



SOUTH–SOUTH ECONOMIC LINKS

2

South–South economic links

The growing weight of the South

How is it that, until the last few decades, an area spanning more than three-fifths of the planet’s land mass and encompassing the homelands of the majority of its human inhabitants figured so lightly in economic terms?

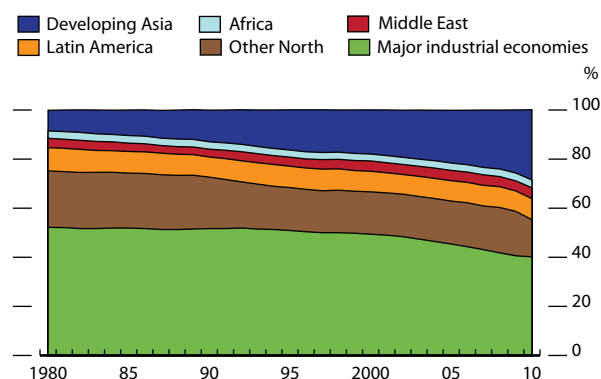
Yet since at least the mid-nineteenth century if not earlier, Africa, developing Asia, Latin America, and the Middle East—geographic regions that in this chapter are collectively referred to as the South¹—have been poorer and less productive than their counterparts in the North. And even in 2009, a yawning gap in living standards remained: the combined per capita GDP of economies in the South—in purchasing power parity current international dollars—at \$5,573, was not even a fifth of the North’s \$31,660.

Over the last three decades, however, the South has been gaining economic weight. Growing at an average annual rate of 4.8% during this period, by 2010 the combined economic output of the South accounted for 45% of world GDP, a remarkable achievement particularly when seen that, as late as 1980, the rest of the world’s share was 71% (Figure 2.1.1).

Moreover, given its relatively higher population growth rates and rising average incomes, the South offers tremendous potential markets for trade and capital investment. As trade and nontrade barriers of Southern economies come down further, increased competition is likely to translate into efficiency gains in production, and expanded markets are likely to present opportunities for greater specialization to achieve scale economies in companies’ operations—both of which will benefit consumers (in terms of lower prices and access to a wider range of goods and services).

As capital restrictions are relaxed, greater capital investment flows with their concomitant technology transfers and spillover effects are likely to translate into higher productivity and more job opportunities for workers, holding the promise of lifting millions of people out of poverty. As financial markets deepen,

2.1.1 Shares in world GDP



Note: Estimate of regional shares for 2010 calculated from the International Monetary Fund’s World Economic Outlook database, as the World Development Indicators online database has data up to 2009 only. The two databases show minimal differences (less than 3 percentage points). GDP is based on purchasing power parity valuation.

Sources: For 1980–2009, ADB calculations using World Bank, World Development Indicators online database (accessed 21 March 2011); for 2010, ADB calculations using International Monetary Fund, World Economic Outlook database, October 2010 (accessed 21 March 2011).

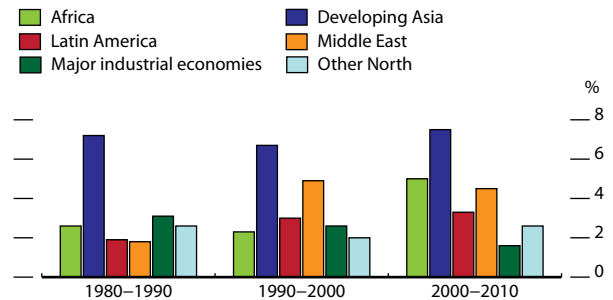
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more of the South's savings are likely to be mobilized within its regions (rather than be intermediated in the North), which can potentially set Southern economies on a higher growth trajectory and even help to address global imbalances.

Thus prospects are bright for the South to promote growth and productivity by improving market-oriented links that facilitate the exchange of goods and services as well as capital investment flows and transfers of technology. Moreover, in the aftermath of the global financial crisis, Southern economies have added incentives to enhance mutual economic welfare by diversifying economic and institutional links.

Indeed, given the prolonged slowdown in industrial countries of the North, the onus for taking global growth forward has fallen on the South (Figure 2.1.2). After all, the vibrant developing Asian region has been quick to recover from the crisis, with the emerging economies of Africa and the Middle East not far behind.² And despite being hit hard due to its strong links with industrial economies, Latin America weathered the crisis well and has recovered strongly.

2.1.2 GDP growth by region



Note: Data refer to 10-year averages of regional GDP growth rates weighted by gross national income (World Bank Atlas method).

Sources: ADB calculations based on data from International Monetary Fund, 2010. World Economic Outlook database, October (accessed 21 March 2011); World Development Indicators online database (accessed 15 March 2011); Asian Development Outlook database.

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The need for developing Asia to look South

Developing Asia has been instrumental in the rise of the South. Between 1980 and 2010, the region grew at an average annual rate of 7% and in 2010 accounted for more than 60% of the South's economic output. The stellar performances of the People's Republic of China (PRC) and India were major factors in this trend.

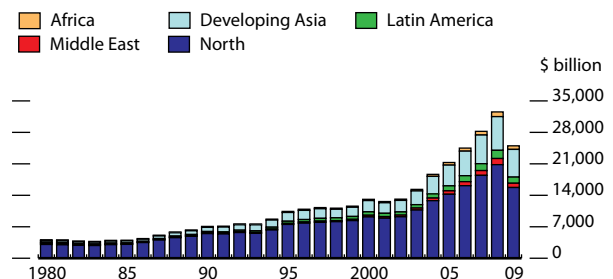
The contribution of the region to world output growth rose from 27% in 1981 to 51% in 2010 (although this increase is somewhat magnified by the global crisis). But even without the PRC and India, developing Asia's share of world GDP nearly doubled (from 5.1% in 1980 to 9.6% in 2010).

For developing Asia, looking South is becoming increasingly important for at least three reasons. First, large welfare gains are associated with more closely integrated Southern economies, particularly in view of "factory Asia" (see below) and developing Asia's emergent middle class. Second, developing Asia can be a primary resource for knowledge sharing. Third, a Southern hemisphere that is more economically open and diversified in trade relationships and investment flows can potentially address global imbalances.

Welfare gains

Given the potential gains, trade in goods and services will remain a key engine of growth for Southern economies, including developing Asia's. Driven by increasing demand from economies that have been growing at rates above the world average, by the proliferation of international production networks, and by the progressive dismantling of trade barriers, South-South trade has been expanding rapidly. In 1990-2009, its share in world trade rose by almost one and a half times, from 7% to 17% (Figure 2.1.3).

2.1.3 World merchandise trade



Source: ADB calculations using data from UNCTAD statistics. <http://unctadstat.unctad.org/TableViewer/dimView.aspx> (accessed 16 March 2011).

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While the bulk of this trade remained confined to developing Asia, driven notably by the faster growth of exports, its rate of expansion can be attributed to the burgeoning commerce between developing Asia, on the one hand, and Africa, Latin America, and the Middle East, on the other (Figure 2.1.4).

As these interregional trade relations intensify and proliferate among Southern economies, strengthening their links will help to realize the welfare benefits. With economic integration will come greater access to wider markets and resources for firms (which fosters specialization, affords scale economies, and promotes employment), more competitive and efficient market environments that benefit consumers, and more attractive rates of return on capital investments that encourage technology-transferring foreign direct investment (FDI)—all of which will translate into higher growth rates and improved well-being of the trading partners' populations.

Put differently, by combining their varied resources and markets, Southern countries will acquire a bigger platform from which to build physical, social, and institutional infrastructure; expand employment opportunities; accumulate capital; upgrade technology; diversify production; and raise income levels.

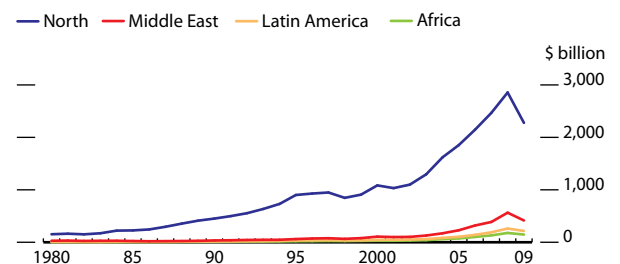
For developing Asia, two factors hold the potential of adding to the benefits of economic integration. First, there is the model of factory Asia, in which parts and components move through cross-border production networks with the PRC as the last-stage assembly hub for exporting final products to countries in the North. This phenomenon opened an opportunity for other countries in developing Asia with narrow export bases. The competitive position of the PRC and its growing economic muscle, in particular, brought numerous benefits to neighboring countries through employment creation in ancillary industries with their backward and forward links, greater access to regional markets, and higher growth.

These production networks are not, however, geared toward producing final goods for the price-sensitive consumers of developing countries—as they were primarily designed to produce high-quality products for consumers in the North.

There are currently no such networks spanning developing Asia, on the one hand, and the other regions of the South, on the other. Thus the concept and technologies of factory Asia can possibly be exported to, say, Africa and Latin America with the networks being designed to produce goods for the price-elastic markets in those regions. Not only will developing Asia's FDI in these new networks enhance employment opportunities, raise workers' incomes, increase domestic demand, and enhance growth prospects, it will also address in part global imbalances by recycling high savings in developing Asia into investment in the South.

Consider the prospects for Latin America, in particular. Most Latin American countries have attained middle-income status and are oriented to domestic expenditure. They are therefore prime markets for factory Asia. A problem is the large infrastructure investment needed to improve the links and reduce the costs of trade. If the high savings of developing Asia can be channeled to fund these infrastructure projects, however,

2.1.4 Developing Asia's merchandise trade



Source: ADB calculations using data from UN Comtrade online database (accessed 7 March 2011).

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trade costs may be sufficiently reduced to make the expansion of factory Asia to Latin America feasible.

The second factor is developing Asia's emerging middle class. These consumers are less sensitive to price differentials, and so are driving demand for high-quality products in the region. This group can possibly absorb part of the high-quality exports of Southern economies that used to go to the North.

Learning from peers

Greater integration will allow the economies of the South to share experiences and to learn from each other. In an interconnected world of multipolar growth, there is no "one-size-fits-all" model of development. This raises the imperative for countries to diversify sources of knowledge and share development experiences. Happily, as a consequence of rapid improvements in information and communications technology, North–South and South–South knowledge exchanges are becoming more frequent. Within the South, the specific expertise of Southern countries tends to be easier to adapt and use, providing efficient development solutions and complementing the ones available in conventional North–South cooperation.

Indeed, peer-to-peer learning (the sharing of know-how, good practices, and innovation) and technology transfer remain major motivators for South–South cooperation. Arenas include the Africa platform, the Ibero–American Program in Latin America and the Caribbean, and the South–South Knowledge Exchange Platform sponsored by the World Bank Institute.

Examples of successful partnerships in knowledge exchanges abound, especially between Africa and Asia (as discussed in *Wider economic links for development*, below).

Rebalancing

South–South links are creating new drivers of aggregate demand that are likely to foster a more resilient and balanced growth of the world economy. Having experienced significant economic setbacks during the recent crisis, industrial economies will take a while to reassume their role as the primary source of demand for the global economy.

At the same time, economies of the South have shown strong promise to grow rapidly (see Part 1 of this *Asian Development Outlook 2011*). The rising consumption of emerging economies and new investment flows within the South represent opportunities for more diversified drivers of global growth. To make these prospects a reality and to assist in the global recovery process, however, economies in the South will need to become more open to trade and capital flows from each other, and their domestic expenditures will have to increase—not just for consumption but also for investment—to help to drive South–South trade and FDI.

Impediments to tapping potential gains

That gains from closer economic integration within the South are not fully realized suggests that there are problems to be hurdled. These come in the form of persistent trade barriers and uncompetitive domestic

industries that are likely to be dislocated and crowded out as economies adopt more open policies.

Countries across the South have become more open; still, numerous “behind-the-border” problems persist. Average tariff rates have declined across the globe over the last two decades (Figure 2.1.5), with the reductions more significant for the South. What has been overlooked, however, is that import duties that Southern countries impose on goods originating from other Southern countries are significantly higher than the rates levied on goods coming from Northern countries.

In addition, structural weaknesses (such as poor trade-related infrastructure and logistics) and nontariff barriers (inefficient administrative procedures, for example) continue to hinder the expansion of trade among Southern countries by adding significantly to transaction costs. Consequently, affluent markets in the North remain the preferred destination of the South’s final-goods exports. In 2009, developing Asia’s trade with other regions of the South was worth \$780 billion—its trade with the North came to \$2,280 billion.

The elimination of tariff and nontariff barriers can therefore significantly expand South–South final goods trade and boost the growth of Southern economies over the medium term. Policies that lower trade barriers and implement trade-facilitating and customs-harmonizing initiatives will promote trade in final goods across Southern regions. In turn, this expansion in trade across the South will allow many of its developing economies to transition from labor-intensive to capital- and knowledge-intensive manufacturing, in effect setting them on a higher growth profile.

While expanding factory Asia to other regions in the South may raise incomes, improve employment opportunities, and increase growth rates in the long run, it may be dislocative in the short and medium run. Faced with more intense competition, domestic industries may be unable to thrive; undercapitalized, they may be crowded out of markets for scarce resources, such as skilled labor and capital equipment.

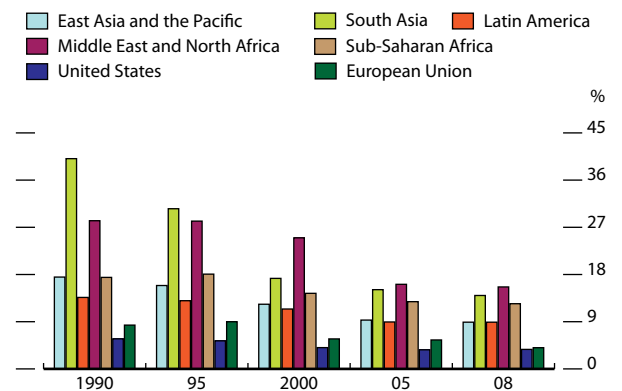
Hence industrial and regulatory policies may need to mitigate the initial ill-effects of opening up the more autarkic economies to trade and investment. Indeed, this can be a topic for knowledge sharing among policy makers in the South.

Importance of trade and foreign direct investment

Two avenues for South–South cooperation should be emphasized: trade and FDI. Both are private sector-led and market-oriented initiatives that promote economic efficiency. Moreover, as trade volumes and investment flows increase among countries, payoffs to maintaining and deepening ties rise correspondingly. Trade and FDI are usually forerunners of deeper and broader sociocultural and political international relations. Finally, as discussed above, trade and FDI are drivers of economic growth and development.

Why focus on South–South trade? For one overriding reason: trade will continue to be an engine of growth for Southern economies, though

2.1.5 Average tariff rates



Note: Data refer to the simple average of most-favored-nation rates for all products. Regional classification follows that of the World Bank.

Source: ADB calculations using UNCTAD’s Trade Analysis and Information System (TRAIS) database through the World Bank’s World Development Indicators online database (accessed 15 March 2011).

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the largest marginal gains are not in North–South trade. As noted above, an issue that has gone under the radar is that South–South trade and nontrade barriers are now higher than those facing North–South exchange. Thus Southern countries need to lower tariffs on imports from other Southern countries, and construct trade-facilitating infrastructure to reduce transaction costs and open up more widely South–South trade routes.

As for capital investment, it is important to highlight South–South FDI for the following reasons. First, South–South FDI may be better suited to developing-country conditions. Perhaps introducing technologies that are not as advanced, capital investment from the South may be more labor intensive and require skill and education levels that are well within the capabilities and attributes of the workforce in a developing country.

Or the entrepreneurial experience of multinational companies from the South may allow them to better navigate developing-country markets and political conditions (Aykut and Goldstein, 2006). In addition, FDI from the South may be better able to produce products for the South’s generally lower-income markets (Prahalad, 2004). A case in point: the \$2,500 “People’s Car” of India’s Tata Motors.

Second, its cyclical fluctuations being different from those of North–South flows, FDI from the South may possibly reduce the volatility of total financial flows in the South—as observed in Africa, where investors from the PRC continued to undertake projects even at the height of the global crisis (Davies, 2010). If so, the more stable financial flows will promote greater economic stability in the FDI host countries.

Third, the size of South–South FDI flows is an indicator of the state of financial integration among the economies of the South. The hope is that, with deeper financial markets, closer financial integration, and improved institutions and investment climate, the South will see its savings channeled toward investment opportunities in the South rather than funneled to deficit spending in the North.

As trade and investment links among Southern countries flourish, wider economic links can be expected. Labor markets can become more unified, development experiences and technical cooperation initiatives can be more widely shared, and macroeconomic policies can be better coordinated. A more integrated South holds the promise of a sustainable path to growth and development.

South–South links as a sustainable path to growth and development

The region has grown rapidly in the past few decades and, together with Africa, Latin America, and the Middle East, has emerged as the driver of global growth while recovery in the North struggles. Within the South, Asia’s role is becoming more prominent. The rise of developing Asia as a potential source of world demand and its growing economic links with Southern countries holds the promise of improving their prospects for growth and reducing global imbalances. But, can strengthening these links prove to be a harbinger of sustainable growth in developing Asia?

Developing Asia's links with the rest of the South have grown rapidly. Trade in goods and services by Southern economies has intensified to take advantage of its potential gains. In contrast to trade integration, financial integration has not happened as deeply although both inward and outward FDI links have grown within the South. These are especially evident in developing Asia in comparison with Africa, Latin America, and the Middle East. However, while Southern economies have emerged as important sources of outward FDI, the majority of global outward FDI flows and stocks still originate in the North.

Structural weaknesses in the South perpetuate its dependence on the North. In the real sector, the global crisis has highlighted the continuing dependence of the South on final demand from the North. And although tariffs have declined significantly, countries throughout the South still face numerous behind-the-border problems exacerbated by structural weaknesses and institutional failures.

The financial markets and regulatory structures in the South also remain underdeveloped. The economic crisis brought to the fore the South's heavy reliance on the North for parking its surplus savings into low-risk assets there rather than recycling the funds within the region. This, in turn, contributed to the expansion in global imbalances and also perpetuated the dearth of funds to finance crucial investment projects in the region.

One key challenge for policy makers in emerging nations is therefore to create a regional and domestic enabling environment that will attract finance to flow into local investments in the region. Even if these bottlenecks are eased, South–South cooperation cannot be a panacea for all development challenges. The dependence of growth of the economies of the South on markets of the industrial world is still high and raises concern about the sustainability of this growth if the North fails to revive from its slowdown soon.

Closer financial and real integration holds the promise of raising consumption and investment in the South, narrowing global imbalances, and sustaining growth in developing Asia. Closer financial market integration would ensure that surplus funds from the South are used to finance productive investments within the South. It would also break the vicious circle of vulnerability to the fortunes of the North. In the real sector, the South must carry on reducing bottlenecks to trade for expanding final goods trade within the region to make up for the slack in the North.

Fixing the real and finance sector problems will contribute to a rise in domestic expenditures in the South. In the short run, this would lead to a narrowing of global imbalances. In the longer term, closer links among Southern countries would foster the growth of new markets, improve trade in goods and services, expand investments, provide greater economic opportunities, and contribute significantly to their growth. Given developing Asia's dominant role in the South, this would put its growth on a sustainable path.

With continued high dependence of the South's economies on markets of the industrial world, these stronger economic links would build a platform on which the North and the global economy can grow again.

Expanding South–South economic links through trade

South–South trade in goods has expanded considerably during the last two decades. Its share of merchandise trade rose by a factor of 2.4, from about 7% in 1990 to 17% in 2009 (Table 2.2.1).³ To a large extent, this trend was due to the emergence of factory Asia, fragmented-production networks that have the PRC as the last-stage assembly hub of production processes. The intermediate stages of the process are farmed out throughout Asia, including Japan, and the final outputs are intended mainly for export to affluent markets in the North (ADB, 2010a), particularly countries in the Organisation for Economic Co-operation and Development (OECD).

