent imbalances, it remains highly controversial. Other authors (Eichengreen 2004, Aizenman and Lee 2005, Goldstein and Lardy 2005, and Obstfeld and Rogoff 2005) have provided broad-ranging critiques.

<sup>4.</sup> The analysis here is partly based on Bai (2006), Kuijs (2006), Li (2006), Mishra (2006), Patnaik and Shah (2006), and Zhao (2006).

<sup>5.</sup> Lane (2006) has provided more details concerning the historical evolution of the international balance sheets of China and India.

ance sheets provide a reasonable measure of international portfolios, where they stand, and how they might shift; and they help us compare stock positions with the evolution of capital flows (with flows responding to stock adjustments).<sup>6</sup> In some places we also discuss recent patterns in capital flows, especially where these patterns signal that the current accumulated positions are undergoing some structural changes toward new portfolio balances.

We start with figure 4.1a, which plots the evolution of the net foreign asset positions of China and India from 1985 to 2004. The figure shows that both countries have followed a similar path-accumulating net liabilities until the mid-1990s but subsequently experiencing a sustained improvement in net foreign asset position. By 2004, China was a net creditor at 8 percent of GDP, whereas Indian net external liabilities had declined from a peak of 35 percent of GDP in 1992 to 10 percent of GDP in 2004. Figures 4.1b and 4.1c show that the net foreign asset positions of other East Asian countries also have improved in the wake of the 1997–98 financial crisis, while the net positions of the countries in the G-7, Eastern Europe, and Latin America have deteriorated. According to the International Monetary Fund's World Economic Outlook database, since 2004 China's current account surplus has continued to increase, reaching 7.2 percent in 2005 and projected at 7.2 percent for 2006–07, thus strengthening their creditor position. In contrast, the Indian current account balance has returned to negative territory with a deficit of 1.5 percent in 2005 and projected deficits of 2.1 and 2.7 percent for 2006 and 2007, respectively, thus deepening their debtor position.

Compared with other developing countries, China and India have net foreign asset positions that are less negative than is typically the case for countries at a similar level of development (Lane and Schmukler 2006). This remains true today. Although some other developing countries have more positive net positions, those typically are resource-rich economies.

In global terms, the imbalances of China and India are relatively small. At the end of 2004, the Chinese creditor position amounted to only 7.4 percent of the level of Japanese net foreign assets, whereas Indian net liabilities were only 2.8 percent of U.S. net external liabilities.<sup>7</sup> Scaled differently, China's net creditor position of \$131 billion at the end of 2004 amounted to only 5

<sup>6.</sup> See Lane and Milesi-Ferretti (2006) for a discussion of the advantages of focusing on balance sheets instead of capital flows.

<sup>7.</sup> Japan is the world's largest creditor nation; the United States is the world's largest debtor nation.



Figure 4.1 Net Foreign Asset Positions, 1985–2004

*Source:* Authors' calculations drawing on the data set constructed by Lane and Milesi-Ferretti (2006). *Note:* Net foreign asset position expressed as a ratio to GDP. East Asia is the average of Indonesia, the Republic of Korea, Malaysia, and Thailand. G-7 is the average of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. Latin America is the average of Argentina, Brazil, Chile, and Mexico. Eastern Europe is the average of the Czech Republic, Hungary, and Poland. The series for the regions are weighted averages where the weights are the countries' GDPs as a fraction of the region's GDP.

	China		India	
Component	Assets	Liabilities	Assets	Liabilities
Portfolio equity	0.3	2.9	0.1	9.1
Foreign direct investment	1.9	25.7	1.3	6.4
Private debt	13.3	11.9	2.6	17.0
Reserves	31.8	n.a.	18.3	n.a.
Total	47.3	40.5	22.3	32.5

 Table 4.1 Composition of Foreign Assets and Liabilities, 2004

 Percent of GDP

Source: Authors' calculations, based on data set constructed by Lane and Milesi-Ferretti (2006). Note: n.a. = not applicable.

percent of the U.S. negative external position of \$2.65 trillion.<sup>8,9</sup> China's position, however, is increasingly important on a flow basis: its projected 2006 current account surplus of \$184 billion amounts to more than 20 percent of the projected U.S. current account deficit of \$869 billion (IMF 2006b).

Underlying these net positions is a significant increase in the scale of China's and India's international balance sheets. Figure 4.2a shows the sum of foreign assets and liabilities (divided by GDP). This indicator of international financial integration has increased sharply for both countries in recent years, although the levels are not high when compared with other regions (figures 4.2b and 4.2c). Whereas the growth in cross-border holdings is substantial, we have shown that the relative pace of financial integration has lagged behind the expansion in trade integration and the growth of China and India's share in global GDP (Lane and Schmukler 2006).

There are significant asymmetries in the composition of the underlying stocks of gross foreign assets and liabilities. Table 4.1 shows the composition of foreign assets and liabilities for China and India. On the assets side, the equity position (portfolio and FDI) is relatively minor for both countries, with a predominant role for external reserve assets that amount to 31.8 percent of GDP for China and 18.3 percent of GDP for India at the end of 2004. On the liabilities side, the table also shows some important differences between the two countries. In particular, equity liabilities primarily take the form of FDI in China, whereas portfolio equity liabilities are predominant for India. External

<sup>8.</sup> A billion is 1,000 millions.

<sup>9.</sup> These calculations are based on data drawn from Lane and Milesi-Ferretti (2006). In recent years, the major oil exporters plus other Asian economies also have run substantial current account surpluses.





*Source:* Authors' calculations drawing on the data set constructed by Lane and Milesi-Ferretti (2006). *Note:* Net foreign asset position expressed as a ratio to GDP. East Asia is the average of Indonesia, the Republic of Korea, Malaysia, and Thailand. G-7 is the average of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. Latin America is the average of Argentina, Brazil, Chile, and Mexico. Eastern Europe is the average of the Czech Republic, Hungary, and Poland. The series for the regions are weighted averages where the weights are the countries' GDPs as a fraction of the region's GDP.

