Africa's Silk Road China and India's New Economic Frontier

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OVERVIEW

CONNECTING TWO CONTINENTS

China and India's newfound interest in trade and investment with Africa—home to 300 million of the globe's poorest people and the world's most formidable development challenge—presents a significant opportunity for growth and integration of the Sub-Saharan continent into the global economy. These two emerging economic "giants" of Asia are at the center of the explosion of African-Asian trade and investment, a striking hallmark of the new trend in South-South commercial relations. Both nations have centuries-long histories of international commerce, dating back to at least the days of the Silk Road, where merchants plied goods traversing continents, reaching the most challenging and relatively untouched markets of the day. In contemporary times, Chinese trade and investment with Africa actually dates back several decades, with most of the early investments made in infrastructure sectors, such as railways, at the start of Africa's post-colonial era. India, too, has a long history of trade and investment with modern-day Africa, particularly in East Africa, where there are significant expatriate Indian communities. Today's scale and pace of China and India's trade and investment flows with Africa, however, are wholly unprecedented.

The acceleration of South-South trade and investment is one of the most significant features of recent developments in the global economy. For decades, world trade has been dominated by commerce both among developed countries the North—and between the North and the developing countries of the South.¹ Since 2000 there has been a massive increase in trade and investment flows between Africa² and Asia. Today, Asia receives about 27 percent of Africa's exports, in contrast to only about 14 percent in 2000. This volume of trade is now almost on par with Africa's exports to the United States and the European Union (EU)—Africa's traditional trading partners; in fact, the EU's share of African exports has halved over the period 2000–2005. Asia's exports to Africa also are growing very rapidly—about 18 percent per annum—which is higher than to any other region.⁴ At the same time, although the volume of foreign direct investment (FDI) between Africa and Asia is more modest than that of trade—and Sub-Saharan Africa accounts only 1.8 percent of global FDI inflows⁵—African-Asian FDI is growing at a tremendous rate. This is especially true of Asian foreign direct investment in Africa.6

China and India each have rapidly modernizing industries and burgeoning middle classes with rising incomes and purchasing power. The result is growing demand not only for natural resource-extractive commodities, agricultural goods such as cotton, and other traditional African exports, but also more diversified, nontraditional exports such as processed commodities, light manufactured products, household consumer goods, food, and tourism. By virtue of its labor-intensive capacity, Africa has the potential to export these nontraditional goods and services competitively to the average Chinese and Indian consumer and firm.

With regard to investment, much of the accumulated stock of Chinese and Indian FDI in Africa is concentrated in extractive sectors, such as oil and mining. While this has been grabbing most of the media headlines, greater diversification of these countries' FDI flows to Africa has in fact been occurring more recently. Significant Chinese and Indian investments on the African continent have been made in apparel, food processing, retail ventures, fisheries and seafood farming, commercial real estate and transport construction, tourism, power plants, and telecommunications, among other sectors. Moreover, some of these investments are propelling African trade into cutting-edge multinational corporate networks, which are increasingly altering the "international division of labor." China and India are pursuing commercial strategies with Africa that are about far more than resources.

Despite the immense growth in trade and investment between the two regions, there are significant asymmetries. While Asia accounts for one-quarter of Africa's global exports, this trade represents only about 1.6 percent of the exports shipped to Asia from all sources worldwide. By the same token, FDI in Asia by African firms is extremely small, both in absolute and relative terms. At the same time, the rise of internationally competitive Chinese and Indian businesses has displaced domestic sales as well as exports by African producers, such as textile and apparel firms, whether through investments by Chinese and Indian entrepreneurs on the Sub-Saharan continent or through exports from their home markets. This competition spurs African firms to become more efficient, but it also creates unemployment and other social costs during the transition. Not surprisingly, some African governments are responding with policies that protect domestic businesses.