As the PRC rose as a leading exporter and world-trade powerhouse,

2.2.1 The rise of South–South trade (%)

GDP indicators ^a	1990–91	2000–01	2006–07	2008	2009
Share of world GDP held by:					
The South	27.8	33.6	38.4	39.7	41.3
Developing Asia	13.1	18.3	22.8	24.0	25.7
China, People's Rep. of	3.7	7.3	10.4	11.5	12.6
India	3.0	3.8	4.7	4.8	5.2
Trade indicators ^b	1990–91	2000–01	2006–07	2008	2009
South–South trade as share of world trade					
Exports	7.6	10.2	15.0	16.3	17.7
Imports	6.2	9.6	14.1	15.4	16.1
Trade	6.9	9.9	14.5	15.9	16.9
Developing Asia's share of South–South trade					
Exports	88.2	79.8	79.8	78.9	80.3
Imports	86.8	71.6	69.3	66.0	68.5
Trade	87.5	75.7	74.6	72.5	74.4
People's Republic of China's share of South–South trade					
Exports	35.5	35.1	40.8	41.2	41.6
Imports	43.9	36.9	37.8	34.4	38.4
Trade	39.7	36.0	39.3	37.8	40.0
India's share of South–South trade					
Exports	2.1	3.1	3.7	3.9	4.9
Imports	2.3	1.6	2.4	4.7	5.8
Trade	2.2	2.4	3.0	4.3	5.4
Other South's share of South–South trade					
Exports	11.8	20.2	20.2	21.1	19.7
Imports	13.2	28.4	30.7	34.0	31.5
Trade	12.5	24.3	25.4	27.5	25.6
Developing Asia's share of South–South trade (growth, %) ^c		12.0			22.8
Other South's share of South–South trade (growth, %) ^c		47.2			25.7

^a GDP, purchasing power parity (current international \$). ^b Nonfuel merchandise trade. ^c Average annual growth rate in 10 years (1990/91–2000/01); in 9 years (2000/01–2009).

Sources: Athukorala (forthcoming); ADB calculations using World Bank, World Development Indicators online database (accessed 21 March 2011).

developing Asia was transformed into an intricate web of regional trade in parts and components. And as developing Asia consolidated its dominant position in the world trade of manufactures, the share of South–South trade in global merchandise trade increased.

So dominant is developing Asia's role in South–South trade that the region accounts for about 75% of this commerce with the PRC alone taking up about 40%. Obviously, much of the traffic reflects the intraregional trade flows of factory Asia. But developing Asia's trade with other Southern regions has been expanding. With its growing appetite for primary commodities, which it needs to fuel its rapid economic expansion, developing Asia is driving up global demand for these goods, which come mainly from Africa, the Middle East, and Latin America. In turn, these markets' imports of Asian manufactures have been increasing as well.

Thus as several recent studies and reports have suggested—see, for example, Broadman (2007), Goldstein et al. (2006), and Santiso (2007)—the “China factor” (which is construed to include developing Asia) has proved to be both a boon and a bane for the rest of the South. For countries with narrow export bases in primary commodities, higher world demand in these goods—including developing Asia's import needs—has created windfall gains from higher prices. For other countries, factory Asia has been a powerful antagonist in third markets for manufactured goods, crowding out the exports of some countries or precluding entry altogether to industrialization's laggards.

The dilemma for the non-Asia South is therefore how to exploit gains from trade while avoiding the downside of specializing in natural resources.

Despite this quandary, there is scope for the South to accelerate its integration as a group and with the world economy by gradually clearing the remaining bottlenecks to trade. Indeed, the integration of the South presents large potential benefits. Although Southern countries have lowered the level of applied tariffs considerably, they are still high by standards of the North. Calculated from 2005–2008 data, average applied tariffs were 9.3% in the South, compared with 3.2% in the North.

Other trade costs also arise out of developing countries' weaker trade-related infrastructure and logistics, as well as institutional barriers. For example, in 2010 it took 11 days and fewer than five documents, on average, to export or import a standardized unit of cargo among OECD economies, but it took more than twice as many days for countries in East Asia and almost three times as long for those in South Asia, with more documents involved (World Bank, 2010).

Similar constraints were found in Latin American and Middle Eastern countries, and were most acute for the low-income economies of Sub-Saharan Africa. Hence, as may be expected, the industrial countries generally received the highest marks in infrastructure and logistics competence per the World Bank's Logistics Performance Index, with developing countries ranking much lower, with the notable exceptions of Hong Kong, China and Singapore, the world's top-rated trading hubs.

Assuming continued rapid economic growth in Asia and to a lesser extent in other developing countries, simulation analyses (see *A simulation of South–South trade*, below) using a global economy model suggests the following. First, the share of South–South trade in global trade is likely to double within the next two decades. Second, lowering

tariff barriers on South–South trade to levels on South–North trade could bring as much as three-quarters of the welfare gains to Southern countries as generated by the global elimination of tariff rates: South–South trade would expand by 23%. Third, regional initiatives, such as the expansion of the Association of Southeast Asian Nations (ASEAN) free trade agreement to other countries in the Asia-Pacific region, can potentially bring about substantial gains for developing Asia and significantly expand South–South trade.

Trade reforms in support of South–South trade, however, must not come at the expense of continuing global integration. In view of the proliferation of regional trade agreements in Asia and elsewhere, it is becoming increasingly important for such pacts to be made as broad-based as possible and to be compatible with World Trade Organization (WTO) provisions.

A comparison of Asia’s South–South FTAs with their North–South counterparts in five key areas—tariff liberalization, rules of origin, liberalization of trade in services, WTO notification, and deep integration—reveals that the latter are generally more consistent with WTO and other global rules. Ensuring comprehensive and compatible FTAs in the future and improving existing South–South agreements along similar lines offer Asia a promising path to follow toward freer trade.

The rise of South–South trade

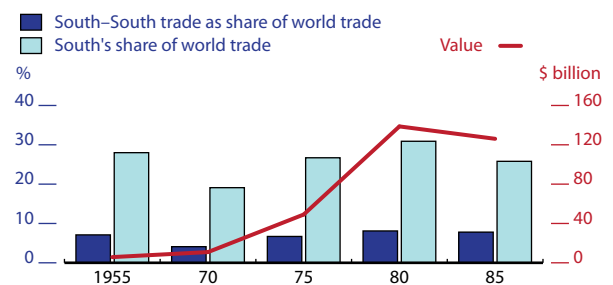
Until about two decades ago, South–South trade in goods was but a minor share of world trade. Records based on UNCTAD data spanning 1955 to 1985 reveal no discernible trend (Figure 2.2.1). By 1985, South–South trade as share of total world trade had increased only marginally, to 7.8%, from 7.1% in 1955, and South–South trade still represented less than a third of developing countries’ total merchandise exports.

Starting around 1990, a rapid upward trend set in, which has since seen the growth of South–South trade outpacing that of total world trade in both exports and imports. During 2000–2009, the average growth of South–South trade accelerated to 16% a year, from 14% in 1990–1997. By comparison, the expansion of world trade was much slower during both periods, at 5.5% and 6%, respectively. Consequently, the share of South–South trade in world trade rose from 7.4% in 1990 to 10.3% in 2000 and 15.3% in 2007 (Figure 2.2.2). Due to emerging markets’ higher resilience to the downturn of global trade during the recent crisis, world exports plunged more steeply than did South–South trade, as a result of which the share of South–South exports in world trade increased further, to 17.3% in 2009.

In parallel with this trend, South–South trade as a share of Southern regions’ total trade also increased steadily between 2000 and 2009 (Figure 2.2.3).

In the analyses that follow, trade in fuel (oil and gas) is excluded from total merchandise trade. This does not materially alter the trends just discussed, since, as seen from Table 2.2.1 above, the trade shares do not change by much.⁴ Excluding

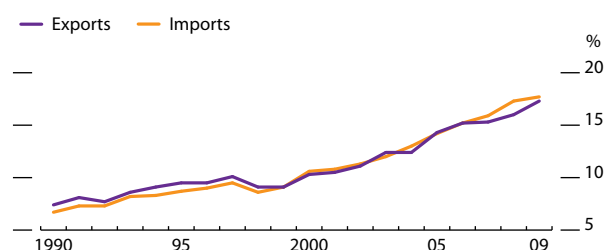
2.2.1 South–South merchandise trade



Source: Data taken from Table 1 of Athukorala (forthcoming).

[Click here for figure data](#)

2.2.2 Share of South–South trade in world merchandise trade



Source: Data taken from Table 2 of Athukorala (forthcoming).

[Click here for figure data](#)

trade in fuel, however, is standard practice in trade-flow analysis for two reasons.

First, it prevents the sharp fluctuations in fuel prices from affecting trade ratios and, in turn, their comparability across periods. Second, the incidence of fuel trade varies significantly among countries and regions, which tends to further blur secular trends in trade shares. Indeed, commodity-specific price deflators can alleviate this problem only to an extent.

Three factors seem to account for much of the rapid expansion of South–South trade from the early 1990s: strong economic growth in emerging economies, the rates of which were above the world average; the rise of fragmented production and trade networks; and the progressive dismantling of trade barriers.

As has been well documented, while the global economy expanded rapidly during the last 20 years or so, developing countries as a group grew even more impressively. As a result, Southern countries' share in world GDP, adjusted for purchasing power parity, increased to about 40% in the late 2000s, from nearly 28% in the early 1990s (Table 2.2.1 above).

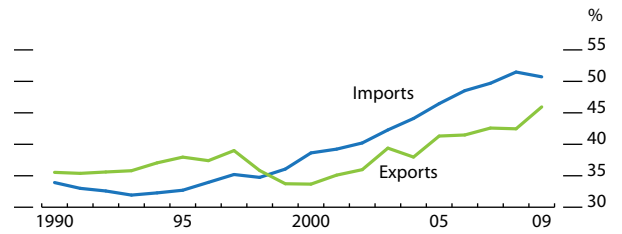
The expansion of global production sharing opened new opportunities for developing countries to partake in international production chains and trade networks. In its formative years in the early 1990s, production sharing involved moving small fragments of the manufacturing process to low-cost countries and importing their component outputs to the host country for the last-stage fabrication.

Later, production networks became more intricate, with firms in different countries having charge of different stages of production, thus resulting in product fragments crossing multiple borders prior to final-product assembly in the host country. More recently, with international supply networks of parts and components now well established, firms have also started setting up final-assembly processes for a broad range of consumer durables (such as computers, cameras, televisions, and automobiles) abroad, both to take advantage of cheap labor and to be closer and more responsive to niche markets.

Today, cross-border trade in parts and components has developed into a truly global phenomenon, although it plays a far more important role for developing Asia than for other developing regions, given the region's integration with the world economy (Box 2.2.1). Particularly with the emergence of the PRC as the premier final-assembly center of electronics and related products since the mid-1990s, intraregional flows of both parts and components and final goods have recorded phenomenal growth (see ADB, 2010a).

Finally, developing countries have made considerable progress in dismantling their tariff barriers, mainly in compliance with regional and WTO commitments. The WTO Information Technology Agreement of 2006 has been of particular relevance for the production networks of electronics and information technology goods of developing Asia. Not only did it free up commerce in this important segment of world merchandise trade, it also stimulated the type of FDI into the PRC that helped consolidate the country's role as the regional assembly hub. The

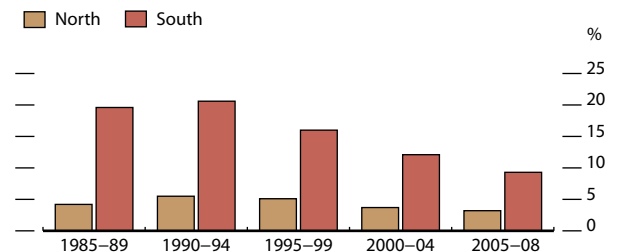
2.2.3 Share of South–South trade in total Southern merchandise trade



Source: Data taken from Table 2 of Athukorala (forthcoming).

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2.2.4 Applied tariffs, simple mean



Note: Data computed as 5-year averages except in 2005–08, which is a 4-year average.

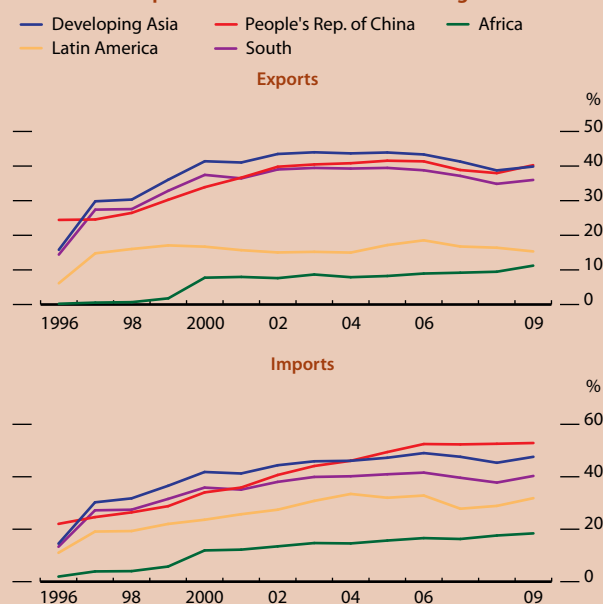
Source: ADB calculations using UNCTAD's Trade Analysis and Information System (TRAIS) database through the World Bank's World Development Indicators online database (accessed 15 March 2011).

[Click here for figure data](#)

2.2.1 Global production sharing and South–South trade

Two important structural features have characterized the expansion of South–South trade over the past two decades: its heavy concentration in Asia and the dominance of manufactures in Asia. The region's rapid growth in manufacturing trade has been underpinned by global production sharing,¹ which in turn is reflected in the surge of cross-border trade in parts and components (box figure).

Parts and components share in manufacturing trade



Source: Athukorala (forthcoming).

[Click here for figure data](#)

From 1996 to 1999, the share of parts and components in South–South trade jumped from about 13% to nearly 32% on the side of imports, and from about 14% to nearly

33% for exports. These shares are much larger in Asia than other regions. Latin America has the second-highest share of parts and components trade—15% for exports and 32% for imports in 2009—reflecting its participation in global value chains, particularly in Brazil and Mexico.

Component trade within global production networks naturally leads to double counting of trade flows, because parts and components, which are manufactured in different countries and at different stages of the production process, typically cross borders multiple times before assembly into the final product. This double counting can be avoided by netting out parts and components from total manufacturing trade.

When it is, the shares of South–South trade are lower than the estimates reported in this section (Athukorala, forthcoming). In the case of exports, the difference seems small. For 2006–2007, the (2-year averaged) adjusted South–South share in total world exports is 13.5%, down from 15%. For imports, however, the adjustment lowers the share to below 11%, from 16%, which reflects the relative importance of parts and components in intra-Asian import trade.

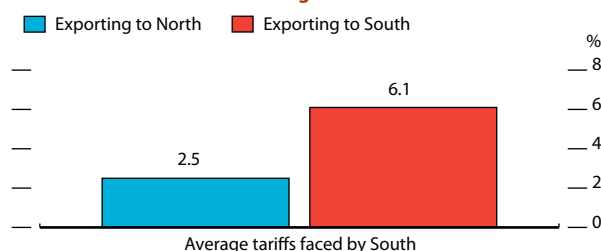
Thus global production sharing seems to introduce an upward bias in estimates of the world trade share of South–South trade and Asia's share in South–South trade. Still, additional analysis (Athukorala, forthcoming) suggests that overall trends in South–South shares are remarkably insensitive to the exclusion of parts and components. In other words, the findings of strong growth in the world trade share of South–South trade over the past decade or so and of Asia's dominant position in South–South trade are robust.

1. See Ando and Kimura (2010) and Athukorala (2009, 2010) and the works cited.

PRC's progressive reduction of tariffs and nontariff barriers, particularly after its WTO accession in 2001, was also a key factor that facilitated the emergence of Asia's trade networks and the multiple border-crossings of intermediate products that were associated with them.

Nonetheless, hindrances to trade persist. While average tariffs applied by the South in 2005–2008 came down to about half their levels of 1990–1994, they remain higher than the North's (Figure 2.2.4 above). Moreover, Southern exporters face higher tariffs when exporting to other countries in the South (6.1%), compared with shipping to the North (2.5%) (Figure 2.2.5).⁵ And the evidence indicates that, where Southern liberalization has occurred, such preferential trade agreements tend to have a narrower coverage of goods and take longer to come into full effect than North–South agreements, which are also more compatible with global rules (Box 2.2.2).

2.2.5 Average tariffs faced by the South when exporting to the North and other South regions



Note: Derived from GTAP database in reference to year 2004.

Source: Data taken from Appendix Table A.9 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

2.2.2 Assessing South–South vs North–South Asian free trade agreements

The last decade has seen an unprecedented surge in free trade agreements (FTAs) in Asia as part of efforts to deepen regionalism by focusing on sophisticated production networks. There are over 60 concluded FTAs today compared with only three in 2000. While the factors driving the proliferation of FTAs in Asia have been scrutinized, little attention has been devoted to studying the evolution and anatomy of North–South and South–South FTAs, or the extent to which they are compatible with global rules and each other.

A structural shift in Asia's trade toward more South–South trade has accompanied the region's economic development. The proportion of Asia's South–South FTAs vs North–South FTAs (39 vs 22) reflects these evolving trade patterns. But quantity does not necessarily equal quality. In five key areas under review—tariff liberalization, rules of origin, liberalization of trade in services, World Trade Organization (WTO) notification, and deep integration—North–South FTAs were generally more compatible with WTO and other global rules.

Beginning with tariff liberalization, the General Agreement on Tariffs and Trade (GATT) Article XXIV states that “duties are eliminated [on] substantially all trade ... within a reasonable length of time.” Yet over one-third of all Asian South–South FTAs have only limited goods coverage, while another 40% eliminate tariffs on substantially all trade over a period lasting more than 5 years. In contrast, roughly one-third of North–South FTAs eliminate tariffs upon entry into force, while an additional 25% do so within 2–5 years.

Rules of origin determine the goods that enjoy preferential tariffs to prevent trade deflection (the entry of imports to a low-tariff member of an FTA, when their ultimate destination is a higher tariff member) among FTA members. In practice, such rules can actually raise transaction costs for firms and generate confusion over compliance. This is especially the case with rules of origin included in Asian South–South FTAs. According to data from Kawai and Wignaraja (2011), over 30% of firms view rules of origin as an impediment to using South–South FTAs, compared with only 13% for North–South FTAs.

Conformity with the General Agreement on Trade in Services (GATS) Article V requires FTAs not to include restrictions on the liberalization of such key services as business and professional, communications, financial, transport, and labor and business persons' mobility. Nearly three-quarters of Asian North–South FTAs liberalize trade in these five services—less than 20% of South–South FTAs do, while nearly half exclude services or have limited coverage of services at best. (The notable exceptions among South–South agreements are the Association of Southeast Asian Nations [ASEAN] FTA and other agreements involving Singapore.)

Some GATT provisions essentially require a member country to notify and submit details to the WTO with regard to FTAs and related interim agreements. The intent is to improve transparency in the global trading environment. Roughly two-thirds of South–South FTAs comply with these

notification requirements, compared with 95% of North–South FTAs.

A thorny issue in the early days of the WTO Doha Round negotiations concerned the depth of economic integration as measured by the so-called Singapore issues: investment, competition policy, government procurement, and trade facilitation. While these issues were later dropped, they remain important for future trade policy negotiations. More than 80% of Asian North–South FTAs have at least some coverage of the Singapore issues, compared with only about 20% of South–South FTAs.

To address the incompatibilities between North–South and South–South FTAs, new Asian FTAs should adopt the following good practice guidelines for core areas, with modifications made to existing FTAs where reviews are possible:

- *Tariff liberalization.* Eliminate a minimum of 85% of all tariffs within 10 years.
- *Rules of origin.* Design and administer rules that are guided by Asia–Pacific Economic Cooperation (APEC) principles of simplicity and consistency, as well as WTO requirements of transparency and prospective application.
- *Services liberalization.* Incorporate at least five key services sectors—business, communications, financial, transport, and labor and business persons' mobility—and pursue reform of competition policy.
- *WTO notification.* Include procedural requirements to promote greater transparency and improve consistency with global rules.
- *Deep integration.* First incorporate good practices on investment and trade facilitation, and then address the more difficult issues of competition policy and government procurement.