Component	China	India	
Net portfolio equity	-2.6	-9.0	
Net foreign direct investment	-23.8	-5.0	
Net equity	-26.5	-14.1	
Net private debt	1.5	-14.6	
Reserves	31.8	18.3	
Net debt	33.3	3.7	

 Table 4.2 Asymmetries in the International Balance Sheet, 2004

 Percent of GDP

Source: Authors' calculations, based on data set constructed by Lane and Milesi-Ferretti (2006). Note: Net private debt equals nonreserve debt assets minus debt liabilities.

debt comprises less than one-third of Chinese liabilities but more than onehalf in the Indian case.

Table 4.2 considers the net positions in each asset category at the end of 2004. Both China and India are "long in debt, short in equity": they have positive net debt positions and negative net equity positions. As observed by Lane and Milesi-Ferretti (2006), this is currently a common pattern for developing countries. However, the scale of the asymmetry is striking, especially in China's case.

Figure 4.3 shows the relative importance of the different components of China's and India's international balance sheets. Relative to other countries, one of the most notable features of China and India is their low levels of non-reserve foreign assets (also discussed in Lane 2006). According to the data compiled by Lane and Milesi-Ferretti (2006), China's foreign portfolio and FDI assets amounted to \$5.7 billion and \$35.8 billion, respectively, at the end of 2004, whereas the figures for India were \$0.95 billion and \$9.6 billion, respectively. Relative to global stocks of foreign portfolio equity and FDI assets (\$8.98 trillion and \$12.55 trillion, respectively), these correspond to global shares of 0.06 percent (China) and 0.01 percent (India) in terms of foreign portfolio equity assets and 0.29 percent (China) and 0.08 percent (India) in terms of FDI assets. As a benchmark, their shares in global dollar GDP are 4.7 percent and 1.7 percent, respectively, whereas they hold 16.0 percent and 3.3 percent of world reserves.

Regarding global impact, figure 4.3 shows that by the end of 2004, the FDI liabilities of China represented 4.1 percent of global FDI liabilities.<sup>10</sup> Al-

<sup>10.</sup> Some of this FDI represents round-tripping activities, by which domestic residents route investment through offshore entities to benefit from the tax incentives and other advantages provided to foreign investors (see World Bank 2002; Xiao 2004).



#### Figure 4.3 Top Foreign Asset and Liability Holders, 2004



Source: Authors' calculations drawing on the data set constructed by Lane and Milesi-Ferretti (2006).

*Note:* The figures show the holdings of foreign assets and liabilities, by type of asset and liability, of the ten largest holders, China, India, and the sum of all the other countries, as a percentage of total holdings of that type of asset or liability. They also show the share of world GDP of the ten largest economies and India. Holdings are expressed as a percentage of the sum of the holdings of all the countries in the data set. Numbers next to holdings show position in world ranking.

though this is broadly in line with China's share in world GDP (in dollars), global shares are much lower for the other nonreserve elements of the international balance sheet. In portfolio terms, China and India are "underweight" both as destinations for international investors and as investors in nonreserve foreign assets (Lane 2006).

# **Domestic Financial Sector**

To probe the extent to which the stylized facts above can be explained by developments and policies related to the domestic financial sectors in China and India, we very succinctly summarize the trends in three interrelated aspects of the financial sector: financial liberalization and exchange rate policies, evolution (and state) of the domestic financial sector, and patterns in savings and investment.<sup>11</sup>

As becomes evident when summarizing their evolution, these factors are fundamentally related to cross-border asset trade and the international balance sheets. We conduct the analysis by turning to the particular developments in the financial sectors of each country.

# China

China has adopted a gradualist approach to financial liberalization, including the capital account. During the 1980s and 1990s, the main focus was on promoting inward direct investment flows (that is, FDI), which led to a surge of direct investment in China in the 1990s. Investment by foreigners in China's stock markets has been permitted since 1992 through multiple share classes, but access is still restricted and a heavy overhang of state-owned shares limits its attractiveness. Debt inflows have been especially restricted, as have been private capital outflows. This has enabled the state to control the domestic banking sector by setting ceilings on interest rates, for example. These measures are summarized in Lane and Schmukler (2006).

China's financial liberalization policies have been linked intrinsically to its exchange rate regime. Since 1995 the renminbi (RMB) has been de facto pegged to the U.S. dollar, albeit with a limited degree of flexibility since the

<sup>11.</sup> A brief but much more detailed account is provided in appendixes to Lane and Schmukler (2006).

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3 percent revaluation in July 2005. A stable value of the exchange rate has been viewed as a domestic nominal anchor and an instrument to promote trade and FDI. The twin goals of maintaining a stable exchange rate and maintaining an autonomous monetary policy have contributed to the ongoing retention of extensive capital controls.

These policies have had a large impact on China's international balance sheet. The capital account restrictions have encouraged significant roundtripping (Lane and Schmukler 2006), with Hong Kong (China) playing a dominant role in channeling investment into China. Moreover, targeting the exchange rate has had a powerful influence on the composition of China's international balance sheet. On the liabilities side, the scale of private capital inflows (at least until the July 2005 regime switch) can be attributed partly to speculative inflows in anticipation of RMB appreciation (Prasad and Wei 2005).<sup>12</sup> To avoid currency appreciation, the counterpart of high capital inflows has been the rapid accumulation of external reserves and expansion in monetary aggregates (see figure 4.4a and Lane and Schmukler [2006]). In turn, the sustainability of reserves accumulation has been facilitated by interest rate regulation that has kept down the cost of sterilization (Bai 2006).

Turning to the domestic financial sector, China's level of domestic financial market development was low at the start of the reform process in 1978. Gradual liberalization of the sector has been accompanied by a sharp deepening of the financial development indicators in China during the last 15 years figure 4.4a and Lane and Schmukler [2006]).