As the global marketplace continues to be increasingly integrated, with rapidly changing notions of comparative advantage, much is at stake for the economic welfare of hundreds of millions of people in Sub-Saharan Africa. With this newest phase in the evolution of world trade and investment flows taking root—the increasing emergence of South-South international commerce, with China and India poised to take the lead—Africans cannot afford to be left behind,

especially if growth-enhancing opportunities for trade and investment with the North continue to be as limited as they have been. Nor can the rest of the world, including Africa's international development partners, afford to allow Africans to be unable to genuinely participate—and most importantly, benefit from—the new patterns of international commerce.

Objectives of the Study

Against this backdrop, there is intense interest by policymakers and businesses in both Africa and Asia, as well as by international development partners, to better understand the evolution and the developmental, commercial, and policy implications of African-Asian trade and investment relations. This interest is reflected, perhaps most notably, in the South-South discussions held during the African-Asian summit in Jakarta in April 2005 celebrating the fiftieth anniversary of the Bandung Declaration, where the dramatic rise in international commerce between the two regions figured prominently, as well as at the July 2005 G8 summit in Gleneagles, where the leaders of the North underscored the growing importance of South-South trade and investment flows, especially as they pertain to the prospects for fostering growth and poverty reduction in Africa.

Yet despite the sizeable—and rapidly escalating—attention devoted to this topic, especially by some of the world's most senior officials, there is, surprisingly, a paucity of systematic data available on these issues to carry out rigorous analysis, and from which inferences of a similar caliber could be drawn to meet the interest and provide the desired understanding. The vast majority of accessible information is based on anecdotes or piecemeal datasets, which make a well-informed assessment difficult to generate.

This study utilizes new firm-level data from a large World Bank quantitative survey and from originally developed business case studies both carried out by the World Bank in the field in mid-2006 in four countries—Ghana, Senegal, South Africa, and Tanzania. The survey and business case studies focused on the African operations of Chinese and Indian businesses, as well as the operations of domestic (African-owned) and other internationally owned firms located in Africa. Based on these data, official government statistics, and existing data compiled by the World Bank and other donors, the study seeks to answer:

• What has been the recent evolution of the pattern and performance of trade and investment flows between Africa and Asia, especially China

and India, and *which* factors are likely to significantly condition these flows in the future?

 What have been the most important impacts on Africa of its trade and investment relations with China and India, and what actions can be taken to help shape these impacts to enhance Africa's economic development prospects?

In focusing on these questions the study examines four key factors that are significantly affecting trade and investment between Africa and Asia:

- "At-the-border" trade and investment policies, including policies affecting market access (tariffs and non-tariff barriers (NTBs)); FDI policy regimes; and bilateral, regional, and multilateral trade agreements;
- "Behind-the-border" (domestic) market conditions, including the nature of the business environment; competitiveness of market structures; quality of market institutions; and supply constraints, such as poor infrastructure and underdeveloped human capital and skills;
- "Between-the-border" factors, including the development of crossborder trade-facilitating logistical and transport regimes; quantity and quality of information about overseas market opportunities, including through expatriates and the ethnic diasporas; impacts of technical standards; and the role of migration;
 - Complementarities between investment and trade, including the
 extent to which investment and trade flows leverage one another;
 the effects of such complementarities on scale of production and
 ability of firms to integrate across markets; participation in
 global production networks and value chains; and spillover
 effects of transfers of technology.

The first set of factors is typically presumed by most observers to be dominant in affecting trade and investment relations between Africa and Asia. This study finds, however, that the effects of formal trade and investment policies are likely to be of equal, if not secondary, importance compared to the latter three sets of factors. The analysis finds that behind-the-border and between-the-border conditions, as well as the interactions between investment and trade flows, are the major elements that influence the extent, nature, and effects of Africa's

international commerce with China and India, and therefore these are the areas where the priority for policy reforms likely should be placed.