In addition, the quality of FTAs in Asia can be enhanced by setting up a regional advisory center to address limited institutional and human resource capacities among some countries in the region. This center would engage legal advisors, train officials, and lead studies to help countries better design, negotiate, and implement WTO-compliant and WTO-plus FTAs.

In the medium to long term, a regionwide FTA would be an important means to better align compatibilities in global and regional rules among Asia's North–South and South–South FTAs. Depending on its scope, the basis for such a regionwide FTA might be either ASEAN+3 (ASEAN plus the People's Republic of China, Japan, and the Republic of Korea); ASEAN+6 (ASEAN+3 plus Australia, India, and New Zealand); or a Free Trade Agreement of the Asia–Pacific (APEC members). A practical first step might be to take the best features from current ASEAN FTAs and design a template consistent with global rules.

Source

Based on Wignaraja and Lazaro (2010).

The regional profile of South–South trade

South–South trade is dominated by developing Asia, in particular by its expanding international production networks. Complementarities are now emerging among the economies of the South.

Figure 2.2.6 shows just how dominant developing Asia's shares of South–South trade are compared with those of Africa, Latin America, and the Middle East. In 1990–1991 (2-year average), developing Asia accounted for about 88% of total South–South exports and almost 87% of total South–South imports.

By 2006–2007 (2-year average), however, these shares had declined to about 80% and 69%, respectively, due to the larger fraction taken up by Latin American exports and considerable increases in the proportions of the other regions' imports. Expanding at an average rate of nearly 26% a year in 2000–2009, South–South trade in these regions grew faster than in Asia, at 23% (Table 2.2.1 above).⁶

The asymmetric decline of developing Asia's export and import shares, however, actually points to the region's growing importance as a manufacturing assembly center of global production networks: that PRC's imports from other Southern regions increased rapidly in recent years but not as much as did its manufacturing exports to these regions means that non-Asia South's exports to the PRC (or the PRC's imports from the non-Asia South) are not growing as fast as the PRC's exports to non-Asia South (or non-Asia South's imports from the PRC).

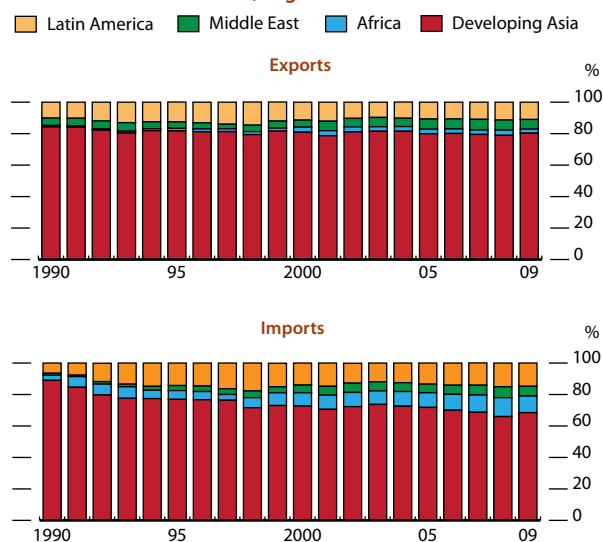
In the case of the shares of South–South trade in total trade, Figure 2.2.7 indicates that, for all the regions,⁷ the proportions were higher for exports than for imports, although the gap narrowed over 1990–2009. In 1990–1991 (2-year average), South–South trade accounted for 42% of total exports and nearly 34% of total imports in Asia. By 2006–2007 (2-year average), the proportions had converged to about 50% and 49%, respectively.

This is explained by the higher demand for imports among Southern economies as a result of their strong growth performance and the emergence of greater trade complementarities between them, as their production structures became more diversified over time. Particularly for developing Asia, such complementarities have arisen out of the international division of labor within regional production networks.

The most striking development in South–South trade has been the PRC's rise as the regional hub of international production and trade networks. Between 1990 and 2009, the PRC's share of Asia's South–South trade rose from nearly 40% to almost 52% in the case of exports, and from 51% to 56% in the case of imports (Figure 2.2.8).

As a proportion of its total exports, the PRC's exports to the South increased from 37% in 1990 to almost 50% in 2009, while the comparable numbers for its imports are 46% for 1990 and 51% for 2009. That the import side has a larger Southern share reflects the PRC's reliance on other East Asian countries for parts and components used in final assembly as well as its dependence on other Southern countries for primary inputs.

2.2.6 South–South trade, regional shares

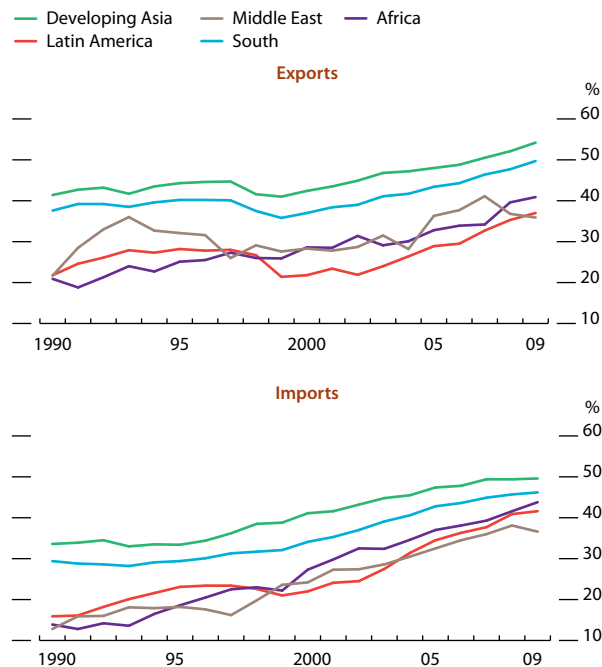


Note: Merchandise trade, nonfuel.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

2.2.7 Share of South–South trade in total Southern merchandise trade

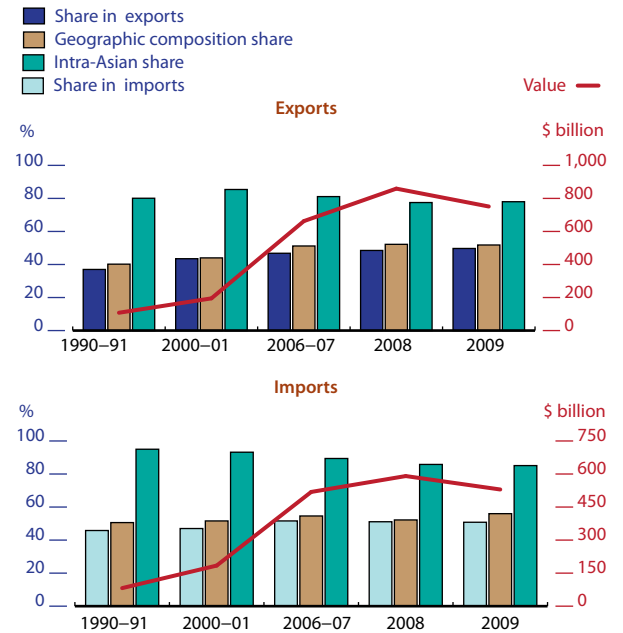


Note: Merchandise trade, nonfuel.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

2.2.8 Share of developing Asia's South–South trade, People's Republic of China



Notes: Merchandise trade, nonfuel. Data computed as 2-year average except in 2008 and 2009.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

The direction of South–South trade

Another characteristic of Asia's South–South trade is its heavy regional concentration, compared with the Middle East, Africa, and Latin America (Figure 2.2.9).

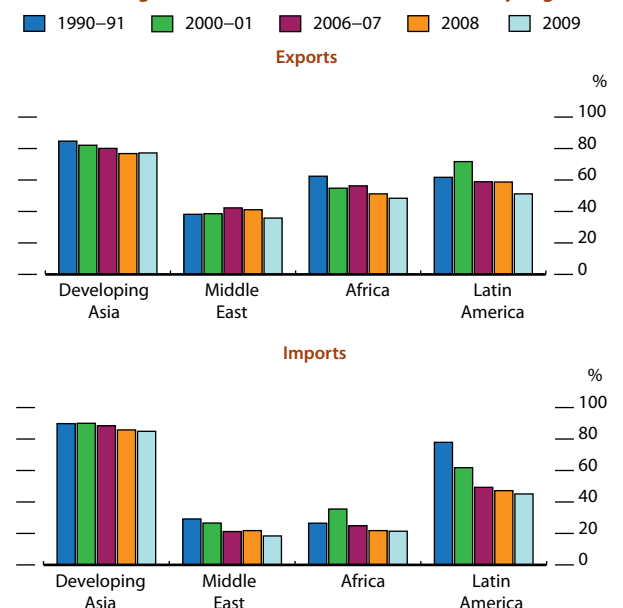
In the early 1990s, intra-Asian trade accounted for almost 85% and 90% of Asia's South–South nonfuel exports and imports, respectively. By 2008–2009 (2-year average), these shares declined only marginally, to about 77% and 85%, respectively. In comparison, the shares of intraregional trade of the other regions are considerably lower.

At the level of individual countries (not shown in the graphs), intraregional shares are highest among Asian countries, particularly for the high-performing economies of East Asia that are linked to the regional production networks.

Developing Asia is the prime destination of other regions' exports outside the regions themselves (Figure 2.2.10). In 2006–2007 (2-year average), it absorbed almost 16% of the exports of the Middle East and more than 9% of the exports of both Latin America and Africa. In contrast, these regions took small shares of Asian exports, with the Middle East the highest at only 4%.

A similar picture emerges for imports by origin: developing Asia's share in other regions' imports is substantial, ranging from 18% to 23%, whereas the regions themselves draw but a

2.2.9 Intraregional shares of South–South trade by region



Notes: Merchandise trade, nonfuel. Data computed as 2-year average except in 2008 and 2009.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

minor share of Asia's total imports, which at 3% in 2006–2007 (2-year average) was highest for Latin America.

Recent trends in Asia's trade with non-Asian Southern markets, however, have been dominated by the PRC's rise as a powerhouse in global trade. The PRC's share of the region's total imports from the South outside Asia increased from about 15% in the early 1990s to about 38% by 2008–2009 (2-year average)—Figure 2.2.11).

During this period, the PRC accounted for almost 80% of the total increment of developing Asia's imports from these regions. Indeed, its shares have increased rapidly across all three subcategories of imports (fuel, nonfuel primary commodities, and manufactures), with that of nonfuel primary products showing the sharpest increase (from 33% in the early 1990s to 61% in 2008–9).

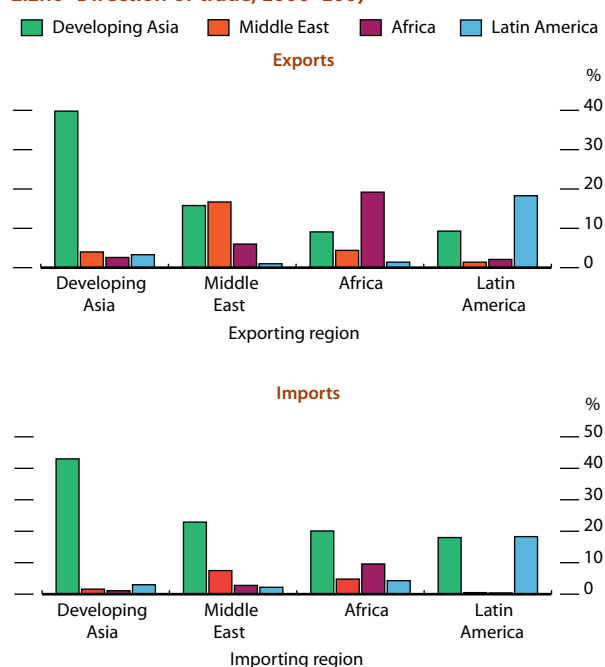
On the exports side, the PRC's share of the region's exports to Southern markets outside Asia increased from about 28% in the early 1990s to 48% in 2008–2009 (2-year average), driven predominantly by the rapid growth of manufacturing exports.

As for the PRC's trade ties with each of Southern regions, it turns out that the PRC's shares in developing Asia's trade with Africa and Latin America have grown the fastest. By 2008–2009, the PRC accounted for 58% and 65% of developing Asia's total imports from Africa and Latin America, respectively. On the export side, the PRC accounted for 51% of regional exports to Africa, up from about 30% in the early 1990s. For Latin America, these flows increased from 34% to 54%, and, for the Middle East, from 22% to 40% (Figure 2.2.12).

In 2008, total trade between the PRC and Latin America reached \$138 billion, an increase of about 33% from a year earlier. This was more than three times the increase in Latin America's trade with the United States and Europe over the same period.⁸ PRC's trade with Latin America is principally an exchange of primary commodities for manufacturing goods (as is its trade with Africa). Mining products account for nearly half of the region's exports to the PRC, followed by agriculture commodities, with a share of 35%.

Approximately 90% of the region's exports to the PRC come from just four countries: Brazil (41%), Chile (23%), Argentina (16%), and Peru (9%) (IADB, 2010). Although PRC products are rapidly penetrating markets in all the Latin American countries, the natural-resource endowment of many countries does not allow them to capture a significant share of the PRC's demand. Consequently, some Latin American countries are accumulating trade deficits with the PRC, which in turn are reflected as developing Asia's persistent trade surpluses with Latin America, similar to Africa's, though thus far these are relatively mild. Only the Middle East as a region has been accumulating a sizeable trade surplus with Asia, mainly due to fuel.

2.2.10 Direction of trade, 2006–2007

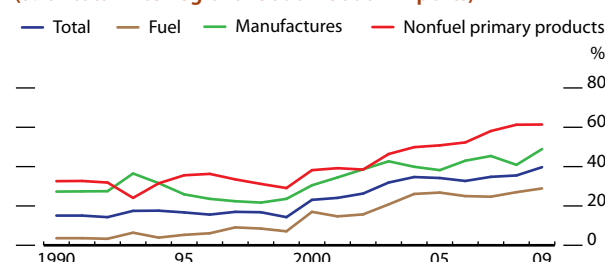


Notes: Merchandise trade, nonfuel. Data computed as 2-year average.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

2.2.11 Share of imports of the People's Republic of China (% of total interregional South–South imports)

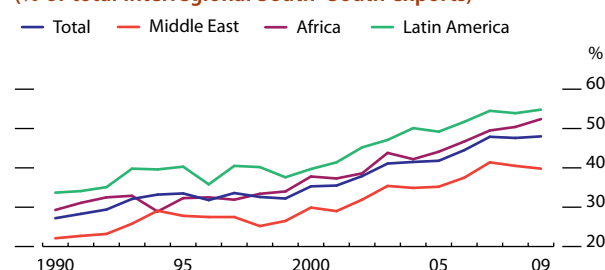


Note: Merchandise imports.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

2.2.12 Share of exports of the People's Republic of China (% of total interregional South–South exports)



Note: Merchandise exports.

Source: Athukorala (forthcoming).

[Click here for figure data](#)

Commodity composition of South–South trade

The broad trends in the commodity composition in South–South trade may be described as follows. First, manufactured goods account for the majority of Asia’s exports to the South. Rising steadily over the years, this share reached about 83% in 2006–2007. Export shares of other regions are considerably smaller (Figure 2.2.13 top panel).

Second, manufactures account for the largest share of Asian South–South imports—about 64% in 2006–2007. Asia’s manufacturing share somewhat resembles that of the South as a whole. But Asia’s imports of manufactures also include trade in parts and components for assembly and reexport in relation to factory Asia, while other regions are mostly at the receiving end of final goods (Figure 2.2.13 bottom panel).

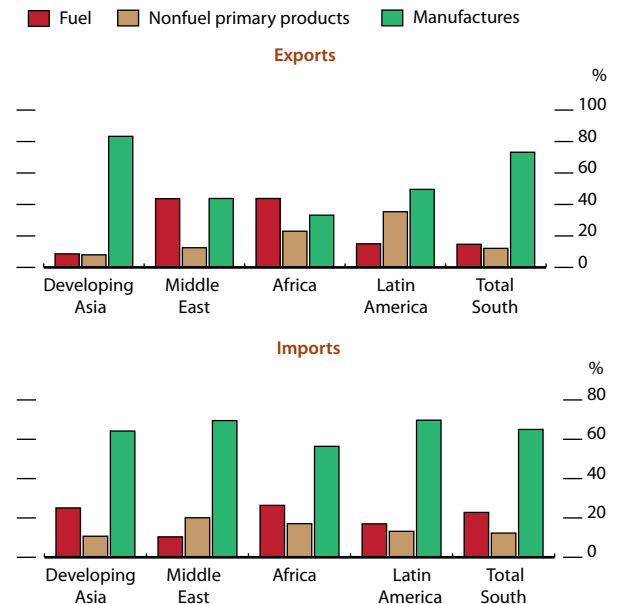
Third, primary commodities, fuel in particular, constitute a substantial share of Asia’s imports from the South. Although the share of commodities in Asia’s imports is not very far from the average share of the South, these relative measures mask the scale of such imports by Asia. The PRC’s imports of fuel and other primary commodities alone increased just over two-fold from the 2-year average for 1990–1991 and 2006–2007, from \$52 billion to \$163 billion.

Fourth, new developments are likely to emerge with the PRC’s strengthening trade ties with other regions of the South, particularly Africa and Latin America. Driven by its increasing demand for primary resources, the PRC became Africa’s largest trading partner in 2009, surpassing both the European Union and the United States. The exports of the five oil-rich countries (Angola, Equatorial Guinea, Nigeria, the Republic of Congo, and Sudan) represent as much as 85% of Africa’s exports to the PRC (Hanson, 2008). Much of the recent growth in these flows is accounted for by oil imports from Sudan and other African nations, although PRC firms also import a significant amount of non-oil commodities, including timber, copper, and diamonds.

The PRC, however, recently began to import minerals, agricultural products, and some manufactured goods from Africa, such as processed food and household consumer goods. This last development reflects the budding interest of PRC firms in Africa as a growing market, for low-cost consumer goods, in which establishing a commercial presence through FDI might prove profitable. And it has been facilitated by the progressive opening up of African economies and the privatization of their industries.

Additionally, the PRC has invested massively in Africa’s fuel and mineral sectors, particularly in Angola, Ghana, Nigeria, South Africa, Sudan, and Zambia. As these investment projects become operational, commodity exports to the PRC are bound to increase rapidly.

2.2.13 Composition of South–South trade, 2006–2007



Notes: Merchandise trade. Data computed as 2-year average.

Source: Data taken from Table 7 of Athukorala (forthcoming).

[Click here for figure data](#)

The scope for boosting Asia’s South–South trade

Athukorala (forthcoming) estimates the intensity of bilateral trade flows during 1990–2008, among the 12 largest economies of developing Asia⁹ and all their trading partners. Controlling for economic size, physical distance, and several other standard explanatory variables, he finds that

the intensity of Asia's trade with Southern countries has been stronger than average trade with countries worldwide.

The results, however, also single out high tariffs and weak trade-related logistics and infrastructure as major hindrances to trade, particularly South–South trade. These factors are reflected in the model by trade-weighted average most-favored-nation (MFN) tariffs and the World Bank's Logistics Performance Index¹⁰ (LPI), respectively.

Based on a worldwide survey of global freight forwarders and express carriers—and complemented by a number of qualitative and quantitative indicators of the trade and transport-related infrastructure, institutions, and the performance of supply chains—the LPI measures the comparative performance of countries in various dimensions on a five-point scale. For the 2010 survey, the LPI scores indicate that countries in the South, on average, continued to score considerably lower than those in the North, with Africa and the low-income countries having cellar rankings (Figure 2.2.14).