Regarding the banking sector, figure 4.4b shows that bank credit to GDP increased almost twofold, and deposits to GDP rose almost threefold between 1991 and 2004, reaching levels much higher than those in India and other relevant benchmark groups (East Asia, Eastern Europe, Latin America, and the G-7).<sup>13</sup> In terms of size, credit is as high as in the G-7 economies, and deposits are substantially larger than all the other comparators. Despite the apparent financial depth captured by these indicators, however, the banking sector remains excessively focused on lending to state-owned enterprises, and it does not appear to be an adequate provider of credit to private enterprises and households. An interest rate ceiling also distorts the behavior of

<sup>12.</sup> Prasad and Wei (2005) pointed out that unrecorded capital inflows have been growing in recent years as foreign investors seek to evade limits on their ability to acquire RMB assets in anticipation of future currency appreciation.

<sup>13.</sup> Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.



**Figure 4.4 Selected Financial Sector Indicators** 

Sources: World Bank, World Development Indicators; IMF, International Financial Statistics; Standard and Poor's Global Stock Markets Factbook; and Beck, Demirgüç-Kunt, and Levine 2006.

Note: For a description of East Asia, G-7, Latin America, and Eastern Europe, see note to figure 4.1.

banks and limits the attractiveness of banks to domestic and foreign investors (Bai 2006).

With respect to domestic capital markets, although the stock market has undergone significant expansion since 1991 (figure 4.4c), the large overhang of government-owned shares implies that tradable shares are only about onethird of total stock market capitalization. In addition, equity pricing is perceived as open to manipulation, with the government regularly intervening in the market in response to political lobbying by the brokerage industry. Furthermore, corporate governance in China remains far from international standards. This contrasts with the focus of the Chinese government on guaranteeing safety for direct investment. The difference in the protection of foreigners' property rights between direct and portfolio investments has made FDI much more attractive than portfolio equity for foreign investors wanting to participate in the Chinese market.

Internal funds have been the main source of investment financing for the Chinese corporate sector.<sup>14</sup> According to Kuijs (2006), enterprises in China saved 20 percent of GDP in 2005. Their level of investment, however, was much higher than that, at 31.3 percent of GDP in 2005. The most important supplier of external finance has been the banking sector. Allen, Qian, and Qian (2005) showed that other important channels of external financing have been FDI (especially for private sector enterprises) and the state budget (for state-owned enterprises).

These features of the domestic financial sector help explain some elements of China's integration into the international financial system. In particular, the problems in the banking system (that is, the concentration of its loan book on state-owned enterprises, the significant number of nonperforming loans, and solvency concerns) have limited the willingness of the authorities to allow Chinese banks to raise external funds or act as brokers for the acquisition of foreign assets by domestic entities (Setser 2005). In addition, the distorted nature of the Chinese stock market means that portfolio equity inflows would have been limited even under a more liberal external account regime. Similarly, the domestic bond market is at a very primitive stage of develop-

<sup>14.</sup> It is important to acknowledge that retained earnings are also a primary source of investment finance in many developed and developing countries (see, for example, Corbett and Jenkinson [1996]). However, the efficiency in deploying internal funds will differ between systems with effective external monitors and those lacking an external disciplinary device to constrain firms' investment decisions.

ment, and the capacity of domestic entities to undertake international bond issues remains heavily circumscribed.

The third channel linking the domestic financial system with the international balance sheet is domestic savings and investment, with the net difference in turn determining the current account balance.

The domestic financial system influences savings rates through myriad channels. Regarding the household sector, Chamon and Prasad (2005) pointed out that the lack of consumer credit means families must accumulate savings to finance the purchase of consumer durables. Moreover, the underdevelopment of social and private insurance requires households to self-insure by accumulating buffer stocks of savings.<sup>15</sup>

Despite these trends at the household level, Kuijs (2005, 2006) showed that the extraordinarily high aggregate savings rate in China is driven primarily by corporate savings.<sup>16</sup> The high level of enterprise savings required to finance high levels of investment has been facilitated by a low-dividend policy. In the extreme case of many state-owned enterprises, there are no dividends at all. In some cases, the reluctance to distribute profits reflects uncertainty about ownership structures and the weak state of corporate governance.<sup>17</sup>

In addition to a low-dividend policy, two more factors help explain high enterprise savings and investment. The first is the high share of the industry sector in GDP, associated with higher savings and investment because of its capital intensity. The second factor is the rising profits of Chinese enterprises in the last 10 years. These enhanced profits can be explained in part by the

<sup>15.</sup> Blanchard and Giavazzi (2005) also emphasized that high household savings in China reflect a strong precautionary motive, in view of the low provision of publicly funded health and education services. Furthermore, Modigliani and Cao (2004) argued that the one-child policy has led to a higher percentage of employment to total population and has undermined the traditional role of family in providing old-age support, thus increasing household savings.

<sup>16.</sup> In 2005, household savings were similar to those of other developing countries. For instance, although the household savings rate in China may have been higher than rates of Organisation for Economic Co-operation and Development economies, it was actually lower than the rate in India. The government savings rate is also recorded as relatively high in China.

<sup>17.</sup> However, the recently established State Asset Supervision and Administration Commission is seeking to assert greater control of state-owned enterprises, including a demand for greater dividend payments. Naughton (2006) has provided an analysis of the political struggle over control and income rights in the state-owned sector.

increasing importance of private firms and the increased efficiency of stateowned enterprises (Kuijs 2006).

On the investment side, the reliance on self-financing and the lack of accountability to shareholders plausibly push up the investment rate, with corporate insiders pursuing projects that would not pass the return thresholds demanded by commercial sources of external finance.<sup>18</sup> In addition, for state-owned enterprises, access to directed credit from the banking sector enables these firms to maintain higher investment rates than would otherwise be possible. Furthermore, restrictions on capital outflows mean that enterprise investment largely has been restricted to domestic projects.