The assessment undertaken in this study is largely economic in nature. In this regard, the analysis focuses on political economy, governance, and institutional issues insofar as they directly have economic implications. Important as these issues are, however, the intention here is not to focus on them per se; they are topics deserving of separate, dedicated study.

Moreover, the study's prism is largely on the impacts on Africa of China and India's trade and investment flows with that continent, rather than the reverse. To be sure, the analysis does cover lessons that can be drawn from Asia's economic success stories that might be applicable for Africa. But a focus on the implications of African-Asian trade for China and India is beyond the scope of the study.

Finally, Sub-Saharan Africa is not a country: it is a very heterogeneous continent comprised of 47 nations with great variations in physical, economic, political, and social dimensions. The bulk of the analysis focuses on those African countries for which new data have been collected specifically for this study, or for which there are systematic data from which economically meaningful analysis, including cross-country comparisons, can be made. The countries that are the subject of the analysis were chosen to be somewhat representative of the continent, but there is no pretense that the study's findings are necessarily applicable to all African countries.

The following sections summarize the study's main findings.

Africa in the Global Economy

Economic development patterns in Africa have become increasingly diverse over the last decade. Since the mid-1990s, 16 Sub-Saharan countries have had annual GDP growth in excess of 4.5 percent. The rise in the world price of oil is certainly a major factor at play for some of these countries. One-third of the world's resource-dependent economies are in Africa. Yet excluding the oil-rich countries, the fastest-growing group of African countries has had an average growth rate of 5.5 percent. These countries host 35 percent of the region's people. By contrast, the 13 slowest-growing economies in Africa have seen their growth rise only at an average rate of 1.3 percent, with some having near zero or negative growth. These countries, many either engaged in conflict or having recently emerged from conflict, account for 20 percent of the region's people.

Africa is quite diverse in other aspects. Geography has played a major role in shaping its economic fortunes. The continent has the largest number of countries per square area in comparison with other developing regions, with each on average sharing borders with four neighbors. Africa is also highly geographically segmented. A large proportion of its population lives in countries with an unfavorable geographic and economic basis for development. Forty percent of Africans live in landlocked countries, compared with 23 percent of the population in East and Central Asia. Moreover, Africa's low population density is accentuated by high internal transport costs, estimated at nearly twice the levels of other developing regions. The result is that, except for South Africa and Nigeria—the two dominant economies in Africa—the continent is comprised of countries that have small and shallow markets.

All told, these conditions—compounded by underdeveloped market institutions, constraints on business competition, and weak governance—make international trade and investment in Africa costly. World trade and investment flows have dramatically expanded in the last 15 years, but the African continent's overall trade performance in the global marketplace has been very disappointing. In fact, Africa's overall export market share has continuously fallen over the last six decades; see figure 1. Unless reversed, this pattern does not bode well for sustained growth on the continent.

Figure 1 Africa's Share of World Exports Has Been Declining

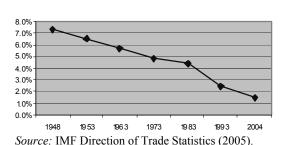


Figure 1 A frica's Share of World Exports

Africa's merchandise exports are dominated by oil. In fact, Sub-Saharan Africa is the only region of the world that has not exhibited an increasing share of non-oil exports over the last two decades; see figure 2. This disappointing performance means that Africa has not taken full advantage of international trade to leverage growth.

Figure 2 Globally, Africa Has Not **Increased its Share of Non-Oil Exports**

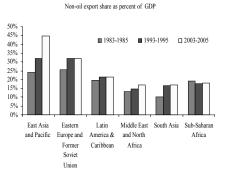
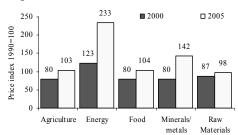


Figure 3 Prices Have Risen for Africa's **Export Commodities**



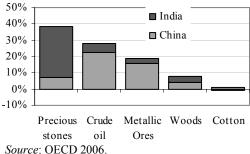
Source: IMF, Direction of Trade Statistics Yearbook, 2005.