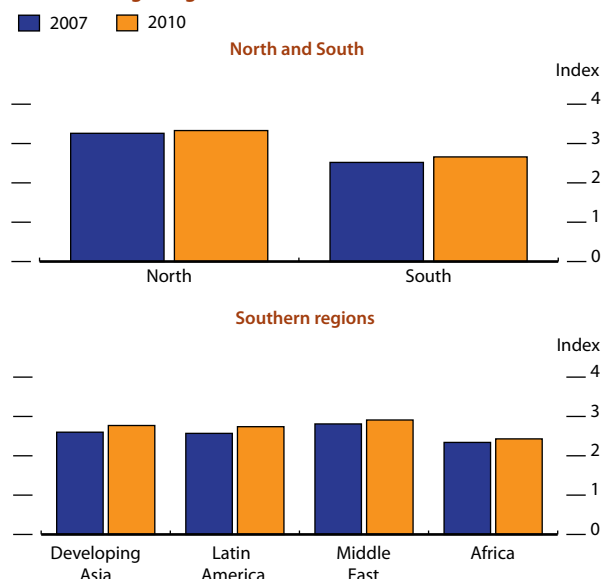
The rankings, then, confirm the well-known bottlenecks to trade that beset developing countries, in particular the poorest among them. In the context of South–South trade, however, easing these bottlenecks assumes greater importance in that the impediments exist on both sides of the trading relationship.

In other words, further tariff reductions and easier access to Southern markets through improved road and ports infrastructure, efficient logistics, and better customs procedures, among other factors, which in turn facilitate closer integration and more trade among countries in the South, are likely to generate benefits beyond those that accrue from the South's closer integration with the global economy in general.

Long-standing policy efforts at regional and multilateral levels—mainly under the auspices of the WTO Doha Development Round—have intensified trade facilitation efforts to improve the South's access to world markets and to lower its trade costs. The initial benefits of these measures, such as improved trade-related infrastructure and more efficient and timely handling of international shipments, are already coming through in the 2010 LPI scores.

Compared with 3 years earlier, the South's score shows a marked improvement, although it remains much below the North's performance (Figure 2.2.14). Continuing efforts at trade facilitation, with trade-related aid providing critical infrastructure in the poorer Southern countries, will be crucial to furthering the South's growing involvement in global trade along South–South lines.

2.2.14 Average Logistics Performance Index scores



Notes: The index is based on a score of 1 (lowest) to 5 (highest).

Source: ADB calculations using data from World Bank's Logistics Performance Index online database. <http://info.worldbank.org/etools/tradesurvey/model1a.asp> (accessed 15 March 2011).

[Click here for figure data](#)

A simulation of South–South trade

To what extent can trade policy potentially foster integration among Southern markets? Anderson and Strutt (forthcoming) use a global-economywide computable general equilibrium (CGE) model (Box 2.2.3) to project outcomes to 2030 of various trade-reform scenarios and evaluate them against a core baseline setting.

Care must be taken, however, in interpreting the simulation results.

2.2.3 South–South trade in 2030: The Global Trade Analysis Project model and core modeling assumptions

The background study to this section (Anderson and Strutt, forthcoming) employs the standard Global Trade Analysis Project (GTAP) model (Hertel, 1997) and Version 7.1 of the GTAP database.

The GTAP database's current baseline depicts the world economy as of 2004. For the analysis discussed in this section, a new core baseline for 2030 is projected under the assumptions that each country's stock of agricultural land and trade-related policies do not change throughout the 26-year period of analysis, but that national real GDP, population, unskilled and skilled labor, capital, and other natural resources (such as oil, gas, and coal) grow at exogenously set rates (Box table).

The exogenous growth rates are based on Lee and Hong (2010), OECD, USDA, and World Bank projections, along with those of Tyers and Golley (2010), Valenzuela and Anderson (2010), and Walmsley and Strutt (2009), plus historical trends in mineral and energy raw material reserves from BP (2010) and the US Geological Survey (2010). Past annual rates of change in fossil fuel reserves

since 1990 are assumed to continue for each country over the next two decades. For other minerals, in the absence of country-specific data, the unweighted average of the annual rate of growth of global reserves for iron ore, copper, lead, nickel, and zinc between 1995 and 2009 (US Geological Survey, 2010) is used for all countries.

Given those exogenous growth rates, the model derives implied rates of total factor productivity (TFP) and per capita GDP growth. For any one country, the rate of TFP growth is assumed to be the same in each of its nonprimary sectors and to be somewhat higher in its primary sectors. Higher productivity growth rates for primary activities were characteristic of the latter half of the 20th century (Martin and Mitra, 2001) and are necessary in this projection if real international prices of primary products (relative to the aggregate change for all products) are to follow a relatively flat trend. Once those higher TFP rates for primary sectors are determined, the uniform TFP rates for nonprimary sectors are recalculated to ensure that targeted GDP levels are obtained.

Average annual GDP and endowment growth rates, 2004–2030

GTAP regional agglomeration	GDP growth	Population growth	Unskilled labor	Skilled labor	Capital	Oil	Gas	Coal
Western Europe	1.72	0.12	-0.03	-0.68	1.80	2.81	0.77	-2.51
Eastern Europe ^a	3.52	-0.34	0.18	0.66	4.04	2.64	0.12	-1.86
United States and Canada	2.34	0.83	0.77	-0.20	2.54	1.00	-0.14	0.19
Australia and New Zealand	2.89	0.98	0.83	-0.17	3.32	1.49	6.10	3.55
Japan	1.04	-0.44	-0.71	-1.38	1.30	0.00	0.00	-9.34
China, People's Rep. of	6.63	0.29	0.49	2.35	8.00	-0.40	4.85	5.62
Rest of East Asia	3.69	0.38	-0.14	1.62	4.09	0.00	0.00	-1.59
Southeast Asia	4.60	1.04	1.06	2.82	4.67	1.31	1.48	11.71
South Asia	6.22	1.27	1.66	3.05	7.41	0.24	-0.47	4.83
Central Asia	4.53	0.73	0.52	0.59	4.50	2.81	0.77	-2.51
The Pacific	3.61	1.53	1.98	3.54	3.60	1.54	1.21	0.15
Latin America	3.99	1.01	1.33	2.76	4.11	3.29	-0.34	5.15
Middle East and Africa	4.34	2.03	1.89	2.09	4.33	1.27	3.64	1.89
North	1.95	0.15	0.25	-0.51	2.08	2.07	0.40	-0.26
South^b	4.83	1.10	1.03	2.36	5.52	1.48	2.24	5.57
Of which: Developing Asia	5.40	0.83	0.66	2.24	6.41	0.72	0.93	5.93
Total	2.54	0.91	0.38	-0.19	2.97	1.67	1.23	2.50

^a Includes the Russian Federation. ^b South comprises Africa, developing Asia, Latin America, and the Middle East. North covers all the other regions, that is, Western and Eastern Europe, United States and Canada, Australia and New Zealand, and Japan.

Source: Anderson and Strutt (forthcoming).

In particular, the outcomes must be considered exclusively in terms of relative changes in the relevant shares and figures rather than in absolute terms, for the following reasons. First, the dataset used in the simulations is aggregated and calibrated to fit the requirements of the CGE model and is not necessarily consistent with the historical time series.

Second, calibrated to the world economy as of 2004, the dataset does

not reflect the effects of the recent crisis, particularly the slowdown in the industrial world and its concomitant effects on the relative shares of the North and South in global GDP and trade. To capture the influences of these developments at least to a degree, the growth assumptions of country aggregates are set to be fairly conservative in order to incorporate relative shifts over the long horizon of the simulations. (See the regional growth assumptions in Box 2.2.3.)

Third, in the simulations, the shares of regional aggregates relative to world trade or total South–South trade refer to total trade in goods and services. That is, they reflect a far broader category of trade flows and have different effects for aggregates of the North and South, where services trade is far smaller. These trade shares are also not directly comparable to those derived from the UN Comtrade database—the basis of the descriptive analysis above—which covers only merchandise goods. Unfortunately, the two series cannot be reconciled because historical data on services between pairs of countries are unavailable.

These caveats notwithstanding, the simulation analyses provide insights to the relative changes in the regions' GDP and trade shares as well as on shifts in bilateral trade shares under alternative sets of assumptions concerning the global outlook over a horizon of more than 20 years.

The core baseline projection: Sector and regional shares of GDP and trade

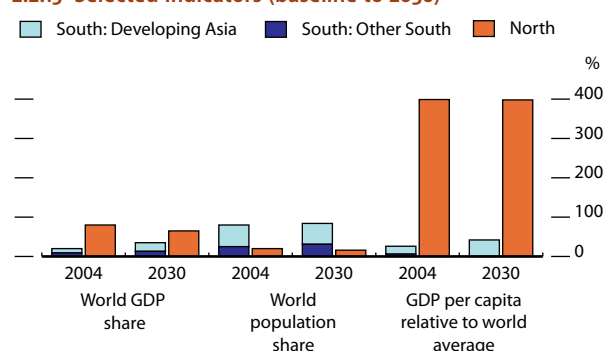
Box 2.2.3 summarized the assumptions on the growth of GDP and factor inputs underlying the core projection to 2030. Together, these assumptions set the parameters for the structures of production, consumption, and trade across sectors both in and between countries.

As for the outcomes, these may be described as follows. In aggregate, the faster-growing South—developing Asia in particular—accounts for much larger shares of the projected global economy (Figure 2.2.15). The South's aggregate share of world GDP rises from 20% in 2004 to 35% in 2030. For developing Asia, this proportion, when the PRC is included, goes from 11% to 22%, and when the PRC is excluded, from 4.1% to 10.6%. (In other words, more than half developing Asia's increasing share of world GDP is due to developing Asia other than the PRC.)

Population shares change much less. Over 2004–2030, it is projected that the South's share rises from 80% to 84% but developing Asia's falls somewhat, from 55% to 53%. Combined with the GDP growth assumptions, the net effect is that per capita incomes converge significantly: the ratio of the North's country average to the South's falls by almost a half by 2030. For developing Asia, per capita income rises from 20% to 42% of the global average.

The South's share of global exports nearly doubles, rising from 33% in 2004 to 55% in 2030 (Figure 2.2.16). The PRC's share

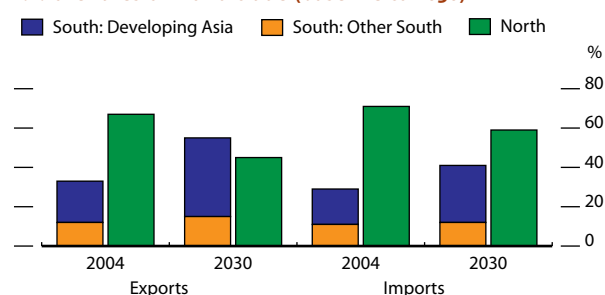
2.2.15 Selected indicators (baseline to 2030)



Source: Data taken from Table 1 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

2.2.16 Shares of world trade (baseline to 2030)



Note: Goods and services trade.

Source: Data taken from Table 2 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

alone grows from 7% to 20%, which comes entirely at the expense of the North, since the export shares of all other Southern regions grow as well. Similarly, the South's import share rises, albeit not as dramatically. For developing Asia, the ratio increases from 18% to 29%. Capital flows balance each region's global export and import shares.

The South's share of primary-product exports rises slightly, while its share of manufactures exports soars (doubling in the case of Asia, as does its share of services exports—Figure 2.2.17). Likewise, the South's share of primary-product imports rises substantially (Figure 2.2.18), due largely to developing Asia's expected continuing rapid industrialization.¹¹

In addition, the South increases its share of world imports by 44% and of manufactures imports by 25%. The increase in the latter is due to the ongoing fragmentation of the production of manufactured goods with its multi-component supply chain, each segment of which can be set up in a footloose fashion. Indeed, the simulation analyses do not fully capture the effects of these production networks because of the high degree of aggregation of manufacturing industries in the CGE model used.

The South's share of farm-product exports remains virtually unchanged (Figure 2.2.19). Its share of farm-products import, however, surges, due mainly to the PRC, but also because of India. Higher import demand for agriculture and food products is projected for these countries despite the fact that their shares of agriculture in GDP and of land in factor incomes are also expected to rise slightly, instead of falling in the usual way as economic development proceeds.

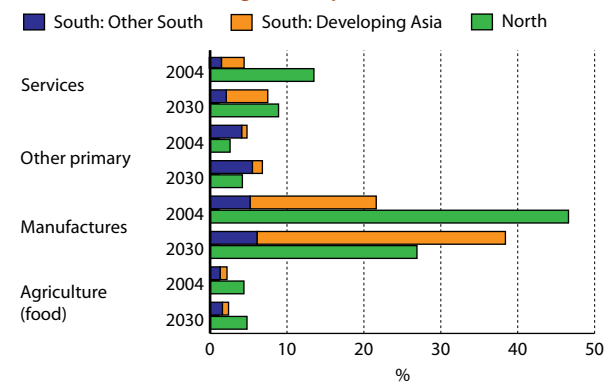
For the sector shares of trade at the country level (not shown in the chart), the consequences of continuing Asian industrialization are again evident: primary products are less important in the South's exports and considerably more important in its imports; conversely, nonprimary products figure more significantly in the South's exports and less so in its imports. Moreover, the increases in primary-product imports and nonprimary product exports are largest for developing Asia.

The opposite is true for the North, reflecting the fact that what one part of the world imports the remaining part of the world must export to maintain equilibrium. Newly industrializing countries are thus poised to become far more dependent on food imports, which may raise problems of sustainability.

On bilateral trade patterns, the core projection indicates that South–South trade as a share of global trade will double by 2030, rising from 12.8% to 26.5% (Figure 2.2.20a–b). Consonant with this trend, the trade share of Asia's developing countries more than doubles, while that of the rest of the South increases by two-fifths. By contrast, the share of North–North trade in global trade is projected to fall from 51.2% to 30.2%.

Finally, the core projection suggests that the global trade share of the North's exports to developing Asia will rise slightly by 2030, while that of developing Asia's exports to the North

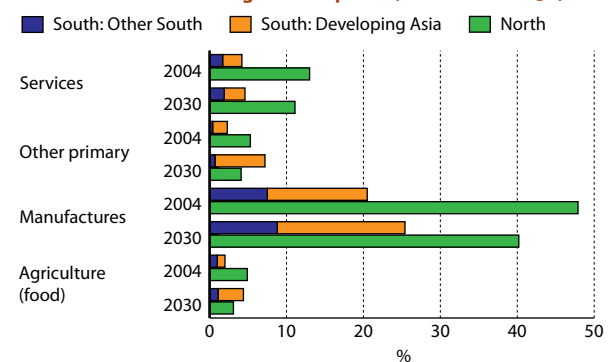
2.2.17 Sector shares of global exports (baseline to 2030)



Source: Data taken from Table 4 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

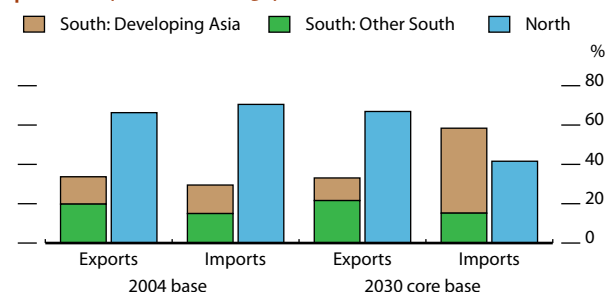
2.2.18 Sector shares of global imports (baseline to 2030)



Source: Data taken from Table 4 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

2.2.19 Shares of world trade in agricultural and food products (baseline to 2030)



Source: Data taken from Table 5 of Anderson and Strutt (forthcoming).

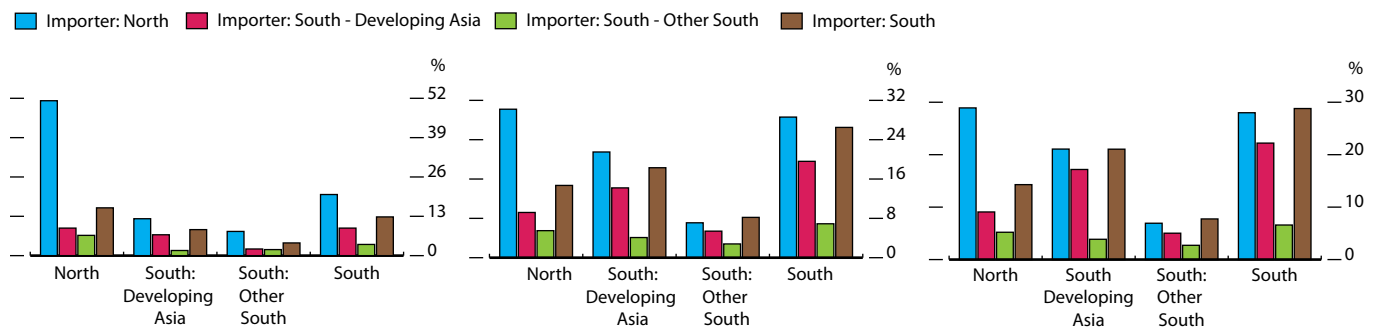
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2.2.20 Core baseline projections for bilateral trade, by exporting region

a Global trade (2004 base)

b Global trade (2030 simulation)

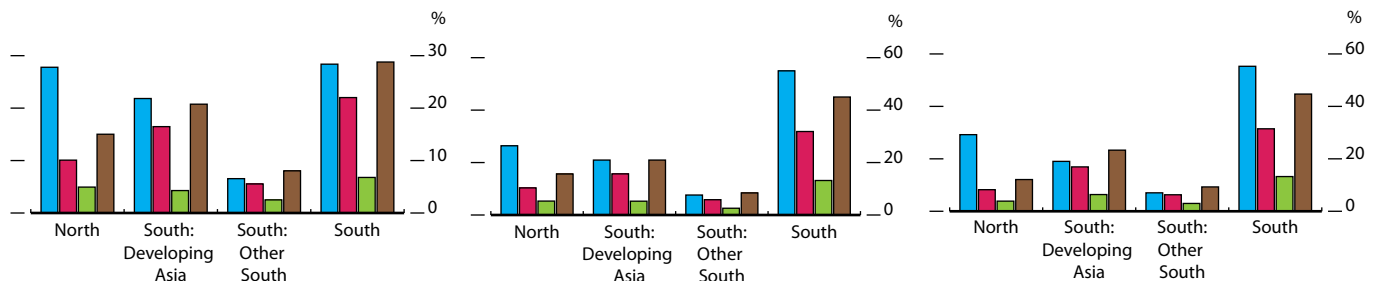
c ASEAN+6 preferential liberalization (2030 simulation)



d ASEAN+6 most-favored-nation liberalization (2030 simulation)

e Global most-favored-nation liberalization (2030 simulation)

f Partial South–South trade liberalization (2030 simulation)



ASEAN+6 = Association of Southeast Asian Nations plus Australia, People's Rep. of China, India, Japan, Rep. of Korea, and New Zealand.

Source: Data taken from Table 8 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

will nearly double, from 12.2% in 2004 to 21.5% in 2030. This latter result is unsurprising, given that the share of developing Asia's exports in world trade doubles over the projection period, due not only to its high GDP growth rate but also its high and rising trade-to-GDP ratio.

Put differently, the expansion of South–South trade does not come at the cost of developing Asia's exports to the North, which will continue to prop up demand for output from factory Asia.

Scenarios for trade reforms

To gauge the potential gains from South–South integration, in view of the anticipated size and structure of global markets in 2030, four scenarios of policy reform¹²—out of many possible—are assessed relative to the core baseline projection.¹³

Scenario a: ASEAN+6 on a preferential basis (Figure 2.2.21a). This involves expanding the ASEAN free trade area to include the six countries now under consideration: Australia, the PRC, India, Japan, the Republic of Korea, and New Zealand. The global gains, as measured by equivalent-variation-of-income estimates, are about \$64 billion a year, most of which accrue to the new members of the trade bloc from the North, namely, Australia, Japan, and New Zealand. Similar gains are enjoyed in the South by current members of ASEAN. Apart from developing Asia, the rest of the South as a group is slightly worse off.

Scenario b: ASEAN+6 on an MFN basis (Figure 2.2.21b). If the reforms

are on an MFN basis (that is, tariffs are eliminated for both members and nonmembers of ASEAN), the global gains more than double, to more than \$153 billion a year by 2030, while developing Asia's gains at \$56 billion a year are 50% higher. Non-Asia South gains are about \$29 billion a year.