In sum, the underdevelopment of the domestic financial system may help explain the high rates of both savings and investment in China. The net impact on the current account is ambiguous in principle because financial development could reduce both savings and investment rates. However, the crosscountry empirical evidence indicates that domestic financial deepening lowers the savings rate and increases investment (see IMF 2005b). Especially in combination with an open capital account, it is plausible that higher-quality domestic financial intermediation could place greater downward pressure on savings than investment. In particular, the international capital funneled through domestic banks and domestic financial markets to high-return domestic projects may compensate for a reduction in investment in those inefficient enterprises that are protected by the current financial system. Moreover, a better financial system could stimulate consumption (by providing more credit) and reduce the need for maintaining high savings levels (either for precautionary motives or to finance future consumption).

## India

India suffered a severe financial crisis in the early 1990s, and that crisis subsequently led to a broad series of reforms. The goal was to spur Indian growth by fostering trade, FDI, and portfolio equity flows while avoiding debt flows that were perceived as potentially destabilizing. In the subsequent years, India has undergone extensive but selective liberalization (summarized in Lane and Schmukler [2006]).Substantial capital controls, however, do remain in place.

<sup>18.</sup> Moreover, the lack of financial intermediation distorts investment patterns, with young or prenatal firms starved of finance while mature firms inefficiently deploy excess cash flows.

The discouragement of external debt has restricted domestic entities' ability to issue bonds on international markets and the entry of foreign investors to the domestic bond market. Moreover, the restrictions on purchases by foreigners in the corporate and government bond markets are much more strict. Hence, the market for private bonds remains underdeveloped (Lane and Schmukler 2006).

By contrast, the approach to equity inflows has been much more liberal. Restrictions on FDI inflows have been relaxed progressively, although they still do exist and India receives far less direct investment compared with China (Table 4.1). The distinctive characteristic of equity flows into India, however, is the relatively high level of portfolio equity financing. India's broad domestic institutional investor base has aided the entry of foreign institutional investors that are permitted to take partial stakes in equity of quoted Indian enterprises.

Capital outflows also are restricted, although the system is being liberalized (Patnaik and Shah 2006). In particular, Indian banks are not permitted to acquire external assets, but rather are encouraged to hold government bonds, thereby lowering the cost of financing public deficits. Accordingly, current constraints on asset allocation make official reserves the predominant component of foreign assets. As in China, the de facto exchange rate/monetary regime seeks to maintain a stable value of the rupee against the dollar, which provides a nominal anchor and is viewed as promoting trade and investment. The exchange rate regime has been supported by capital controls, which have allowed some degree of monetary autonomy to be combined with the exchange rate target.

Following the crisis of the early 1990s, India initiated a reform of its financial institutions. There were extensive reforms in the equity markets and the banking sector. As figures 4.4b and 4.4c illustrate, the domestic equity market is much more developed in relative terms than is the banking sector (or the bond market, as shown in Lane and Schmukler [2006]). Corporate governance was improved, thus encouraging investment by domestic and foreign minority shareholders. Successful development of the equity market helps explain the shift in the external financing of listed firms from debt to equity (see Lane and Schmukler [2006]).

As mentioned above, the third channel linking the domestic financial system with the international balance sheet is domestic savings and investment. India's current savings rate is similar to that of most other Asian economies (Mishra 2006). Indeed, its household savings rate exceeds the Chinese level. Although corporate saving is on an upward trend, however, it is far below the

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Chinese level, and government saving is relatively low despite an uptick since 2002. On the investment side, private investment has risen steadily while public investment has been declining since the 1980s. In comparing investment levels in China and India, Mishra (2006) noted that an important difference is that India's sectoral growth pattern is more oriented toward services and is thereby less intensive in physical capital. Still, Kochhar et al. (2006) noted that the next phase of Indian development may require a higher level of physical investment—an expansion in the manufacturing sector is required to absorb low-skilled labor, and there are significant deficiencies in the quality of public infrastructure.

As in China, it is plausible that further development of India's domestic financial sector may prompt a decline in household and corporate savings rates as the availability of credit from the financial system increases. Even more strongly than in China, further financial development also may stimulate an expansion in investment, in view of the credit constraints faced especially by small- and medium-size enterprises. In addition, financial development accompanied by further capital account liberalization will stimulate a greater level of cross-border asset trade, with the acquisition of foreign assets by domestic households and enterprises and the domestic financial system intermediating international capital flows to domestic entities.

# Impact on the Global Financial System

Many important issues have emerged concerning the impact of China and India on the global financial system and they deserve much more attention than we can devote to them here. In our discussion we will try to summarize the main points, which can be expanded in further work. We group these issues into four broad questions that have already captured attention and, where relevant, highlight the differential effect of China and India on developed and developing countries.

## How Important Are China and India as Destinations for External Capital?

China and India account for only a small share of global external liabilities (with the exception of Chinese FDI liabilities). In terms of FDI flows, however, China looks rather more important: the country absorbed 7.9 percent of global FDI flows in 2003–04 (India's share was 0.8 percent). These high flows

might represent the adjustment to a new portfolio balance in which China captures a higher share of international investment (more in line with its participation in the world economy) after having a very small weighting in foreign portfolios.<sup>19,20</sup>

With respect to portfolio equity liabilities, Lane (2006) and figure 4.3 have shown that China and India each account for just over 0.5 percent of global portfolio equity liabilities. In terms of flows, China received 1.94 percent of global equity flows during 2003–04, and India received 1.79 percent (Lane 2006). Especially in regard to China, this likely understates its impact on the global distribution of equity flows—because of the poor reputation of the Chinese stock market, overseas entities may prefer to build portfolio equity stakes in "proxy" stock markets that are expected to co-move positively with the Chinese economy (most obviously, the Hong Kong [China] equity market can serve this purpose).