Source: IMF DOT.

The countries in Africa experiencing strong growth outside the oilproducing nations have been buoyed, in part, by global price increases in other primary export commodities. As illustrated in figure 3, with the exception of raw materials, whose prices have been relatively stagnant, other commodities, including metals and non-oil minerals, have experienced noticeable increases in their price levels. This worldwide rise of commodity prices has been engendered in large part by the rapid growth of Asian developing countries, especially China and India. They contributed close to 40 percent of global import oil, and 20 percent for metallic ores; see figure 4. Their demand for these growth for precious stones, 30 percent for crude commodities is likely to grow, or at least not change from current levels, in the foreseeable future.

Still, a number of countries in Africa are diversifying their exports, no longer relying solely on the export of a few raw commodities. Exports are increasingly comprised of light manufactured goods, processed foods,

Figure 4 China and India's Contribution to Global Commodity Demand, 2000–2004



horticulture, and services such as tourism. Some countries—such as Nigeria and South Africa—have been increasing their shares of exports in technology-based products. In fact, they are moving up the technology ladder and exporting low- to medium-technology products in sectors where Asian countries are increasingly putting less emphasis.

Country-Level Patterns and Performance of African-Asian Trade and Investment Flows

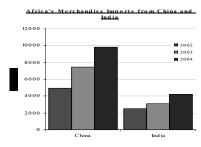
There has been a dramatic increase in trade flows between Africa and Asia, and this trend is a major bright spot in Africa's trade performance. These trade flows are largely driven by economic complementarities between the two regions. Africa has growing demand for Asia's manufactured goods and machinery, and demand in Asia's developing economies is growing for Africa's natural resources, and increasingly for labor-intensive goods. Factor endowments and other economic resources will likely continue to yield these strong country-level African-Asian complementarities, indicating the likely sustainability of the current African-Asian trade boom.

The volume of African exports to Asia is growing at an accelerated rate: while exports from Africa to Asia grew annually by 15 percent between 1990 and 1995, they have grown by 20 percent during the last five years (2000–2005). Asia is now a major trading partner of African countries. Asia accounts for 27 percent of Africa's exports, an amount that is almost equivalent to the EU and US share of Africa's exports, 32 percent and 29 percent, respectively. Despite this growth, Africa's exports still remain relatively small from the Asian perspective: Africa's exports to Asia account for only 1.6 percent of Asian global imports.

The recent growth of African exports to Asia largely reflects a sharp upturn in their exports to China and India. African exports to these two countries have been rising dramatically; see figures 5a and 5b. Though China and India still account for only 13 percent of all of Africa's exports, Africa's exports to China and India have grown 1.7 times the growth rate of the continent's total exports worldwide. Between India and China, it is China that is the more dynamic destination market for Africa's exports. Exports to China grew by 48 percent annually between 1999–2004, compared to 14 percent for India. Ten percent of Sub-Saharan exports are now to China and some 3 percent are to India. China has overtaken Japan as the leading importer of African products in Asia.

Figures 5a and 5b The Dramatic Rise of China and India as Destinations for African Exports





Source: IMF Direction of Trade Statistics.

The growth in African exports to China and India in the last few years is largely driven by large unmet domestic demand for natural resources in those countries, reflecting growing industries as well as increasing consumption by households. Petroleum is the leading commodity, followed by ores and metals. That oil dominates Africa's exports to China and India is part of the larger profile of Africa's global export pattern.

Africa's rapidly growing exports to China and India are not limited to fuels and other mineral and metal products. Labor-intensive raw or semi-processed agricultural commodities that are used for further processing either for industrial use (timber, cotton) or for consumer use (food products) are also increasingly imported by China and India. Still, taken together, petroleum, metals, and agricultural raw materials account for 85 percent of Africa's exports to China and India

The current geographic distribution of Africa's origin markets for the continent's export to China and India is concentrated. Five oil- and mineral-exporting countries (excluding South Africa and Nigeria) account for 85 percent of Africa's exports to China. South Africa alone accounts for 68 percent of Sub-Saharan exports to India.