Scenario c: Global MFN liberalization (Figure 2.2.21c). This is an extreme reform scenario in which all countries eliminate their tariff barriers to merchandise trade. Welfare gains of almost \$333 billion a year are generated—\$130 billion for the North, nearly \$138 billion for developing Asia, and about half those levels to the rest of the South.¹⁴ Against scenario b, one sees that full liberalization of goods trade by ASEAN+6 goes a long way toward generating the potential benefits that come from global goods trade liberalization.

Scenario d: South–South partial liberalization (Figure 2.2.21d). This final and possibly most realistic scenario explores the impacts of reducing intra-South import tariffs to the average levels imposed on exports from the South to the North.¹⁵ The outcome is that North is slightly worse off, while the South comes out much better off. Specifically, the gains to the South overall generate three-quarters of the benefits that the South obtains from a worldwide regime of zero tariffs (scenario c).

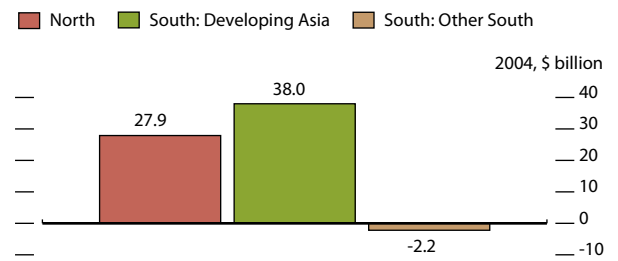
Thus each of these reforms raises the share of South–South trade above the core projection, albeit in varying degrees. Unsurprisingly, ASEAN+6 preferential trade reform (scenario a) increases developing Asia's intraregional trade share in global trade by almost 3 percentage points (Figure 2.2.20c above), and half a percentage point is taken off from this if ASEAN+6 lowers tariff rates to zero (scenario b—Figure 2.2.20d above). But in both cases, the global trade share of South–South trade increases by 2.3 percentage points.

If all countries fully liberalize their goods trade (scenario c), the share of South–South trade increases by even more—that is, 2.9 percentage points (from 26.5% in the core projection to 29.4%—Figure 2.2.20e above). As may be expected, the highest increase in South–South trade's global trade share is achieved under broad South–South liberalization (scenario d above), which boosts the estimate by 6.1 percentage points, or 23%, above that of the core projection (Figure 2.2.20f above).

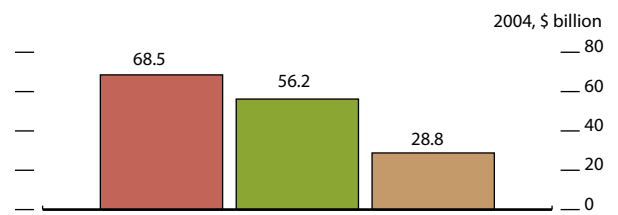
How are the other trade flows affected by increases in the world trade share of South–South trade? Under all scenarios considered, the share of North–North trade in world trade declines. In contrast, the world trade share of North–South trade increases under scenarios b and c, that is, with regional and global MFN liberalization, but decreases under scenarios a and d, that is, with preferential liberalization involving ASEAN+6 and the South as a whole. Perhaps not surprisingly, the declines in trade shares are more pronounced under South-wide tariff reductions, as a result of which the share of North-to-South exports and of South-to-North exports fall by 2.6 and 2.5 percentage points, respectively, relative to the core projection estimates.

2.2.21 Four scenarios for trade reform

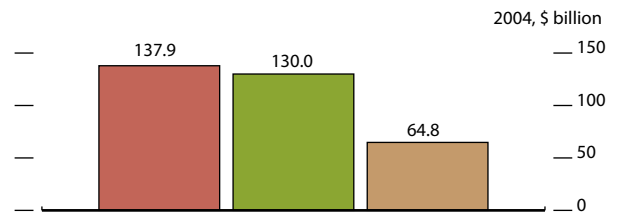
a ASEAN+6 (2030 simulation)



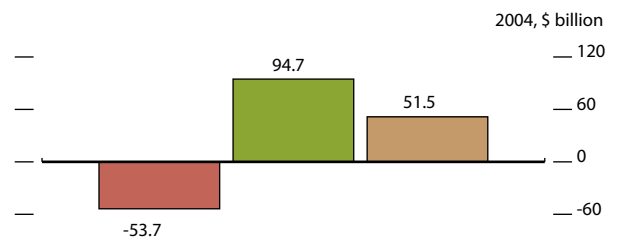
b ASEAN+6 on most-favored-nation basis (2030 simulation)



c Global most-favored-nation liberalization (2030 simulation)



d South–South partial liberalization (2030 simulation)



ASEAN+6 = Association of Southeast Asian Nations plus Australia, People's Rep. of China, India, Japan, Rep. of Korea, and New Zealand.

Note: Bars refer to welfare gains, measured as equivalent variations in income.

Source: Data taken from Table 11 of Anderson and Strutt (forthcoming).

[Click here for figure data](#)

Stress scenarios: Slower growth in the North and the alleviation of global imbalances

Given the importance of demand from the North as the ultimate driver of factory Asia's production network and the ramifications this has for developing Asia's intraregional trade, the following question arises: How does stronger South–South trade hold up against slower growth in the North?

The plunge in the industrial economies' demand for exports from the developing world during the recent crisis raised the need for developing Asia's economies to become more self-reliant and to adopt policies that broaden the scope and structure of their openness to trade and capital flows. To gradually shift developing Asia's supply and demand structures toward Southern and intraregional markets, however, far-reaching structural and macroeconomic adjustments are needed. On the supply side, for example, it has been argued that the value chains of PRC-centered international production networks have to overcome issues of production and product specificity as well as adjust their physical and human infrastructure to the new structure of demand (ADB, 2010b). On the demand side, in turn, household consumption has to be stimulated by transferring corporate saving to households and reducing precautionary saving (ADB, 2009).

The simulation framework adopted here is suitable neither for exploring these issues in their full complexity nor for drawing implications for developing Asia and the South more broadly. But to roughly gauge the implications for South–South trade of a weakening of demand from the North, the following stress scenario is tested: suppose the rates of growth of GDP and capital flows in the North are reduced by one-third compared with the core projection and, as a consequence, the South slows down by half the North's rate.

The results of the simulation exercise indicate that the South would be unable to simply rely on its higher growth momentum and, in turn, the share of South–South trade would not expand. Clearly, unless the South fully makes up for the lower demand from the North, it is likely that the dynamism and viability of factory Asia would come under stress.

A second stress test explores an issue related to the South's reliance on the North, namely, the gradual reduction in North–South imbalances. To the extent that South–South trade grows as a share of total trade, some of the largest imbalances at the bilateral level along North–South lines can be expected to fall. By the same token, imbalances among Southern regions are likely to widen, particularly if the commodity composition of interregional South–South trade remains largely unaltered and demand for Asia's manufactures exports continues to expand.

Again, the full implications cannot be explored within the simulation environment employed. To assess the robustness of South–South trade against global imbalances, the following two assumptions are imposed: both the PRC surplus and United States deficit are eliminated by 2030; and global growth rates are unaffected by the trade rebalancing.

Leaving the other assumptions from the core baseline unaltered and accommodating changes in the trade balance by allowing saving rates to decline in the PRC and increase in the United States, the simulation

results suggest that, even under such extreme assumptions of complete expenditure switching in the PRC and a dramatic increase in the saving rate in the United States, the overall pattern of the main findings does not change. Most importantly, the South's share in global trade almost doubles as it did in the core baseline projection.

Three conclusions from the simulation results

First, the South has the potential to boost trade within the group. Lowering barriers to South–South trade, even to the levels prevailing in South–North trade, could bring three-quarters of the gains to Southern countries as would flow from a freeing of all countries' goods trade. The share of South–South trade in world trade would expand by 6.1 percentage points, or about one-quarter, compared with the core projection.

Second, to benefit the South as a whole, regional initiatives should be inclusive and eventually extend market access to other countries on an MFN basis. For example, it was shown that if an ASEAN+6 bloc were to trade freely on an MFN basis, this could generate for Asia almost half of what would accrue to the region if the whole world so liberalized. South–South trade would rise by 2.3 percentage points, or almost one-tenth, as a result.

Third, growth in the North and demand from that region will continue to play an important role for the South. This is particularly the case for developing Asia and its trade within the region, given that the final outputs of its production networks are still largely geared toward the North. A progressive shift of supply and demand structures toward increased regional demand will take time for Asia to accomplish, and until then the viability of factory Asia will continue to be linked to the vicissitudes of the North, albeit to a lesser and lesser extent as South–South economic integration advances.

Summary

South–South trade has expanded rapidly during the past two decades, with its share of merchandise trade rising from about 7% in 1990 to 17% in 2009. The main determinants of this trend have been the emerging economies' strong growth performance and rising share of world GDP, the rise of fragmented-production and trade networks, and the progressive dismantling of trade barriers.

As the leading proponent of international production networks in the South, developing Asia has been the main driver of South–South trade. The region as a whole now accounts for about three-quarters of the trade among Southern countries (although by and large the flows are confined within developing Asia).

The PRC alone accounts for about 40% of this intra-South traffic in goods. In large part, this share reflects the PRC's pivotal role as the last-stage assembly hub of the parts and components production networks referred to as factory Asia, the final output of which is exported predominantly to the affluent markets of the North.

At roughly one-quarter of South–South trade, the combined share of Latin America, Africa, and the Middle East is small. Since 2000, however,

these regions' trade with the South has been expanding at an average annual rate of 26%—faster than Asia's 23%.

Developing Asia's trade with the other regions of the South has increased markedly during the past two decades. Of developing Asia's imports from the South, almost 80% was attributable to the PRC. Mainly consisting of primary commodities, these imports were used to fuel the country's economic expansion. In turn, the PRC's manufactures exports were increasingly absorbed by growing demands from Latin America, Africa, and the Middle East.

Although global trade as a whole stands to gain from further reductions of tariffs and other barriers to trade, which tend to be higher in the South, an abiding policy focus on lowering these remaining hurdles will spur South–South trade especially.

Average tariff levels in the South have come down dramatically over the past two decades, but they are still much higher than those in the North. Moreover, tariffs faced by exporters from the South are, on average, higher in the South than they are in the North. Logistics performance of the South, as measured in its various dimensions by the World Bank, has shown significant improvement since 2007; it is still not up to par, though, with the North.

There is therefore scope for developing Asia and other developing regions to deepen trade integration and further increase the volume of South–South trade through a gradual clearing of the remaining bottlenecks. Simulation analysis suggests that lowering tariff barriers to South–South trade even to just the levels prevailing in South–North trade could bring three-quarters of the gains to Southern countries as would be generated by the global elimination of tariff barriers, and South–South trade would expand as a result.

However, trade reforms in support of South–South trade must not come at the expense of continuing broader global integration. In view of the proliferation of regional trade agreements in Asia and elsewhere, it is increasingly important that the terms and conditions of future accords be made as broad-based and inclusive as possible, as well as consistent with WTO provisions. A comparison of Asia's North–South FTAs with their South–South counterparts reveals that the former are generally more compatible with WTO and other global rules (Box 2.2.2). Continuing its policy of open regionalism and ensuring that future FTAs are comprehensive and compatible with global rules are two strategies that offer Asia a promising path to take toward freer trade.

Expanding South–South economic links through investment

Attracted by the PRC's opening up to investment in 1978 and, in particular, by the establishment of export-processing zones in the country's coastal provinces, FDI spurred the PRC's rise as a world trade powerhouse. In turn, this spawned FDI-financed international production networks (which have the PRC as the hub of last-stage assembly of the final product) throughout developing Asia. The volume of investment for these networks intensified after the Asian financial crisis in the late 1990s as the networks expanded and became more intricate and fragmented. Recently, interregional FDI flows in the South have become more significant as well, with developing Asia's emergence as an FDI exporter to Latin America and Africa.

A measure of foreign ownership of productive assets (such as factories, mines, and land), FDI is a far more important source of capital to developing Asia than other types of foreign investment. Over the last two decades, FDI inflows to developing Asia have averaged \$187 billion a year, while the combined flows of portfolio and bank investment have averaged only \$126 billion a year. Among the regions of the South, developing Asia receives the largest inflows of FDI, far exceeding those to Africa, Latin America, or the Middle East (Figure 2.3.1).

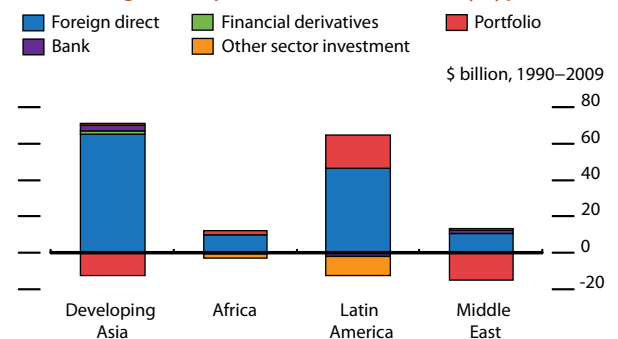
For the South as a group, FDI is important as it is a net inflow, whereas portfolio investment, for instance, is a net outflow. Moreover, FDI in the South has proved resilient to external shocks. Compared with portfolio and bank investment, both FDI inflows to and outflows from the South have tended to be more stable.

Indeed, net FDI inflows have been persistently large and positive over the last two decades, even with the financial crises that hit the South in the 1990s, the collapse of the IT bubble in the early 2000s, and the recent global financial crisis. In contrast, portfolio and bank flows have been much more volatile, their direction switching rapidly in response to shocks (Figure 2.3.2).

These attributes were validated during the global financial crisis. Outward FDI from the South was less affected than that from the North. In 2008, global outward FDI contracted by around 15%, while the PRC's outward FDI nearly doubled. And FDI inflows to developing Asia in 2009 remained relatively high, even though its rate of growth slowed.

Historically, FDI flows from the capital-abundant North have proved beneficial to their Southern recipients in that they brought advanced technology and filled investment gaps.

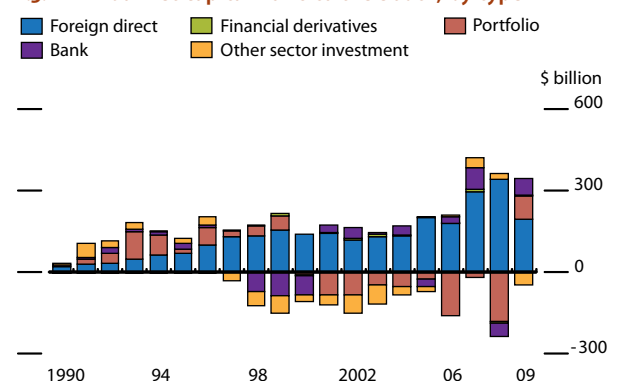
2.3.1 Average net capital flows to the South, by type



Source: ADB calculations based on data from International Monetary Fund. International Financial Statistics online database; and Directorate-General of Budget, Accounting and Statistics. National Statistics. <http://eng.dgbas.gov.tw> (both accessed 25 March 2011).

[Click here for figure data](#)

2.3.2 Annual net capital flows to the South, by type



Source: ADB calculations based on data from International Monetary Fund. International Financial Statistics online database; and Directorate-General of Budget, Accounting and Statistics. National Statistics. <http://eng.dgbas.gov.tw> (both accessed 25 March 2011).

[Click here for figure data](#)

Indeed, many developing Asian economies owe their high long-run growth profiles, in part, to such FDI and spillover effects.

The recent trend, however, is that the South is emerging as an exporter of capital both within and outside its own area, which has resulted in a surge of South–South FDI in particular. There are two reasons for this. Increasingly, Southern-owned multinational corporations are expanding their areas of operation, seeking efficiency gains and market opportunities globally, and state-owned enterprises and sovereign funds with abundant finance are seeking resources abroad. Although the magnitudes of these investments are still small relative to flows from the North, their significance and implications for the South cannot be overlooked.

As mentioned earlier, South–South FDI stands out for three reasons: being generally less capital intensive than the North's and more suited to conditions in the South, it may be easier to set up even in low-income countries, thereby increasing employment and income levels. It may also be more stable and resilient to economic crisis. And its volume is an indicator of financial integration of economies of the South.

Stylized facts about South–South links

The emergence of the South as a source of foreign direct investment

FDI has seen a dramatic expansion across the globe over the last two decades. Total stocks of world FDI surged by a factor of almost nine, from \$2.1 trillion in 1990 to \$19 trillion by 2009. This trend reflects the continuing integration of the world economy, which is facilitating the flow of foreign capital and funds, as well as expediting transfers of technology, skills, and job opportunities.

For Northern economies, the outward FDI stock is far larger than its inward stock, while the converse is true for developing Asia. This confirms, on the one hand, the North's role as a net capital exporter and implies, on the other, that developing Asia presents attractive investment opportunities (Table 2.3.1).

The PRC is becoming increasingly important as both a recipient and sender of FDI. Historically, Hong Kong, China and Singapore, the two regional financial centers of developing Asia, were also its largest players in both inward and outward FDI. Since 2006, however, the PRC has received more FDI than Singapore. Indeed, in the last 5 years, the PRC's inward FDI stock averaged \$349 billion a year—an amount far larger than Japan's as well as those of the 27 countries in the eurozone and of the leading economies of Latin America and Africa. And while the PRC still lags behind Singapore as a sender of FDI, it has now surpassed Brazil in this respect.

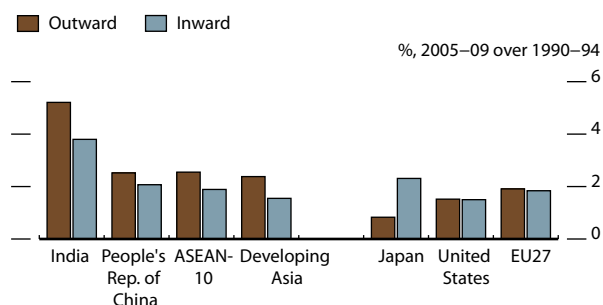
2.3.1 Inward and outward FDI stocks, 5-year average, selected economies, \$ billion

Region/Country	Outward FDI		Inward FDI	
	1990–94	2005–09	1990–94	2005–09
India	0.2	44.1	2.3	101.4
China, People's Rep. of	9.7	120.8	43.9	348.6
ASEAN-10	2.7	34.2	8.7	58.0
Developing Asia	5.3	57.9	10.8	50.7
Brazil	42.3	129.8	47.9	280.0
South Africa	17.2	53.7	10.7	94.1
Japan	243.3	560.0	14.8	149.0
United States	9,06.8	4,158.0	686.2	3,076.2
EU27	44.6	300.0	39.3	248.1

Note: For ASEAN-10, developing Asia, and EU27, values are averages for the region.

Source: ADB calculations based on data from UNCTADstat. <http://www.unctad.org/Templates/Page.asp?intItemID=1584&lang=1> (accessed 25 February 2011).

2.3.3 Growth of outward and inward FDI stocks, selected economies

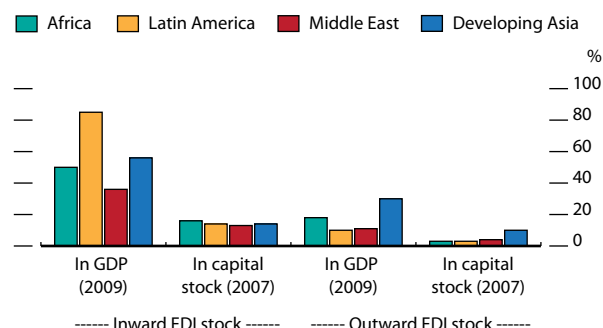


Note: Association of Southeast Asian Nations (ASEAN) 10 comprises Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.

Source: ADB calculations based on data from UNCTADstat. <http://www.unctad.org> (accessed 25 February 2011).

[Click here for figure data](#)

2.3.4 Shares of inward and outward FDI stocks for the South



Note: Capital stock refers to physical capital stock data constructed using the perpetual inventory method, which is based on aggregate investment data in the Penn World Tables 6.3.3. (Lee and Hong, 2010).

Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org> (accessed 25 February 2011); Lee and Hong (2010).

[Click here for figure data](#)

Significant developments are also occurring in India. Starting from the low base, India is now a key player after surpassing the average FDI stocks of the ASEAN-10 in the 2000s.

Southern countries emerged as recipients of FDI in the late 1980s, then became sources of outward FDI in the 2000s. Outward FDI stocks in developing Asia are growing much faster than those in the North (Figure 2.3.3). This is consistent with the notion that developing Asia is increasingly important as an FDI sender.

Total outward FDI flows from developing Asian economies to all regions generally surpassed outflows from Japan after 1995. In particular, Hong Kong, China and the PRC have emerged as leading sources of foreign investment. Other Asian economies, specifically, Taipei, China; Singapore; and Malaysia have also gained in importance, particularly after the Asian financial crisis in the late 1990s.

The significance of developing Asia as a capital exporter is not simply due to its rapid economic growth over the last decade. Outward FDI stock normalized by either GDP or the capital stock is much larger for developing Asia than for other regions in the South: at 30% of regional GDP, developing Asia's outward FDI is twice as high as those of other Southern regions; at 10% of its capital stock, it is three times as large.

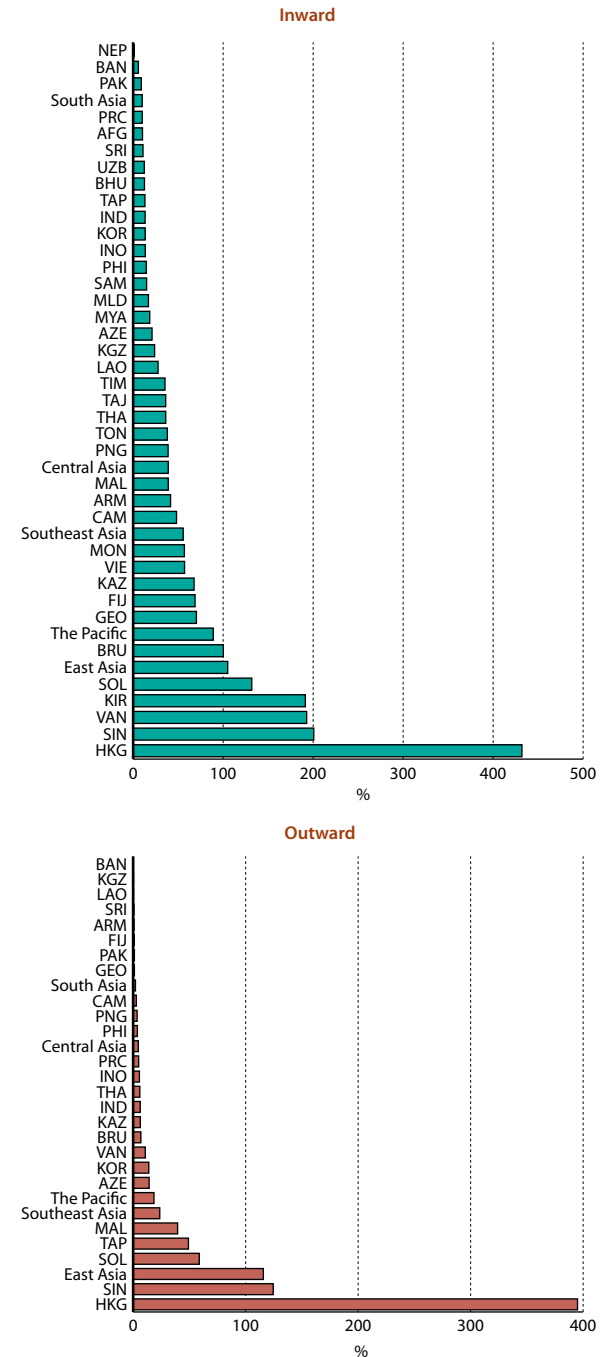
In contrast, developing Asia's normalized inward FDI stock—at 56% of regional GDP and 14% of capital stock—is not as impressive. Latin America's measures are larger at 85% of GDP and 14.2% of capital stock. Nonetheless, the inward FDI stock measures generally appear to be similar across Southern regions (Figure 2.3.4).

Large variations exist in normalized FDI stocks among the economies in developing Asia (Figure 2.3.5). For inward stocks of FDI, the relatively small and open economies in the Pacific stand out: their inward-FDI stock estimates at almost 90% of their GDP are far above the average for developing Asia and reflect the economies' reliance on foreign capital. In contrast, many South Asian economies have ratios to GDP of around 10%.

For East and Southeast Asia, the subregions' averages are driven up by their financial centers—Hong Kong, China and Singapore. Its large FDI stocks notwithstanding, the PRC has a disproportionately small inward FDI stock relative to its GDP or capital stock, given the huge size of its economy.

In the case of outward FDI stock, Taipei, China; Malaysia; and the Republic of Korea have large stocks relative to the size of their economies. In fact, they are the only economies in developing Asia whose outward stocks are larger than their inward stocks. (Another notable characteristic of these net FDI exporters is the significant role played by their portfolio flows due largely to their deep and open financial systems.) Except for these economies, normalized outward FDI stocks are minimal in developing Asia.

2.3.5 FDI stock, ratio to GDP, 2009



AFG = Afghanistan; ARM = Armenia; AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; BRU = Brunei Darussalam; CAM = Cambodia; FIJ = Fiji; GEO = Georgia; HKG = Hong Kong, China; IND = India; INO = Indonesia; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; KIR = Kiribati; KOR = Rep. of Korea; LAO = Lao People's Dem. Rep; MAL = Malaysia; MLD = Maldives; MON = Mongolia; MYA = Myanmar; NEP = Nepal; PAK = Pakistan; PHI = Philippines; PNG = Papua New Guinea; PRC = People's Rep. of China; SAM = Samoa; SIN = Singapore; SOL = Solomon Islands; SRI = Sri Lanka; TAJ = Tajikistan; TAP = Taipei, China; THA = Thailand; TIM = Dem. Rep. of Timor-Leste; TON = Tonga; UZB = Uzbekistan; VAN = Vanuatu; VIE = Viet Nam.

Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org> (accessed 25 February 2011); Lee and Hong (2010).

[Click here for figure data](#)

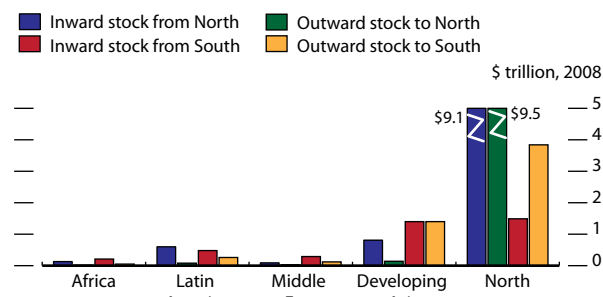
Direct investment among countries of the South

Since the mid-1980s, many governments in developing Asia have welcomed FDI, taking notable steps to liberalize capital account transactions, foreign-ownership and foreign-exchange policies, as well as related regulations, in order to help bring firms to their countries. Success has been such that Asian FDI flows are no longer dominated by the traditional North–South relationship but are increasingly South–South as well.

Hard data on South–South FDI flows are scarce. Nonetheless, balance-of-payments measures suggest that South–South FDI links are particularly strong in developing Asia compared with other Southern regions (Box 2.3.1). In 2008, both developing Asia’s outward FDI stock to the South and the South’s inward FDI stock to developing Asia were almost double the inward FDI stock from the North to developing Asia (Figure 2.3.6).

Moreover, the South-to-developing-Asia and the developing-Asia-to-the-South FDI stocks were almost equal, in contrast to the other Southern regions where capital exports were not as strong. In fact, outward FDI from developing Asia of this magnitude was not observed in the 1990s. That it is relatively large in 2008 implies that developing Asia fared well

2.3.6 Inward and outward FDI stocks, South vs North, by source and destination



Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org>; Organisation for Economic Co-operation and Development. <http://www.oecd.org> (both accessed 25 February 2011); Lee et al. (forthcoming).

[Click here for figure data](#)

2.3.1 Problems of measuring foreign direct investment with balance-of-payments data

Balance-of-payments data are the only comprehensive records on world FDI activity. They are the starting point for estimating the size of South–South FDI and the share of South–South FDI in world FDI stocks or flows, even though balance-of-payments financial flows cannot be directly linked with measures of economic activity and the distinction between direct and portfolio investment is blurred in these accounts.

Measuring FDI based on balance-of-payments data has three serious problems. First, these data magnify the role of financial centers, which are conduits of financial flows, but are not necessarily connected to productive activity. Top recipients of FDI from Hong Kong, China and Singapore include the British Virgin Islands and Bermuda, while FDI from the PRC goes to the Cayman Islands as well.

But these types of FDI flows would almost completely disappear from any measure based on economic activity as they often represent bookkeeping entries in corporate accounts, rather than “real activity” such as labor employment, goods and services production, or physical-asset procurement.

Second, the distinction between direct and portfolio investment is blurred with the FDI of sovereign wealth funds (SWFs). While purchases of equity shares of 10% or more meet the IMF definition of FDI in terms of extent of ownership, SWF investments tend not to be motivated by standard FDI objectives such as exploiting the investing firm’s specific advantages (like managerial

style or corporate culture). Rather, SWFs rarely bring benefits beyond large amounts of capital; they generally do not seek control of firms they invest in; and they tend to move in and out of industries in pursuit of higher returns, much as private equity funds do. FDI by SWFs was a small part of FDI from developing countries through 2004, but it increased rapidly after that, reaching over \$25 billion in 2009, or over 10% of all FDI outflows from developing countries (Lipse and Sjöholm, forthcoming).

Third, in some developing and transitional economies much FDI takes the form of transactions known as “round tripping” (UNCTAD, 2006), in which domestic agents move capital funds to an offshore location and then remit them back as FDI to their own country. This practice is largely motivated by financial incentives intended exclusively for foreign investments and by a lack of effective institutions to intermediate the funds domestically.

For example, an estimated 25%–40% of the PRC’s inward FDI comes from domestic firms round tripping funds through these foreign subsidiaries, especially in Hong Kong, China (Li, forthcoming). For the PRC, however, the problem is expected to become less serious after financial incentives for foreign firms were removed in 2008.

Nonetheless, round tripping, combined with the balance-of-payments convention measuring flows and stocks of FDI in terms of immediate rather than ultimate beneficial ownership of FDI assets, distorts the overall picture of the size, trend, and direction of South–South FDI.

amid the global financial crisis; outward FDI from developing Asia did not slow down as much as inward FDI to the region.

The factors driving South–South FDI in developing Asia are the regional financial centers—Singapore and Hong Kong, China—acting as intermediaries of funds from within and outside the region, thus amplifying intra- and interregional Southern relationships. Hong Kong, China is by far the largest player in the region.

But South–South links can still be observed even without the large players, albeit to a lesser extent (Figure 2.3.7). In East Asia without the PRC and Hong Kong, China, the South lateral links are seen in the forms of outward FDI from the Republic of Korea and Taipei, China. In Southeast Asia excluding Singapore, it appears as inward FDI from the South, its magnitude exceeding the inward stock from the North.

In other Southern regions, inward FDI stocks outweigh outward FDI stocks, with investment from the North particularly dominant in the case of Latin America. As with developing Asia, each Southern region has one or two key players driving both lateral intraregional and vertical FDI flows. These are Saudi Arabia in the Middle East, South Africa in Africa, and Mexico and Brazil in Latin America.

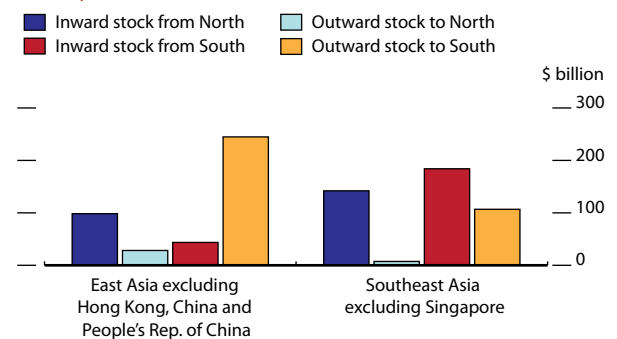
In the Middle East, Saudi Arabia has the largest FDI stock from the South, which in 2008 consisted of one-third of the total inward stock from the South to the region (Figure 2.3.8). In contrast, the region's outward FDI stock to the South in 2008 was less than half of its inward stock from the South, with more than half due to Saudi Arabia and the United Arab Emirates.

In Africa, the South–South link manifests itself in inward FDI as the region exports very little capital. Inward FDI stock from the South amounted to \$340 billion in 2008, while the outward stock was less than a quarter of this. Major FDI recipients were Nigeria, Morocco, Tunisia, and South Africa. Together, these countries accounted for almost 60% of total inward stock in Africa (Figure 2.3.9).

The share of Southern countries' inflows of FDI to Africa rose from 18% in the late 1990s to 21% in 2000–2008. Developing Asia's share increased even faster, from almost 7% to 15%. Indeed, developing Asia, the PRC in particular, rather than Africa itself has been the main source of South–South FDI into African countries (Table 2.3.2).

In the case of Latin America, inward FDI stocks from the North, particularly from the United States and Spain, have dominated, with Brazil, Chile, Colombia, and Mexico receiving about 80% of this stock. On the South lateral link, the pattern is similar to Africa's, except that the stocks are much larger: Latin America, excluding offshore financial centers, has mainly inward FDI; inward stocks are about 50% higher than, and outward stocks more than three times as large as, Africa's. Major recipients of inward FDI stocks from the South are Mexico, Brazil, and Chile (Figure 2.3.10).

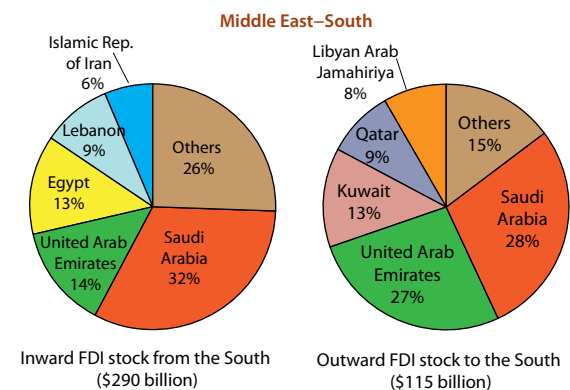
2.3.7 Inward and outward FDI stocks, East and Southeast Asia, by source and destination, 2008



Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org>; Organisation for Economic Co-operation and Development. <http://www.oecd.org> (both accessed 25 February 2011); Lee et al. (forthcoming).

[Click here for figure data](#)

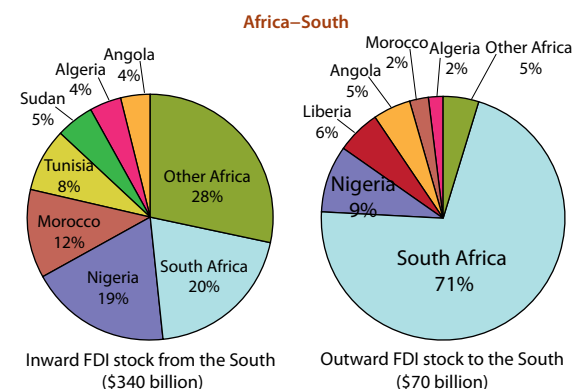
2.3.8 Middle East–South inward and outward FDI stocks, selected economies, 2008



Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org>; Organisation for Economic Co-operation and Development. <http://www.oecd.org> (both accessed 25 February 2011); Lee et al. (forthcoming).

[Click here for figure data](#)

2.3.9 Africa–South inward and outward FDI stocks, selected economies, 2008



Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org>; Organisation for Economic Co-operation and Development. <http://www.oecd.org> (both accessed 25 February 2011); Lee et al. (forthcoming).

[Click here for figure data](#)

Increasing intraregional foreign direct investment in developing Asia

While exploring Southern lateral investment flows is constrained by paucity of data, a few important observations can be made from the available information. First, over half of FDI inflows to developing Asia appear to originate in the South and mostly from the region itself (UNCTAD, 2006).

Indeed, the flows are concentrated in East and Southeast Asia, spurred most likely by regional integration efforts, expanding production networks, and plant relocations to lower-cost areas. Advances in transport and logistics as well as information and communications technologies have also created opportunities to better manage integrated but fragmented production networks in developing Asia. Asian FDI has become more intraregional, as production networks have deepened with the success of the factory Asia model (Figure 2.3.11).

Second, the FDI flows through offshore financial centers and from unknown sources increased their share of total inward FDI from 15% in 1991 to 32% in 2008. Since the North has better reporting systems, it seems reasonable that most such FDI flows come from Southern economies. If so, about 70% of inward FDI stock in developing Asia can be said to originate within the region (Lipsey, forthcoming).

In fact, the rise in the share of offshore financial centers and unknown sources is consistent with the growth of FDI flows from the PRC to ASEAN member states, which were negligible in 2001 but rose to about \$2.5 billion in 2009 (UN, 2010).

Third, evidence from seven economies in developing Asia (the PRC; Hong Kong, China; India; the Republic of Korea; Malaysia; Taipei, China; and Thailand), which account for more than 70% of the region's total FDI and have detailed data for 2005–2009 (only for inward FDI for India and the Republic of Korea), supports the increasing significance of intraregional FDI. About 40% of outward FDI from these economies flowed to developing Asia, while 37% of inward FDI to these countries originated in developing Asia (Figure 2.3.12). In contrast, the North's share of inward FDI to these economies was only about 27%.

Fourth, when the sources of inward FDI to each of these seven countries are considered, it appears that intraregional FDI inflows are particularly significant for Hong Kong, China and for the PRC (Figure 2.3.13). As for the destinations of outward FDI from the five economies (that is, without India and the Republic of Korea), the data suggest that, while all of them invest substantially within the region, the flows are concentrated in Hong Kong, China, Thailand, and the PRC.

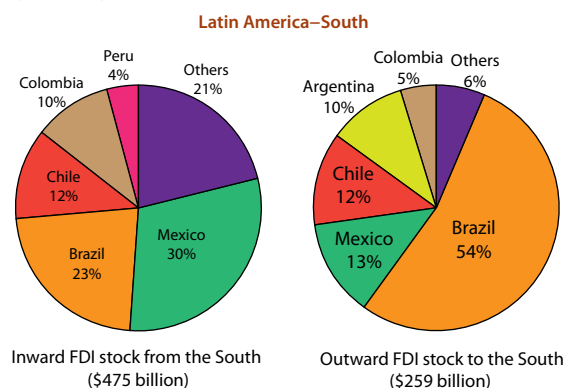
Fifth, while the share of FDI from the North has declined in general, the North still maintains a relatively important presence in some economies in developing Asia, such as the Republic of Korea and Taipei, China. This is consistent with the notion that the investments from the North tend to need highly skilled workers and to be in more capital-intensive sectors, where these relatively high-income economies in the region have a comparative advantage.

Table 2.3.2 Major Southern investors in Africa, FDI inflows, 2006–2008 (\$ million)

South Africa	2,609
China, People's Rep. of	2,528
Malaysia	611
India	332
Taipei, China	48
Korea, Rep. of	45

Source: UN (2010).

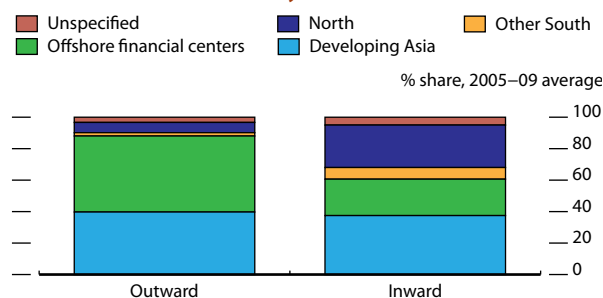
2.3.10 Latin America–South inward and outward FDI stocks, by country, 2008



Sources: ADB calculations based on data from UNCTADstat. <http://www.unctad.org>; Organisation for Economic Co-operation and Development. <http://www.oecd.org> (both accessed 25 February 2011); Lee et al. (forthcoming).