Finally, Lane (2006) recorded that both Chinese and Indian shares in global external debt liabilities have sharply declined in recent years—by 2004, only 0.65 percent and 0.35 percent, respectively. The decline is especially noteworthy for India, which was a much more important international debtor (in relative terms) in the early 1990s.

Turning to the future, continued domestic financial reform and external liberalization should produce some evolution in the level and composition of China's and India's external liabilities. As a benchmark, an increasing share of these countries in world GDP and world financial market capitalization naturally should prompt increasing capital inflows to these countries. In addition, we may expect to see some rebalancing in the composition of external liabilities. For China, reform of the domestic banking system and the development of its equity and bond markets may reduce its heavy reliance on FDI inflows as alternative options become more viable. A reduction in the relative importance of FDI also may be supported by moves to limit the generosity of the current incentives offered to foreign direct investors, which would attenuate FDI directly and through its attendant impact on round-tripping activity.<sup>21</sup> Finally, the expansion of domestic capital markets and reform of the

<sup>19.</sup> It is important to stress that some proportion of FDI represents round-tripping.

<sup>20.</sup> An interesting question is whether FDI inflows to China have been at the expense of other emerging economies. See Lane and Schmukler (2006) for a discussion of current research on this topic.

<sup>21.</sup> See Lane and Schmukler (2006) for a more detailed discussion.

banking system also would allow foreign-owned firms to draw on domestic funding sources.

With regard to India, recent moves to further liberalize the FDI regime may increase the relative importance of FDI inflows. India's ability to attract FDI, however, also depends on more widespread institutional reforms that improve the investment environment for foreign investors and encourage them to channel FDI into the country. The major barrier regarding the liberalization of debt inflows could be that opening up the capital account may threaten the government's ability to finance its large fiscal deficits at a low interest cost. Under these conditions, further liberalization may be delayed until the domestic fiscal situation is reformed.

## How Important Are China and India as International Investors?

As shown in table 4.1, China and India are much less important as external investors in equity assets than as holders of equity liabilities. This is especially the case for portfolio equity assets, which by 2004 were only 0.3 percent and 0.1 percent of GDP for China and India, respectively. Relative to portfolio equity assets, FDI assets in 2004 were much larger—but remain small at 1.9 percent and 1.3 percent of GDP, respectively. In terms of nonreserve foreign debt assets, China had a much larger position in 2004 than did India (13.3 percent versus 2.6 percent of GDP). Nevertheless, even the China position is small in global terms, representing just 0.6 percent of global nonreserve foreign debt assets in 2004 (Lane 2006; figure 4.3).

In view of the relatively low levels of foreign equity assets and nonreserve foreign debt assets, the foreign assets of China and India are highly concentrated in official reserves, which respectively represent 67 percent and 82 percent of their total foreign asset holdings. As noted earlier, these countries rank highly in the global distribution of official reserves—at the end of 2004, China and India were second and sixth, respectively, and together accounted for about 20 percent of global reserve holdings.

On the financial front, the high level of reserves acts as a subsidy that lowers the cost of external finance for the issuers of reserve assets—primarily, the United States. In turn, this helps to keep interest rates lower than otherwise in these economies. For example, a careful empirical study by Warnock and Warnock (2006) estimated that the foreign official flows from East Asia kept U.S. interest rates about 60 basis points below normal levels during 2004–05. This also feeds into higher asset and real estate prices and a reduction in the

domestic savings rate, helping explain the large U.S. current account deficit. Regarding the impact on other developing countries, the low global interest rates associated with high reserve holdings also have translated into a compression of spreads on emerging market debt, with the "search for yield" raising the attractiveness of emerging market destinations to international investors (IMF 2006a).

There are several reasons to believe that the pace of reserve accumulation will start to decelerate. First, the accumulation of reserves comes at a significant opportunity cost in terms of alternative uses for these funds. For instance, Summers (2006) estimated that the opportunity costs for the world's 10 largest reserve holders amount to 1.85 percent of GDP; Rodrik (2006a) calculated that the cost is near 1 percent of GDP for developing countries taken as a whole.<sup>22</sup> Because these countries comfortably exceed the reserve levels that are required to cover imports and debt obligations, the opportunity cost may be high relative to the insurance gains from building up reserves as a precaution against financial risks. Second, to the extent that inflows are not sterilized, the increase in domestic liquidity (shown in figure 7 of Lane and Schmukler [2006]) associated with reserve accumulation threatens the possibility of an asset and real estate price boom and misdirected lending in the domestic economy. Third, it is increasingly appreciated in China that rebalancing output growth toward expanding domestic consumption is desirable to raise living standards even faster and avoid the external protectionist pressures that have been building up in Europe and the United States. Fourth, the move to a more flexible exchange rate system might reduce the pressure on the monetary authority to intervene in the foreign exchange market to maintain a de facto fixed currency peg.

A slowing of reserve accumulation would have several ramifications. The removal of the interest rate subsidy would raise the cost of capital for the primary issuers of reserve assets. In turn, depending on the policy response, this might contribute to a reversal in global liquidity conditions, which also might adversely affect the supply of capital to emerging market economies. However, the full impact on the international financial system of changes in reserve accumulation is difficult to estimate and depends on the other changes that occur along with the deceleration in reserve accumulation, the external net

<sup>22.</sup> Summers (2006) assumed that these countries could earn a 6 percent social return on domestic investments; Rodrik (2006a) compared the yield on reserves to the borrowing costs faced by these countries.

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positions, and their contribution to global imbalances. For example, looking only at reserves does not take into account the amount of capital absorbed by these countries from the international financial system.