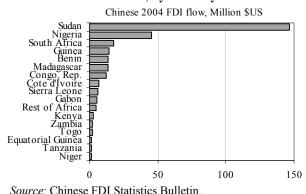
Asian exports to Africa are also increasing. Over the last five years, they have grown at an 18 percent annual rate, higher than that of any other region, including the EU. These exports are largely manufactured goods, which have surged into African markets. Some of them are intermediate inputs for products assembled in Africa and shipped out to the third markets, such as the EU and United States, or capital goods (machinery and equipment) for African manufacturing sectors themselves. At the same time, there is also a sizable

amount of African imports of consumer nondurables from Asia, which compete against Africa's domestically produced products.

African-Asian FDI flows are also growing rapidly, but the volume of such flows is more modest than that of trade. While there is some African foreign direct investment in China and India, this investment is dominated by the flows of Chinese and Indian FDI in Africa. As of mid-2006, the stock of China's FDI to Africa is estimated to be \$1.18 billion.

The vast majority of Chinese and Indian FDI inflows to Africa over the past decade have been largely concentrated in the extractive industries. Since such investments are typically capital intensive, they have engendered limited domestic employment creation. However, in the last few years, Chinese and Indian FDI in Africa has begun to diversify into many other sectors, including apparel, agroprocessing, power generation, road construction, tourism, and telecommunications, among others. Chinese and Indian FDI in Africa has also become more diversified geographically; figure 6 shows the current country distribution of Chinese FDI flows to Africa.

Figure 6 China's FDI Outflows to Africa, by Country



Examining the Determinants of the Patterns of Africa-Asian Trade Flows

What are the principal factors that account for the differences observed in the patterns of African-Asian trade flows? At-the-border formal trade policies are often at the forefront of negotiations and discussions on international commerce. Obviously, tariff and non-tariff barriers (NTBs) are the primary targets of trade liberalization. It is thus important to investigate the impact of such factors on the patterns of Africa's trade flows with Asia. More liberal import policies (e.g., low tariff rates) taken by individual countries should

facilitate more trade flows among such countries. Preferential market access measures or free trade agreements also should stimulate more trade flows.

However, changes in formal trade policies are only a necessary and not a sufficient condition for engendering cross-border trade. In order for trade to take place, tradable, internationally competitive goods and services need to be produced. Most African nations, like other developing countries, possess a rather thin base of internationally competitive private sector enterprises and the related institutions and infrastructure needed for them to be able to engage in sustainable and commercially attractive international transactions. Under these conditions, arguably there would be limited or perhaps no supply response to any beneficial reforms in trade and investment policies that might materialize. Simply put, without such reforms, new trade and investment opportunities will likely go unexploited by Africa. At the same time, for the goods and services produced to be traded efficiently, sufficient capacity is needed for trade-facilitating infrastructure, institutions, and services to lower "between-the-border" trade-related transactions costs

A large number of *qualitative* studies have been conducted to analyze how "at-the-border," "behind-the-border," and "between-the-border" factors influence the trade performance of developing countries. Prominent among them are the Diagnostic Trade Integration Studies (DTISs) carried out under the Integrated Framework for Trade-Related Technical Assistance to Least Developing Countries (IF) program. DTISs have been developed for 26 countries in Africa to identify country-specific bottlenecks for promoting trade in those countries. These studies find that these three factors are indeed major parameters affecting African trade performance. But due to their country-specific, qualitative nature, these instruments have little capacity to systematically gauge how these various factors impact African countries across the board. Nor do they give a sense of the relative importance of such impacts. To do so requires a *quantitative* cross-country approach.