[Click here for figure data](#)

2.3.12 Distribution of outward and inward FDI flows, selected Asian economies, by source and destination



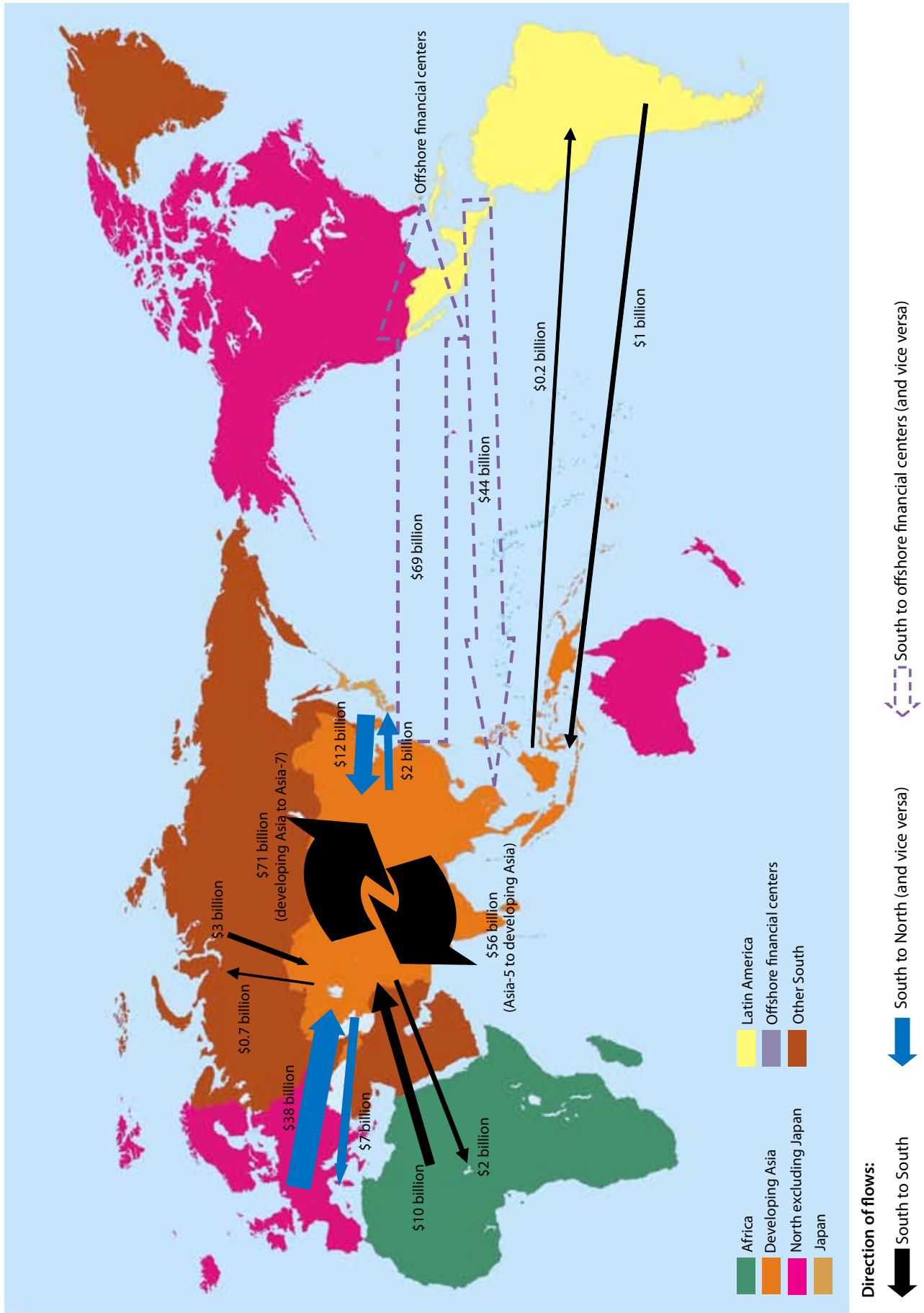
Notes: Inward FDI refers to data for seven economies namely, People's Rep. of China; Hong Kong, China; India; Rep. of Korea; Malaysia; Taipei, China; and Thailand. Outward FDI excludes India and Rep. of Korea.

Offshore financial centers comprise Bermuda, British Virgin Islands, Cayman Islands, Labuan Island, and Panama.

Sources: ADB estimates based on data from CEIC Data Company; Bank of Thailand. <http://www.bot.or.th>; UNCTADstat. <http://www.unctad.org>; Directorate-General of Budget, Accounting and Statistics, National Statistics. <http://eng.dgbas.gov.tw> (all accessed 25 February 2011); Li (forthcoming).

[Click here for figure data](#)

2.3.11 Source and destination of outward and inward FDI flows, selected Asian economies, 2005–2009



Notes: See Figure 2.3.12.

Sources: See Figure 2.3.12.

The drivers of South–South foreign direct investment

The macro view

What explains FDI? The literature offers at least three hypotheses. First, FDI may be motivated by the search for strategic natural resources. Firms with capital, technology, and access to markets undertake outward FDI to take control of immobile factors in host countries, such as oil and minerals, to secure supplies of raw materials or develop alternative supply sources as a hedge against shortages or price increases.

Second, FDI may be induced by the search for efficiency gains. Firms seek lower-cost locations or opportunities for exploiting scale economies in production. An economy with an overvalued currency, for instance, may cause firms to consider other locations to maintain their international competitiveness.

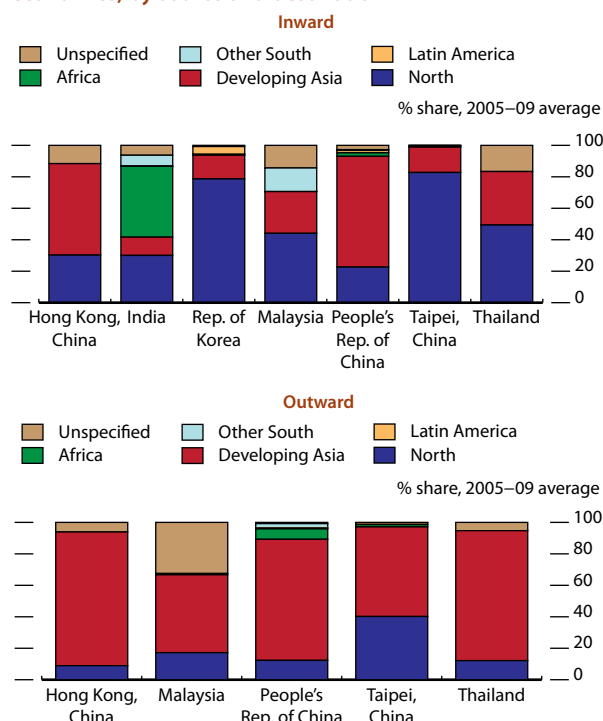
Third, FDI may be prompted by the search for markets. Firms undertake market-seeking FDI to exploit opportunities in host countries, particularly those with large markets and high incomes. Others do so to optimize returns on new technologies or marketing techniques that they have developed.

The anecdotal evidence is consistent with these motivations. FDI in natural resources was an early form of North-to-South direct investment. The North had capital, technology, and access to markets that the South host countries lacked. Thus the Netherlands invested in oil in the Middle East and the United Kingdom invested in tea plantations in Africa and South Asia. Similarly, the PRC has long invested in oil and other commodity industries in many countries—a trend that has intensified lately in Latin America and Africa. And this is because the PRC, relative to African host countries, has the capital, technology, and access to markets for these investments.

In the case of the Republic of Korea's multinational companies, their investments throughout developing Asia were apparently undertaken to take advantage of cheap labor (efficiency-enhancing), and to penetrate local markets (market-seeking). Lee et al. (forthcoming) also argue that these firms have increasingly engaged in outward FDI in part because of push factors, such as rapidly rising nominal wages and frequent labor-management conflicts at home—in other words, for efficiency gains and to maintain competitiveness.

FDI from the North and the South may have somewhat different emphases, however. Fung et al. (2002) contend that investments from Hong Kong, China and Taipei, China are efficiency-seeking, sensitive to infrastructure conditions and labor costs, whereas investments from Japan are market- and resource-seeking, focused on labor quality (skilled labor is a scarce resource and is a complement to advanced technology). In the same vein, Brooks and Hill (2004) claim that most Singaporean firms investing overseas, including the PRC, are actually high value-added manufacturers or service providers (seeking skilled labor to complement new technology).

2.3.13 Distribution of inward and outward FDI flows (excluding offshore financial centers), selected Asian economies, by source and destination



Notes: Offshore financial centers comprise Bermuda, British Virgin Islands, Cayman Islands, Labuan Island, and Panama.

Inward FDI refers to data for seven economies namely, People's Rep. of China; Hong Kong, China; India; Rep. of Korea; Malaysia; Taipei, China; and Thailand. Outward FDI excludes India and Rep. of Korea.

Sources: ADB estimates based on data from CEIC Data Company; Bank of Thailand. <http://www.bot.or.th>; UNCTADstat. <http://www.unctad.org>; Directorate-General of Budget, Accounting and Statistics, National Statistics. <http://eng.dgbas.gov.tw> (all accessed 25 February 2011); Li (forthcoming).

[Click here for figure data](#)

A variation on the motivations may explain the investment of Southern firms in the North. South-to-North FDI can be intended to acquire brands with established markets and technologies of production, distribution, and advertising that are unavailable in the South.

But FDI may be influenced by other factors as well. For instance, Singaporean investment in East and Southeast Asia was motivated in part by personal relations the firms had with local partners and customers. In some host countries, such as the PRC and Malaysia, ethnicity and social connections played a role for Singaporean investment as well. In the PRC, the drivers of FDI evolved over time as policy and the business environment became more conducive to foreign investment (Box 2.3.2).

In addition, other factors, such as the state of financial development, the quality of institutions, or the investment climate, can be crucial determinants of FDI flows. A financially deep market provides firms with access to capital for undertaking cross-border investment. Although it is well recognized that the banking sector is the primary source of funds for investors in developing countries, Brooks and Jongwanich (2010) maintain that financial depth in terms of stock and bond markets has begun to play a role in financing cross-border transactions in developing Asia as well.

2.3.2 Factors that influence inward foreign direct investment in the People's Republic of China

When the PRC opened up to investment in 1978, most FDI inflows came from Hong Kong, China. As financial integration progressed in the 1980s, multinational corporations from all over the world started to invest in the PRC—a trend that accelerated in the late 1990s, taking inward FDI to \$45.5 billion in 1998.

In the PRC, policies to attract inward FDI were adopted and conducive conditions promoted. The international production networks constitute a case in point. The PRC established export processing zones soon after it liberalized investment. Within the zones, enterprises could import parts and components for assembly without duty—a policy that was later extended to all special economic zones in the southeastern provinces. FDI with labor-intensive technology, particularly in electronics, textiles, and apparel, came in to take advantage of the country's cheap labor.

The PRC's export and trade surplus grew in tandem with the increasing FDI inflows. Though the employment share of these foreign-invested enterprises is a minuscule 5% and their contribution to the PRC's GDP is only 3%–6%, their share of combined imports and exports reaches almost 55%.

In the past, most inward FDI consisted of greenfield investment. Most parent companies also created new long-term jobs locally. However, in the late 1990s to early 2000s, the share of mergers and acquisitions surged due to deregulation of such activity in the PRC and the entry of

more investors from the North who were less inclined to start from scratch.

The PRC remains attractive to market-seeking FDI, but the coastal region has become less attractive to labor-intensive, efficiency-seeking FDI from Southern economies because of rising costs of production. Some low-end, export-oriented manufacturing activities have therefore shifted from coastal areas to other developing Asian countries. Efficiency-seeking FDI in coastal provinces has been upgrading to high-end products, and market-seeking FDI has been increasingly targeting inland regions.

From the mid-2000s, given the abundant liquidity in the country, doubts about the desirability of foreign investment have been voiced in the PRC. The inward FDI stock in the PRC is by no means large relative to the economy's size at about 10% of GDP, or 2% of the capital stock. Yet the slowing of inward FDI growth signals a possible policy shift to curbing competition from foreign-owned firms.

To avoid foreign monopoly power in some strategic sectors and to reduce dependence on inward FDI for economic growth, the FDI policy may be limited to investment in areas where the PRC needs foreign capital and associated know-how, such as high-tech and environmental industries.

Source

Li (forthcoming).

The micro view

At the industry or firm level of analysis, the rationale for FDI can arise from the many possible sources of differences, such as industry composition, average size, and labor or capital intensity, which affect the productivity and spillover or “technology-diffusing” effects of investment. Traditionally, microeconomic analysis of FDI focuses on productivity improvements in the host economy, not merely because FDI adds to the capital stock, but more important because it augments human capital, enhances productivity, and generates spillovers to local firms.

Spillover effects from foreign investment are hypothesized to be multifaceted. The entry of multinational companies can reduce the monopolistic power of local firms and improve market efficiency.

It can also improve production efficiency and enhance economic growth by clearing bottlenecks to investment; introduce new know-how by bringing in new products, production and marketing techniques (with their concomitant demonstration effects, and by training workers who later become employees in local firms); transfer techniques on inventory management and quality control; and force local firms to upgrade managerial quality, intensify managerial effort, or adopt the marketing techniques used by multinational companies, either in domestic markets or internationally.

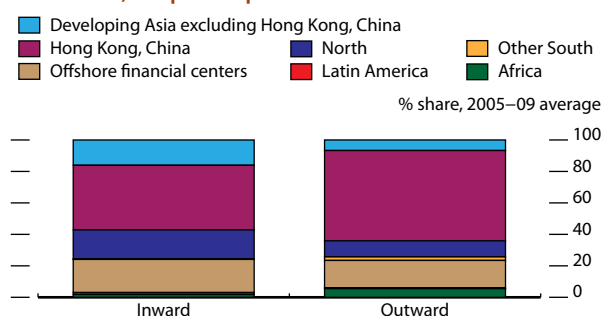
In turn, the more intense competition between such companies and local firms, as well as the demonstration and learning-by-doing effects of new production methods, lead to higher economywide productivity. Indeed, this is precisely why many countries offer special incentives to foreign enterprises, including lower income taxes or income tax holidays and import duty exemptions.

Spillover effects are not as readily apparent for North–North and South–South (lateral) FDI as they are for North-to-South (vertical) flows. Although only a few analyses exist on Southern lateral flows, the consensus is that South–South FDI generates weak spillover effects at best (from intermediate-input imports and higher labor employment rates). In contrast, for vertical investment, local firms seem to benefit more from Northern technology (Box 2.3.3).

Outward foreign direct investment from the People’s Republic of China

Decomposition of recent FDI flows to and originating from the PRC suggests that Hong Kong, China and offshore financial centers are the PRC’s dominant partners for both inward and outward FDI, with a combined average share of 61% for inward and 76% for outward FDI during 2005–2009. Hong Kong, China’s role has steadily increased, while that of the offshore financial centers has diminished somewhat since the onset of the global crisis. Outside these two partners, popular destinations of PRC investment funds include economies in the North, the rest of developing Asia, and Africa (Figure 2.3.14).

2.3.14 Inward and outward FDI flows, by source and destination, People’s Republic of China



Note: Offshore financial centers comprise Bermuda, British Virgin Islands, Cayman Islands, and Panama.

Sources: ADB estimates based on data from CEIC Data Company (accessed 25 February 2011); Li (forthcoming).

[Click here for figure data](#)

2.3.3 How do North–South and South–South foreign direct investment compare in industry distribution, productivity, and spillovers?

A few case studies¹ on developing Asia show industry, size, and productivity differences between Southern and Northern plants. FDI from sources in the South tends to be a major presence in textiles and apparel; food; wood and paper products; and rubber products. Firms from the North tend to be dominant in chemicals, transport equipment, and some types of machinery.

Although these are rather wide industry categories, it is fairly safe to characterize the second group of industries as being more capital-intensive and more technology-intensive than those of the first group.

Size characteristics, as measured by output and employment per plant, regardless of industry, show that plants with Northern owners are much larger than those with Southern owners from, for example, Hong Kong, China; Malaysia; Singapore; and Thailand. Since plant sizes differ widely by industry, and clothes factories are typically much smaller than those of auto plants, these differences reflect the industry distributions mentioned above. Margins are larger for output per plant than for employment per plant, pointing to productivity differences in addition to the industry mix.

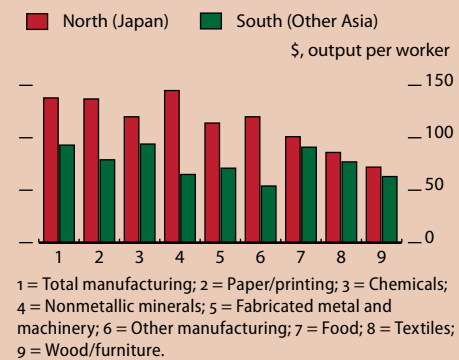
Do these industry distribution and size differentials point to distinct differences in productivity between foreign-owned and locally owned plants?

In an Indonesian case study, labor productivity in plants representing FDI from the North (Japan) was found to be significantly higher than in plants representing FDI from the South in a broad set of industries (Box figure). The exceptions to this pattern were foods, textiles, and wood/furniture—industries in which FDI from the South were a major presence.

In the two cases of Hong Kong, China and Singapore, compared with plants owned by Southern firms, those owned by Northern firms reported higher productivity of close to 20% (in Hong Kong, China) and of more than half for United States- and European-owned plants and close to a third for Japanese-owned plants (in Singapore).

An issue of interest to host FDI countries concerns the extent to which FDI technology is absorbed by local firms, which is a process referred to as spillovers and which comes in the form of increased competition; copy-catting of foreign firms' production techniques,

Labor productivity of foreign-owned plants in Indonesian manufacturing, 1997–2003



Source: Takii (2011).

[Click here for figure data](#)

products, and ways of doing business; and availability of a greater range of products or of products of better quality.

Results reported in studies are mixed. Countries and firms differ in their ability to benefit from the presence of foreign-owned firms. Insignificant impacts seem to be driven by the fact that Southern lateral investment is mainly in labor-intensive industries, which are associated with relatively low productivity. This is consistent with the hypothesis that spillovers are larger for North–South FDI than for South–South FDI because Northern-owned firms are the original owners of technology in most industries.

It may, however, be true that the less advanced technologies used by Southern investors are more suited to the conditions of the host Southern countries, such as labor force or management skills, levels of education, or local customs, and might be more easily imitated or learned than those of the Northern firms.

In general, affiliates from Northern countries tend to be large, and can have many things to teach Southern host-country firms. But the latter may be too small to use the technologies suited to such larger affiliates.

1. Such as Ramsetter (2004, 1994) on Thailand; and Takii (2011) on Indonesia.

Source

Lipsey and Sjöholm (forthcoming).

The history of the PRC's outward FDI may be briefly described as follows. The PRC government deregulated outward FDI in 1976, allowing PRC firms to establish joint ventures abroad. These were initially seen in Hong Kong, China, and Sudan, where the motivation was trade-related and resource-seeking. The PRC's outward FDI did not show real increases, however, until 2003 when its investment in the nonfinance

sector hit \$2.9 billion and was followed by years of annual doubling until flows reached \$59.0 billion in 2010.

Outward FDI from the PRC became noticeable in 2003, or about 3 years earlier than what Dunning's (1981, 1986) rule of thumb would forecast. Were this rule—that a country becomes a FDI exporter only after its per capita gross national income exceeds \$2,000—correct, only in 2006 would the PRC have become a significant source of FDI. That it became so earlier is probably due to the role played by state-owned enterprises. From 2002 to 2003, outward FDI from the PRC increased from \$0.98 billion to \$2.85 billion, with 73.5% of the latter amount due to such enterprises. And in 2003–2009, they accounted for more than 80% of the PRC's outward FDI stock and flow, with funds coming from huge corporate savings. Investments from state-owned enterprises were primarily resource seeking, going to energy and mining, in both North and South (Table 2.3.3).