To mitigate the opportunity cost of reserve accumulation, countries also may decide to redirect excess reserves toward a more diversified portfolio of international financial assets, which might include the liberalization of controls on outward investment by other domestic entities.<sup>23</sup> For instance, Genberg et al. (2005) supported the creation of an Asian investment corporation that would pool some of the reserves held by Asian central banks and manage them on a commercial basis, investing in a broader set of assets with varying risk, maturity, and liquidity characteristics. In related fashion, Prasad and Rajan (2005) have proposed a mechanism by which closed-end mutual funds would issue shares in domestic currency, use the proceeds to purchase foreign exchange reserves from the central bank, and then invest the proceeds abroad. In this way, external reserves would be redirected to a more diversified portfolio and domestic residents would gain access to foreign investment opportunities in a controlled fashion. Finally, Summers (2006) suggested that international financial institutions may have a role to play in establishing a global investment fund that would provide a vehicle for the reallocation of excess reserves held by developing countries.

The different strategies for reserve deceleration have varying implications for the rest of the world. First, to the extent that reserves are reallocated toward other foreign assets, there would be a positive impact on those economies that benefit from the shift away from the concentration on the reserve assets supplied by a small number of countries toward a more diversified international portfolio. The capacity of emerging market economies to benefit from such a move (especially those in Asia) depends on the policy response. At a domestic level, economies that made the most progress in developing domestic capital markets and providing an institutional environment that is attractive to direct investors would benefit most.<sup>24</sup>

Second, a slowdown in reserve accumulation associated with a policy package that promotes increased domestic absorption (for example, through high-

<sup>23.</sup> Indeed, some redeployment of reserves has occurred already. For instance, China transferred \$60 billion in reserves in 2004–05 to increase the capital base of several state-owned banks. See also the discussion in European Central Bank (2006).

<sup>24.</sup> As discussed in Eichengreen and Park (2003) and Eichengreen and Luengnaruemitchai (2004), there is also room for regional cooperative policies (for instance, in developing a more integrated Asian bond market).

er domestic consumption in China and higher investment in India) and a reorientation away from export-led growth would have other spillover effects on the rest of the world economy. In effect, it would increase the overall cost of capital for the world economy. But it is important in this case not to overstate the initial impact of a deterioration in the current account balances of these countries because they hold small current positions in the global distribution of external imbalances. However, it is possible to construct scenarios in which these countries become significant net capital importers as their share of world GDP increases and if their medium-term current account deficits settle down in the 2 percent to 5 percent range.

Third, if a shift in reserves accumulation is associated with a shift in exchange rate policy, a move toward greater currency flexibility also would have spillover effects on other countries. If this shift in exchange rate policy generates less inflows and less reserve accumulation, the effect on the cost of capital in other countries is difficult to predict: it would depend on how the inflows previously going to these countries become allocated elsewhere, relative to how reserves were invested. In addition, the effective Asian "dollar bloc" that has been formed by individual Asian economies each tracking the U.S. dollar would be weakened by such a move. In its place, and political conditions permitting, smaller Asian economies might move to an exchange rate regime that sought to target a currency basket weighted on the Chinese renminbi as well as the U.S. dollar. As such, the renminbi might start to play the role of one of the few world reserve currencies in the international financial system, so long as the capital controls are removed and the financial system consolidates. Similarly, the rupee could increase in importance as a partial anchor for other currencies in South Asia.

Finally, to the extent that tax and other advantages offered to foreign investors may be eliminated in the future through further financial liberalization, the gross scale of the international balance sheet as currently measured would shrink because round-tripping activities would diminish.

## What Is the Contribution of China and India to Global Imbalances?

China's and India's current net foreign asset positions are small in global terms. In 2004, China was the world's 10th largest creditor and India was the 16th largest debtor (Lane and Schmukler 2006). Moreover, both imbalances are relatively small in absolute terms. Although India has returned to running

a current account deficit, the Chinese current account surplus has continued to increase.

Based on a combination of a calibrated theoretical model and nonstructural cross-country regressions, Dollar and Kraay (2006) argued that liberalization of the external account and continued progress in economic and institutional reform should result in average current account deficits in China of 2 percent to 5 percent of GDP over the next 20 years, with the net foreign liability position possibly reaching 40 percent of GDP by 2025.<sup>25</sup> Indeed, any general neoclassical approach would predict that China should be a net liability nation because productivity growth and institutional progress in a capitalpoor country offering high rates of return should boost investment and reduce savings at the same time. Although there has been no similar study for India, similar reasoning applies—with greater capital account openness and continued reform, India might run persistently higher current account deficits during its convergence process.

It is worth recalling that the development experience of some other Asian nations has involved sustained phases of considerable current account deficits. For instance, the current account deficits of the Republic of Korea and Singapore averaged 5.0 percent and 14.4 percent, respectively during 1970–82, with the net foreign liabilities of the former country peaking at 44.2 percent of GDP in 1982 and those of the latter peaking at 54.2 percent of GDP in 1976 (in those cases, however, the economies were significantly smaller in relative terms than are China and India today). Likewise, in Europe the neoclassical model is performing well with a strong negative correlation between income per capita and the current account balance, driven by large current account deficits in the poorer members of the European Union and the emerging economies of Central and Eastern Europe. More formally, Dollar and Kraay (2006) considered the determinants of net foreign asset positions in a cross-country regression framework that controlled for productivity, institutional quality, and country size, and they found that the China dummy is significantly positive—the Chinese net foreign asset position is too high relative to the predictions of the empirical model. Similarly, along the timeseries dimension, Lane and Milesi-Ferretti (2002) found that increases in per

<sup>25.</sup> The natural evolution is that the scale of current account deficits will taper off and, if these countries become rich relative to the rest of the world, this phase may be followed by a period in which they become net lenders to the next wave of emerging economies. See also Summers (2006).

capita output are associated with a decline in the net foreign asset position for developing countries, contrary to the recent Chinese experience.