"Gravity models" of bilateral trade flows provide useful information as to how significant are the various policy factors in influencing the pattern of overall trade flows between Africa and Asia on a cross-county basis. An estimated multivariate gravity model is applied to bilateral trade flows of African countries to and from various countries in the world, including Asian countries as well as African countries themselves. In addition to standard economic and geographic factors such as GDP, GDP per capita, physical distance, and common language, among others, the model incorporates variables depicting the stance of

formal trade policies (at-the-border factors), intensity of domestic business constraints (behind-the-border factors), and extent of development of institutions and infrastructure that facilitate trade and lower transactions costs (between-the-border factors). (The model also incorporates variables that permit an assessment of the extent to which African-Asian investment and trade flows complement (or leverage) rather than substitute for one another; see below.)

Table 1 summarizes the direction of statistically significant impacts from various factors based on the signs of coefficients estimated by Ordinary Least Squares (OLS) regressions. (Although not reported in the table, most of the economic, geographical, historical, and cultural factors have the predicted signs and their coefficients are statistically significant.) All of the statistically significant coefficients display the expected sign. Moreover, the results from the estimation procedures show that the same factors are equally important when examining Africa's trade performance on a global basis or its trade performance vis-a-vis Asia in particular. This indicates the robustness of the estimated model.

Table 1 Impacts on Bilateral Trade Flows of African Countries: Roles of At-the-Border, Behind-the-Border, and Between-the-Border Factors

		All Mercha	ndise Trade	Manufactu	ired Trade
		Exports from Africa	Imports to Africa	Exports from Africa	Imports to Africa
At-the-	Importer Trade Restrictiveness	n.s.	n.s.	-	n.s.
border	Regional Trade Agreement	+	+	+	n.s.
Factors	Preferential Market Access	n.s.	n.s.	+	n.s.
	Customs Procedure - Exporter	-	n.s.	-	n.s.
	Customs Procedure – Importer	+	n.s.	n.s.	n.s.
Between- the-border	Internet Access – Exporter	+	+	+	+
Factors	Internet Access – Importer	n.s.	n.s.	n.s.	n.s.
	Port Quality – Exporter	-	+	-	+
	Port Quality – Importer	+	+	+	+
Behind-the- border	Domestic Business Procedure – Exporter	-	n.s.	-	n.s.
Factors	Power Infrastructure Quality – Exporter	n.s.	n.s.	+	n.s.

Source: Authors' calculations based on 2002–2004 average figures. See chapter 2 for details.

Note: Only the signs of significant coefficients are shown (level of significance above 10 percent).

"n.s." represents a coefficient not statistically significant.

The empirical analysis shows that, on a cross-country basis, in addition to trade policy variables, both behind-the-border and between-the-border factors significantly influence the trade performance of African countries. In fact, the analysis suggests that the impacts of behind-the-border and between-the-border factors on the export propensity and orientation of international commerce

between African and Asian countries are at least equal to or even greater than those of formal at-the-border policies. For example, it is estimated that a 10 percent reduction in domestic barriers to new business start-ups or a 10 percent improvement in domestic electric power service would increase Africa's manufactured exports by about 20 percent. In contrast, a 10 percent improvement in Africa's regional trade policy regime is estimated to increase African exports only by roughly 10 percent.

We now turn to examine in detail the overall impacts of these various factors on African-Asian trade and investment.

Role of At-the-Border Policies

Tariff structures of African countries as well as China and India still have some unfavorable elements that constrain mutual trade. Since China, India, and most African countries are members of the World Trade Organization (WTO), as a rule, their tariffs are generally set on a nondiscriminatory, Most-Favored-Nation (MFN) basis. One of the objectives of the WTO Doha Round, which at present is suspended, is to seek a global agreement to lower countries' various MFN tariffs

With some important exceptions, the import tariff rates African exporters face in Asia are higher than those they face in the United States and the EU. Among Asian countries, the tariff levels of China and India on African products remain high. Tariff rates on agricultural products are high in both countries. The prevalence of high tariff rates in India is broadly based. China is a relatively liberalized market. It has zero tariffs for its most highly demanded raw materials, including crude petroleum and ores, but has moderate-to-high tariffs on other imports, especially in inedible crude materials from the South. China has announced plans to further lower its tariffs and bring about lower dispersion in the structure of tariffs by the end of 2007.