Table 2.3.3 Outward FDI from the People's Republic of China, by type

Motivation	Industry	Firms and characteristics	Location
Resources	Energy and resources (mining in particular) leasing and business services	Central state-owned enterprises	Worldwide
Market	Wholesale and retail trades, telecommunications, textiles, shoe-making, and car industry (labor intensive)	Small and medium-sized enterprises, except for a few big companies like Huawei and ZTE	Asia, Africa, and Latin America for local markets
Efficiency	Electronics, machinery	Green (air-conditioner maker), Sany (machinery manufacturer)	Mainly south, such as Latin America
Strategic assets	Research or design center, merger with or acquisition of technology-intensive competitor	Sany, Gily, Lenovo, Haier	Europe

Source: Li (forthcoming).

In contrast, outward FDI of private enterprises tended to come from small- and medium-size enterprises and in manufacturing. Foreign investments by private enterprises mostly sought to penetrate southern markets in industries such as telecommunications, textiles, and automobiles. Certain investments in Latin America were intended to reap efficiency gains through reductions in transport cost and by using local production centers as regional bases. Most investments were in labor-intensive industries. For example, the PRC's FDI in the South included investments in telecommunications, city-bus manufacturing, and infrastructure construction.

As a result of the surge in outward FDI, the PRC has become an important source of capital and technology for neighboring, low-income countries, thus promoting industrial migration.

Summary and key policy messages

The importance of South–South FDI is rising. While the majority of global outward FDI flows and stocks still originate in industrial economies, developing economies are emerging as important sources of outward FDI, with their share reaching 20% of the global total. Because of its high growth profile and accumulating financial resources, developing

Asia is becoming a major player in this trend, accounting for more than 70% of outward FDI stock from developing countries. Indeed, the region's significance was highlighted by the resilience of outflows from developing countries during the global financial crisis, in contrast to those coming from the North.

Over the past two decades, Asian FDI has become more intraregional as, driven by the success of factory Asia, international production networks have deepened. More than half of total FDI inflows to developing Asia are estimated to originate in the region. Recent evidence from seven economies of developing Asia (the PRC; Hong Kong, China; India; the Republic of Korea; Malaysia; Taipei, China; and Thailand) indicates that about 40% of their combined outward FDI (excluding India and the Republic of Korea) were directed to the region, while 37% of their inward FDI flows originated in the region.

Enterprises invested with foreign capital are known to introduce new products or technology and to enhance the quality of the labor force in the host economy. The evidence that South–South FDI does this, however, is mixed at best. To maximize the benefits of inward FDI, host economies ought, therefore, to design and adopt investment policies such that positive externalities are generated for both local firms and the labor force. More specifically, continued efforts should be made to improve the business environment, upgrade labor skills, foster technology transfer, and integrate FDI firms into local economies. In addition, policy makers in host economies should periodically scrutinize the effectiveness of trade policy to ensure that industries are not overprotected and that regulations are not constraining growth.

Developing Asia is playing an increasingly important role in filling the investment needs of other countries inside and outside the region and, in turn, improving the productive capacity of industries in those countries. Prospectively, outward FDI from the high-saving countries of developing Asia can also help to address the global current account imbalance to the extent that savings are invested in Southern countries rather than in low-risk assets in the North.

Northern FDI's strong suits—association with more advanced technologies and more effective management styles—remain indispensable. Northern and Southern FDI complement rather than substitute. Moreover, the low FDI-to-capital-stock ratio of many economies in developing Asia suggests that the quality of the capital stock (with implications for technology and other spillovers) can be vastly improved, which can best be addressed by Northern sources of capital.

Countries in developing Asia should therefore continue to promote investment-friendly policies to attract more FDI. These strategies include improving the investment climate to attract foreign capital in a broader set of industries; developing the finance sector, particularly equity and bond markets to facilitate flows of funds; and promoting capital-account openness.

Wider economic links for development

South–South economic links go beyond trade and investment. Labor movement and remittances, knowledge sharing, and macroeconomic policy coordination are other channels through which developing economies are benefiting from closer ties. For knowledge sharing and policy coordination, a wide range of cooperative activities is carried out each year, but their extent is unclear as systematic monitoring is lacking.

Labor movement and remittances

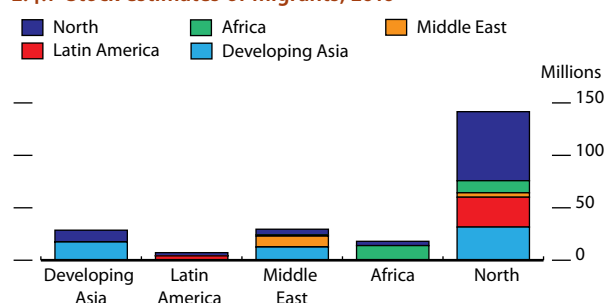
Just as globalization has opened up markets for goods and capital, so it has for labor. Freer cross-border movement of people has allowed labor markets of different countries to be more closely integrated. People are on the move, the streams reflecting divergences in circumstances and opportunities, which results in more efficient allocation of global resources. Out-migration from labor-surplus economies increases labor productivity; in-migration to labor-scarce countries provides either cheap or highly demanded labor. Ultimately, labor movements contribute to economic growth all round.

Industrial countries of the North remain the most sought-after destinations of migrant workers. But the economic success of the South has created rising demand for both unskilled workers and highly skilled professionals—the former to produce manufactures cheaply or provide low-skilled services, and the latter to complement new technology. Labor flows within the South accelerated in the early 1970s when the Middle East started attracting thousands of workers from Asia for construction work and domestic service as a result of the oil price boom.

In particular, the workers came from Bangladesh, India, Indonesia, Pakistan, the Philippines, and Sri Lanka. More recently, East and Southeast Asia have become major destinations for Asian workers, with their export-led model of development. Notable host countries in these subregions include the newly industrialized economies of Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China, as well as emerging economies of Malaysia and Thailand.

Among migrant settlers, North–North migrants constitute the largest group (Figure 2.4.1). This possibly reflects the freer labor movements within Europe and the North in general. North-to-developing Asia migrants make up the second-largest group. This may well stem from Asia’s rising economic importance. Interestingly, for each region of the South, more emigrants relocate to the North than intraregionally. Outside the North, interregional migration from the South seems insubstantial. This trend may be indicative of physical, policy,

2.4.1 Stock estimates of migrants, 2010



Source: World Bank. *Bilateral Estimates of Migrant Stocks 2010*. <http://www.econ.worldbank.org>

[Click here for figure data](#)

and institutional constraints to interregional labor mobility or of preferences due to cultural and linguistic affinity of countries nearby.

Recently, however, rising labor mobility within the South has notably increased the South's migrant stock, bringing it rapidly closer to that of South–North flows (Figure 2.4.2).

Most countries' policies on labor flows are more restrictive than their rules for goods or capital movements. This is because, on the one hand, host countries require immigrants to have relevant skills and, on the other, countries of origin want to limit the brain drain, while simultaneously protecting the rights of their workers abroad. To ensure that labor movements are mutually beneficial, coordinated policies are needed.

Growing migration has gone hand in hand with rising flows of remittances, which contribute to the economic growth of recipient countries and provide an additional source of funds for their receiving households. A majority of the top 10 remittance-receiving countries in the world (India, the PRC, Mexico, the Philippines, Bangladesh, and Nigeria) are in the South, with developing Asia accounting for the lion's share of the total flows. Indeed, the rates of growth of remittance inflows to developing Asia are higher than those flowing into other parts of the South.

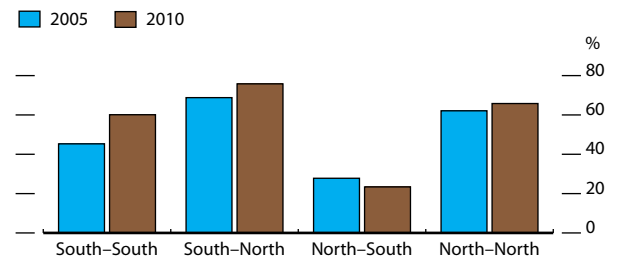
Total remittance inflows to all developing countries averaged around \$315 billion annually in the 3 years to 2010 (Figure 2.4.3). The great bulk of these inflows went to middle-income countries, particularly to developing Asia, which received around \$170 billion of these flows on an annual basis in the last few years. As a share of GDP, remittance receipts were especially important in Asia for Tajikistan, Nepal, the Kyrgyz Republic, Bangladesh, and the Philippines, as well as for several Pacific island countries.

Although North–South transfers of workers' remittances account for close to 45% of global flows, South–South transfers have also grown in importance. The economic resilience of the South manifested itself in the rising share of South–South remittances—from 18% in 2005 to 25% in 2010 (Figure 2.4.4).

In contrast, the North–North share declined from about 34% to 29% over the same period. As the major remittance-sending countries were hit by the global crisis, the growth in remittance flows slowed, but the flows to each Southern region generally did not decline. Indeed, the flows to developing Asia are apparently reverting to a higher trajectory.

Countries have undertaken various cooperative policy measures to improve the efficiency of remittance procedures. Indeed, the cost of making such transfers through formal channels has declined and led to a larger share being remitted through wire transfers, which are more easily recorded by central banks. Beyond this, tighter finance sector coordination would facilitate more secure ways of making transfers, while improving the accuracy of statistics on remittance flows.

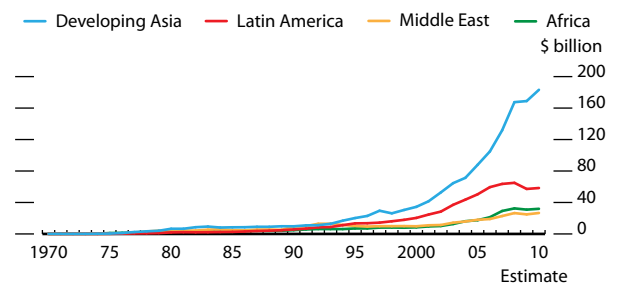
2.4.2 Stock estimates of migrants



Source: World Bank. *Bilateral Estimates of Migrant Stocks 2005 and 2010*. <http://www.econ.worldbank.org>

[Click here for figure data](#)

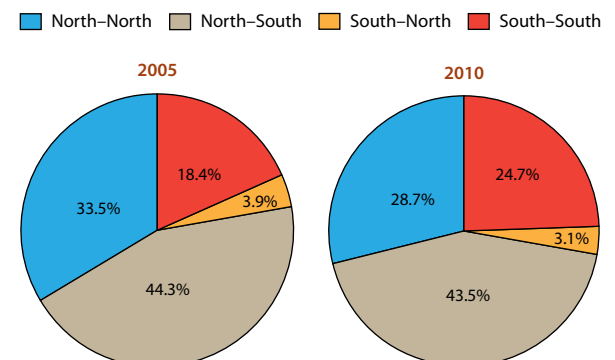
2.4.3 Remittance inflows



Source: World Bank. 2010. *Migration and Remittances Data*. November. <http://www.econ.worldbank.org>

[Click here for figure data](#)

2.4.4 Shares of global remittance flows



Source: World Bank. *Bilateral Remittance Estimates for 2005 and 2010 using Migrant Stocks, Host Country Incomes, and Origin Country Incomes*. <http://econ.worldbank.org>

[Click here for figure data](#)

South–South knowledge sharing

Mobility of ideas across borders also reduces economic disparities among regions. New opportunities for global learning across regions and countries are opening up, and the sharing of development experiences (including through North–South, South–South, and triangular cooperation) to strengthen and broaden sources of knowledge for growth and development has expanded.

Commensurate with the economic growth of the South, South–South knowledge sharing has become an important part of international relations. Indeed, South–South knowledge exchange is one of the nine pillars of the G20 Development Consensus for effective collaboration among developing countries on development solutions. It can be enhanced through triangular cooperation arrangements, where a bilateral or multilateral donor teams with a more advanced developing country to provide lessons and advice to another developing country.

The United Nations Economic and Social Council (ECOSOC, 2008) gives examples of South–South knowledge sharing. These include technical cooperation programs of various countries, such as Argentina, Chile, Egypt, and Tunisia, as well as the PRC, India, the Republic of Korea, Singapore, and Thailand. It notes, however, that Southern multilateral institutions play only a limited role in technical cooperation and that Southern bilateral development cooperation is driven mainly by geographic proximity, except the PRC's.

Drawing a distinction between North–South and South–South cooperation, ECOSOC observes that projects supported by Northern donors focus more on social sectors, whereas Southern bilateral and multilateral institutions prefer projects in hard-core infrastructure sectors such as communications, energy, and transport.

For Asia, Schulz (2010) lists numerous examples of cooperation on knowledge-sharing spanning a wide range of areas such as poverty reduction, sector programs, local administration, microfinance, and aid management. The International Poverty Reduction Center, set up in 2005 in the PRC, promotes experience sharing with developing countries and assists them through training, research, and exchange events.

Prospectively, countries in the South can learn from each other on various other issues. Sharing best practices in environment-friendly management of solid and hazardous waste, for example, can enhance economic sustainability and reduce health care costs. Similarly, knowledge sharing on farming technology and practices that increase agricultural productivity, as well as on mitigating the impacts of global warming on agricultural production, can improve food security.

Knowledge-sharing mechanisms have mushroomed at all levels, but they lack harmonization, with communication and coordination among the layers limited. Building a strong architecture for South–South cooperation calls for systematically sharing these mechanisms.

Macroeconomic cooperation

Coordinating macroeconomic policies and institutional measures has become an effective means of economic cooperation. For example, G20's actions during the global crisis helped to synchronize fiscal and monetary

stimuli across countries. And following the return to growth of the global economy, it is now focusing on how global imbalances are best addressed.

The recovery of the world economy underscored the value of South–North macroeconomic cooperation. South–South cooperation, however, is likely to figure more prominently in global rebalancing initiatives. Indeed, proposed solutions cannot focus on United States–PRC bilateral trade balances alone, because many developing Asian economies also have trade deficits with the PRC. Instead, coordinated exchange rate adjustments can mitigate the disruptive effects of, for instance, a unilateral exchange rate realignment on other economies.

Two other instances of macroeconomic and institutional cooperation involve countries adopting a common economic policy. Addressing short-term volatility in capital inflows by imposing temporary capital controls can be harmful for a country if it acts unilaterally. But the policy may be feasible if it is executed in an internationally coordinated manner. As mentioned in Part 1 of the *Asian Development Outlook 2011*, G20's plan to establish practical indicative guidelines for assessing a country's current account imbalances and set out principles for capital control is a useful start, to which the South, particularly Asia, can provide many lessons.

In a similar vein, using the South's savings to fund regional investment projects rather than placing them in safe assets in the North can contribute to global rebalancing. But this requires deepening the regional capital markets and adopting coordinated policies for capital market liberalization. Fortunately, regional financial institutions in the South have been taking steps to integrate with global markets, develop domestic capital and bond markets, and promote macroeconomic coordination.

Many efforts at macroeconomic cooperation are under way in the South. In Latin America and the Caribbean, initiatives include the proposal to establish a cohesion fund (a structural instrument intended to reduce economic and social gaps and to promote regional economic stability) for member states of the Central American Common Market, and the creation of the Mercosur Structural Convergence Fund (that also promotes competitiveness and social cohesion, particularly among economically smaller members).

In Asia, ASEAN+3 projects consist of setting up the informal ASEAN Surveillance Process (to monitor and exchange information on financial and economic developments); developing Asian bond markets; adopting the Economic Review and Policy Dialogue process (for exchanging views on global, regional, and country economic development issues as well as on risks affecting regional economies and the options for policy); and establishing the multilateralized Chiang Mai Initiative (a \$120 billion reserve pool intended to provide short-term liquidity to supplement existing international financial arrangements).

Harnessing South–South cooperation to its full potential

South–South cooperation initiatives can be a powerful force for development and change. Closer ties will facilitate better sharing of goods and services, knowledge and technology, and even labor resources. This

sharing, in turn, will afford more opportunities for countries in the South to grow economically. Integration of regional markets through the core areas of trade and investment will allow a better distribution of benefits from the growth process as well. Expansion of economic relations within developing Asia and across Southern countries will not only strengthen Asia's role as a driver of global growth, but also give its lagging states a chance to catch up with the leading ones.

To fully realize these benefits, however, the South needs to address numerous bottlenecks—including outdated laws, regulations, and standards; barriers to trade; poor investment climates; low-quality infrastructure; and shortages of capital and skilled labor—all of which hamper the deepening and expansion of links among its economies. Still, the fact alone that the South recognizes the challenge is a good start to bring back its growth to a sustainable path.

Endnotes

- 1 The South refers to Africa, developing Asia, Latin America, and the Middle East. *Africa* comprises Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Republic of the Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Morocco, Mozambique, Namibia, Niger, Nigeria, Reunion, Rwanda, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, United Republic of Tanzania, Togo, Tunisia, Uganda, Western Sahara, Zambia, and Zimbabwe. *Developing Asia* refers to the 44 developing member countries of ADB including Brunei Darussalam, an unclassified member country. *Latin America* comprises Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Bolivarian Republic of Venezuela, and Yemen. *Middle East* covers Bahrain, Egypt, Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Occupied Palestinian territory, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, and United Arab Emirates. The North is the residual.
- 2 The impact of recent developments in North Africa and the Middle East, however, is not yet clear.
- 3 Data for all economies other than Taipei, China are compiled from the UN Comtrade database, based on Revision 3 of the Standard International Trade Classification (SITC, Rev. 3). Data for Taipei, China are obtained from the trade database of the Council for Economic Planning and Development, Taipei, China. The data set spans from 1990 to 2009. The reported data refer to merchandise trade, not services trade, for which a comprehensive database of bilateral flows is not available. To facilitate the comparability of trade shares across regions over time in view of sharp price fluctuations, the discussion generally refers to merchandise trade net of fuel trade (oil and gas, SITC category no. 3), unless otherwise specified.
- 4 Although this exclusion introduces a downward bias to the share of the oil-exporting regions, it does not alter the basic conclusion on Asia's dominant role in South–South trade. In 2009, for instance, developing Asia's share in total South–South merchandise trade was 66% when fuel is included and 74% when fuel is excluded, and the PRC's corresponding shares were 37% and 40%.
- 5 While this is the case for average tariffs applied, it is also true that peak tariffs tend to be highest in the North, especially for products of key interest to Southern exports, such as food products.
- 6 The growth rate of non-Asian South–South trade was as high as 47.2% a year on average from 1990–1991 to 2000–2001, although its base was very small.
- 7 The exception is Latin America, whose South–South share of exports is below that of imports. This is explained by the inclusion of Mexico in the regional aggregate. As a member of the North American Free Trade Agreement, Mexico sends a large share of its exports to Canadian and United States markets. When Mexico is excluded, Latin America's patterns are consistent with those of the other Southern regions.
- 8 Based on data sourced from the *Latin Business Chronicle*, the US Census Bureau, and Eurostat.
- 9 People's Republic of China; Hong Kong, China; India; Indonesia; Republic of Korea; Malaysia; Pakistan; Philippines; Singapore; Taipei, China; Thailand; and Viet Nam.

- 10 For a detailed description of the Logistics Performance Index, see <http://info.worldbank.org/etools/tradesurvey/modela.asp>.
- 11 Recall, though, that the model assumes that there are no changes in agricultural trade policies over the projection period. Perhaps more realistic scenario, especially for a rapidly growing Asia, is a steady rise in agricultural protection to slow the decline in food self-sufficiency—as happened over the past 50 years in the most advanced Asian economies (see, for example, Anderson and Nelgen, 2011).
- 12 In reality, some of these agreements have already been partly implemented and others, if implemented, will be staggered over time.
- 13 Although certainly indicative, the results are based on comparative static analyses that fail to capture additional dynamic gains from trade reform, which can be substantial.
- 14 This estimated global welfare gain from freeing all of the world's merchandise trade turns out to be small both in absolute terms and compared with the welfare effect of a GDP slowdown in high-income countries. As the caveats in the next section make clear, however, these gains from global trade reform are very much lower-bound estimates.
- 15 The South–North average tariffs for each commodity are implemented as a ceiling tariff for South–South trade, with any bilateral tariffs already lower than these remaining unaffected (the exception predominately farm products).

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