If the neoclassical predictions about the impact of institutional reform and capital account liberalization in China take hold, the global effect of a sustained current account deficit on the order of 5 percent of GDP per annum soon would become significant. If India also ran a 5 percent deficit and if projections about the superior growth rate of these countries turn out to be true, the combined deficits of China and India would reach 1.23 percent of G-7 GDP by 2015 and 2.16 percent of G-7 GDP by 2025 (Lane 2006).<sup>26</sup> Clearly, the global impact of current account deficits of this absolute magnitude would represent a major call on global net capital flows. Of course, the feasibility of deficits of this magnitude requires that there are countries in the rest of the world willing to take large net creditor positions. If that is not the case, the desired savings and investment trends will translate into higher world interest rates rather than large external imbalances.

Although a neoclassical approach predicts that these countries could run much larger current account deficits, there is substantial disagreement about these predictions. Critics would argue that the neoclassical predictions do not take into account several factors unique to China and India and do not explain the recent past and distinctive nature. More specifically, several studies have suggested that savings rates are likely to remain high in China and India. For instance, Fehr, Jokisch, and Kotlikoff (forthcoming) interpreted China's recent savings behavior as indicative of a low rate of time preference, and they suggested that China will remain a large net saver. Based on household survey data, Chamon and Prasad (2005) made demographic projections and predicted higher household savings rates over the next couple of decades. Finally, Kuijs (2006) has argued that structural factors mean that savings and investment rates in China will decline only mildly in the decades ahead. With respect to India, Mishra (2006) argued that the upward trend of Indian savings rates will continue. For instance, India's working-age population as a percentage of total population is expected to peak in 2035, much later than in other Asian economies.

Although demographic considerations may mean that savings rates are unlikely to plummet, it is plausible that further domestic financial development and capital account liberalization will induce a downward adjustment in the savings rate. For instance, Chamon and Prasad (2005) pointed out that the

<sup>26.</sup> By comparison, the U.S. deficit in 2005 was 2.41 percent of G-7 GDP.

savings rate (especially for younger households) could decline if the growing demand for consumer durables were to be financed through the development of consumer credit. This would be reinforced by the liberalization of controls on capital flows that would provide greater competition in the domestic financial sector and improved opportunities for risk diversification, leading to more lending and less savings. In addition, there are recent indications that China plans a range of policy initiatives to raise the domestic level of consumption.<sup>27</sup> Furthermore, over time, improvements in social insurance systems and provision of public services in both countries would reduce the self-insurance motivation of high savings rates.

To project the net position, it is important also to consider the prospects for the level of investment. In China and India, a combination of an improvement in domestic financial intermediation and capital account liberalization would raise the attractiveness of these countries as a destination for external capital and would enhance the ability of domestic private firms to pursue expansion plans.<sup>28</sup> In the Indian case, a primary driver of larger current account deficits could be a higher rate of public investment, in view of the deficiencies in the current state of its public infrastructure.

In terms of net positions, Dooley, Folkerts-Landau, and Garber (2003) argued that it is possible to rationalize persistent current account surpluses by appealing to the reduction in country risk that may be associated with the maintenance of a net creditor position. However, even if such an externality effect is present, it may not survive a liberalization of controls on capital flows, in view of the powerful private incentives to invest more and save less.

In summary, our projection is that, all else being equal, a combination of further domestic financial development and capital account liberalization will unleash forces that induce larger net resource flows into China and India. Although this projection seems quite robust at a qualitative level, we recognize that different forces may operate in the other direction. In particular, a stalling of the reform process in either country would reduce the impetus for greater net inflows. Moreover, even if market-orientated reform continues, the rela-

<sup>27.</sup> See the media coverage of the March 2006 Congress of the Communist Party of China. 28. In view of the high level of inefficient investment in China, it is plausible that corporate governance reforms and higher dividend payouts (together with domestic financial deepening and external liberalization) could lead to a reduction in the absolute level of investment in tandem with a decline in the level of enterprise savings. With an increase in marketdriven investment and a decline in savings, the prediction of an increased current account deficit still would hold.

tive pace of demographic change in China and, at a later date, in India will be an important force toward a more positive net external position. Even in that case, however, the composition of capital flows will be radically different from the current pattern, with the net balance the product of much larger gross inflows and gross outflows.

## Do China and India Pose Additional Global Risks?

It is important to acknowledge that integrating China and India into the international financial system is not risk free. Indeed, Prasad et al. (2003) documented that financial globalization is typically associated with an initial increase in consumption volatility for developing countries, and there have been many currency and banking crises in recent decades that may have been compounded in part by external financial liberalization. Of course, these findings do not in themselves represent a blanket argument against international financial integration. In fact, they point out that financial globalization reduces volatility for those countries that exceed a threshold level of domestic financial development, indicating that the source of instability is the interaction of international capital flows with an ill-prepared domestic financial system. Ranciere, Tornell, and Westermann (2005) showed that long-term output growth increases after external liberalization so that the output reversals associated with "bumpiness" are more than offset by a faster underlying growth rate. On the financial front, Kaminsky and Schmukler (2003) showed that although financial markets might become more volatile in the immediate aftermath of liberalization, volatility is diminished in the longer term.

For China, the 1997–98 Asian financial crisis appears to have shaped its approach to external liberalization: it minimizes the risks involved. In the Indian case, its own external debt crisis in the early 1990s strongly has influenced its subsequent strategy. Both countries have sought to limit the accumulation of foreign currency external debt to private creditors, which has been the central vulnerability in most of the financial crises over the last decade. Similarly, the accumulation of large official reserve holdings provides a good measure of self-insurance in the event of a sudden stop in capital inflows.

In the preceding sections, we have documented that China and India represent only a relatively small share of global external liabilities. For this reason, the spillover impact of a reversal in China or India could be somewhat limited in magnitude because the exposure of international investors to these countries remains quite low. This does not mean, however, that these countries pose no risks to the global economy.