Particularly problematic is the fact that in certain cases, tariff escalation in Asian markets has been discouraging the export of higher value-added processed products from Africa. This is especially true for some of Africa's leading exports to China and India, including coffee, cocoa beans, and cashews, to pick but three examples; see table 2.

Table 2 Africa's Leading Exports Face Escalating Tariffs in China and India

		Africa Imports			
		China	India	Japan	Asia Average
211	Raw hides	6.5	0.1	0	0.8
611	Leather	8.8	14.7	0.7	4.6
612	Manufactures leather	14.6	15	1.9	7.9
222	Oil seeds	5	30	0.4	2
423	Vegetable oils	10	45	-	27.7
7111	Coffee, not roasted	8	100	0	2.3
7112	Coffee, roasted	15	30	9.1	9.1
721	Cocoa beans, raw	8	30	0	2.8
722	Cocoa powder	15	-	-	0.2
333	Petrol. oils, crude	0	-	-	0.2
334	Petroleum products, refined	7.4	15	2.1	0.3
66722	Diamonds, sorted	3	-	0	2.2
66729	Diamonds, cut	8	15	0	6
6673	Other Precious/semi-precious stones	7.3	15	0	9
897	Jewelry	26.8	15	0.9	15.7
263	Cotton	27	10	0	14.8
6513	Cotton yarn	5	15	-	5
652	Cotton fabrics, woven	10	15	1	5.6
84512	Jerseys, etc. of cotton	14	-	5.7	6.8
8462	Under garments, knitted	14.1	15	6.9	5.2

Source: UNCTAD TRAINS database.

Note: Darker shades represent higher levels of processing.

Like Asian countries, Africa also has many tariff peaks against Asian imports. Textiles, yarn, and apparel, footwear, and light manufactured goods are among Africa's largest imports from Asia; they also carry some of the highest tariffs in Africa. However, other significant imports from China and India, including electronics, machinery, and transportation equipment, generally have relatively low tariffs. Although African tariff barriers have been lowered significantly, some high tariffs on intermediate inputs into African countries constrain African manufacturing exports. This bias against exports is an obvious target for reform by African policymakers.

Non-tariff barriers (NTBs), such as technical standards, pose special challenges to African exports to Asia (as well as elsewhere). Most countries in Africa lack the institutional capacity and resources to fully implement or effectively enforce these standards. This diminishes the ability of domestic producers to penetrate certain export markets in Asia, including China and India.

As in other areas of the world, there has been a proliferation of regional and bilateral trade and investment agreements on the African continent in recent years, including reciprocal agreements among other countries in the South, including China and India. No bilateral free trade agreements (FTAs) are currently in effect between Asian and African countries, but several are either under negotiation or have been proposed; these include as a China-South Africa FTA, an India-Mauritius economic cooperation and partnership agreement, and an India-SACU (Southern Africa Customs Union) FTA.

The fashioning of the emerging "spaghetti bowl" of regional trade agreements among African countries, while perhaps being done with good intentions, in practice is not having demonstrable salutary effects; see figure 7. Many Chinese and Indian investors—not to mention African and other foreign investors—find them at best, ineffective, or at worst, confusing, and not conducive to attracting international commerce.