First, the banking sectors in both countries are a source of vulnerability. This is of particular concern in China where a history of directed lending to stateowned enterprises, a significant volume of nonperforming loans, and low levels of efficiency mean that the transition to a commercially based system is far from complete. Solvency concerns could lead to banking instability if restrictions on capital outflows were lifted and weaknesses in the banking sector are not addressed before financial liberalization, with depositors opting to deal with better-capitalized international banks.<sup>29</sup> Moreover, credit has expanded in recent years, with the risk that the quality of new loans is too low (Setser 2005). In the Indian case, as emphasized by Kletzer (2005), the assets of the banking sector have been heavily concentrated in domestic government debt-typically carrying a low interest rate and having a relatively long maturity, with attendant exposure to an increase in interest rates. Significant progress has been made in the last couple of years, however, with a decline in the holdings of government securities, an improvement in risk management, lower levels of nonperforming loans and credit risk, and improved profitability.

A second potential vulnerability relates to the effect of greater exchange rate flexibility on the balance sheets of domestic entities. One manifestation is the much-discussed capital losses on China's and India's large dollar reserve holdings in the event of significant currency appreciation against the dollar.<sup>30</sup> Aside from the value of the local currency with respect to the U.S. dollar, fluctuations in international asset prices and exchange rates will be increasingly strong influences on the balance sheets of banks, firms, and households in China and India. The importance of these valuation effects increases with financial globalization, affecting the dynamics of the external positions (Lane and Milesi-Ferretti 2006). The challenge is to ensure that the domestic financial sector has the capacity to manage such balance sheet risks.

Finally, a third concern is the political economy of FDI. Political opposition from local entities may reduce the inward flow of new FDI. Export-oriented FDI may be harmed by the rise of protectionist pressures in destination

<sup>29.</sup> For this reason, Obstfeld (2005) recommended a gradual approach to capital account liberalization and suggested that China could learn from other countries (Chile, Israel) that have strengthened domestic financial systems before fully opening the capital account.30. Setser (2005) also stressed that, contrary to the norm in other developing economies, many Chinese firms are financially exposed should such currency appreciation occur because they sell in foreign currency and have debts in domestic currency.

markets. Because China is so highly integrated into an Asian manufacturing chain, a disruption in FDI could have adverse upstream spillover effects on other Asian countries.

# **Concluding Remarks**

In this chapter, we have studied the impact of China and India on the international financial system by examining and comparing both countries, analyzing different aspects of their international financial integration, and linking the patterns in their international balance sheets to policies regarding their domestic financial systems. Given the evolution and probable changes in their domestic financial sectors, this analysis is relevant in projecting the future evolution of the international financial system.

The main current international financial impact of India and particularly China has been in their accumulation of unusually high levels of foreign reserves. Another salient aspect of their integration is the asymmetry in the composition of their gross assets and liabilities. Their assets are low-return foreign reserves, which are liquid and protect them against adverse shocks, but they carry a high opportunity cost. Their liabilities are FDI, debt, and portfolio equity, which usually yield a higher rate of return. FDI has been relatively more important in China, with portfolio investment taking a lead role in India. Despite recent attention and concerns regarding their effects on developing countries, China and India do not seem to have been crowding out investment elsewhere and, despite a recent acceleration in activity, are not yet major accumulators of nonreserve foreign assets. A striking aspect of their integration has been the reduction in their net liability positions, defying neoclassical predictions that they should be running large current account deficits, given their levels of development. Whether the shift in their net positions is transient or permanent is a central issue in assessing the future impact of China and India on the international financial system.

We have argued that the effect of China and India on the international financial system fundamentally is linked to the evolution of their domestic financial systems, including their exchange rate and capital account liberalization policies. As both China and India are likely to undergo further financial development and liberalization, these countries are set to have an everincreasing effect on the international financial system. We project that the nature of their integration with the international financial system is likely to be reshaped. At one level, the composition of the international balance sheet will become less asymmetric—with a greater accumulation of nonreserve foreign assets and a more balanced distribution of foreign liabilities among FDI, portfolio equity, and debt. This rebalancing should be good news for developing countries that may receive a greater share of the outward investment flows from China and India. At another level, there is a strong (but not undisputed) prospect that the Giants might experience a sustained period of substantial current account deficits. In view of their increasing share in global output, the prospective current account deficits of China and India may be a central element in the next phase of the "global imbalances" debate. If this scenario plays out, other potential borrowers will receive smaller net capital flows, will face a higher cost of capital, or will encounter both problems.

As always, future developments are difficult to predict and are conditional on other factors (like distinct demographic trajectories and economic reforms), domestic policy options, and the international environment. Key aspects to monitor when analyzing the possible paths that China and India may follow (and their impact on the international system) include the following elements. First, it is essential to watch what approaches these countries adopt regarding their exchange rate policies, particularly in light of the sustained appreciation pressure from the market and the international political environment. Although significant appreciation may be resisted in the short run by further reserve accumulation, this is increasingly costly and may compromise other policy objectives. Second, a sharp correction in the U.S. dollar relative to other major currencies may act as an external trigger for a switch to greater exchange rate flexibility in China and India because the renminbi and the rupee would become (more) undervalued relative to those major, relevant currencies. Indeed, concerns about such a correction also may prompt these countries to alter the currency composition of reserves, affecting interest rates and possibly exchange rates (at least in the short run). A third key component to monitor is how fast these countries substitute reserve holdings for other assets abroad. To the extent that the international environment remains favorable, it is likely that some of the ideas described above to shift away from traditional reserve holdings will start to materialize. Fourth, a fully fledged liberalization of capital controls remains unlikely in the short to medium term, in view of the outstanding weaknesses in coping with unrestricted debt flows. It is likely, however, that these countries will continue to liberalize their financial sectors, with implications for the composition of their international balance sheets and net foreign asset positions. The exact form of this liberal-

ization process, its timing, and its pace are still to be determined and will remain a subject of attention. For all these reasons, we anticipate that the international financial integration of China and India is set to undergo significant reshaping in the coming years.