Nile River Basin COMESA ECCAS IGADAMU Cameroon Central Africa Gabon Equat. Guinea Djibou Rep.Congo Burundi* Ethiopia Rwanda* Conseil d Eritrea Cape Ver DR Cong Togo Burkina Faso Cote d'Ivotre Guinea -Bissau Mal 7AC Liberia Sierra Leone Mauriti Malawi* Zambia* SACU Zimbahwe* WAEMUMann iver South Africa Union CLISS AMU: Arab Maghreb Union Swaziland Lesotho Namibia CBI: Cross Border Initiative CEMAC: Economic & Monetary Community of Central Africa CILSS: Permanent Interstate Committee on Drought Control COMESA: Common Market for Eastern and Southern Africa *CBI EAC: East African Cooperation ECOWAS: Economic Community of Western African Studies IGAD: Inter Governmental Authority for Government IOC: Indian Ocean Commission SACU: Southern African Customs Union SADC IOC SADC: Southern African Development Community WAEMU: West African Economic & Monetary Un

Figure 7 The Spaghetti Bowl of African Regional Trade Agreements is Not Investor Friendly

Source: World Bank.

There are also a few African-Asian preferential arrangements. Of significance in this regard is the unilateral liberalization by China in early 2006 of certain African imports: tariffs were eliminated on 190 commodities from 25 African countries. There are also preferential arrangements provided by developed countries in the North, such as the U.S. African Growth and Opportunity Act (AGOA) and the EU Everything But Arms (EBA) programs, which also facilitate market access for exports from Africa produced by Chinese and Indian firms operating in Africa. Among other effects, these have encouraged Asian investment in manufacturing sectors such as the apparel industry in Lesotho and automobile assembling in South Africa. The size of the benefits derived from preferential arrangements diminishes significantly when

market barriers for other competitors are lowered, challenging the sustainability of such regimes.

In addition to formal international agreements, African-Asian trade and investment are also influenced—in varying degrees—by other instruments. Investment Promotion Agencies (IPAs) and public-private investors' councils in African and Asian countries have been playing an increasing and critical role in facilitating international commerce between the two regions. China and India have also established various other mechanisms in the hopes of stimulating trade and investment with Africa. A recent—and perhaps most notable—initiative is the January 2006 release in Beijing of "China's Africa Policy." The white paper identifies a large set of economic issues over which China proposes to cooperate with Africa, including trade, investment, debt relief, economic assistance, finance, agriculture, and infrastructure.

While some export and investment incentives, such as Export Processing Zones (EPZ), have been successful in China and India, in Africa, with only a few exceptions, their potential to stimulate exports has not effectively materialized. Export incentives in African countries have also had mixed results in creating backward production linkages and enhancing value-added in processed exports. The general ineffectiveness of such incentives on the African continent is due, in part, to significant implementation and enforcement challenges in the face of generally weak institutional capacities. Without strong governance disciplines and incentives in place, opportunities for discretionary behavior and corruption have arisen. The ineffectiveness of export and investment incentives is also due to the lack of the requisite infrastructure and labor skills.

"Behind-the-Border" Factors

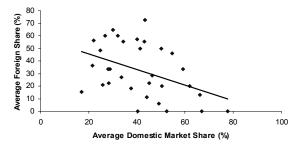
Competition is a potent force in affecting Africa's integration with Asia, particularly with businesses from China and India, and the influence occurs through a variety of channels. Domestic competition matters significantly in explaining the performance of firms operating in Africa—regardless of nationality—both in terms of productivity and international integration through exports. Intense competition on the sales side enhances both productivity and export performance. Tougher import competition, lower barriers to entry and exit, and less reliance on sales to government through public procurement, for example, tend to result in a higher propensity to export, again, across firms of all nationalities. The more competitive are African input markets, the more competitive are product markets, and both productivity and export performance are enhanced.

Scale strongly influences the performance of firms operating in Africa. This is true regardless of the nationality of the business. Larger firms outperform surveyed smaller firms both in terms of productivity and exports. Smaller firms in Africa face tougher competition overall than do larger firms, resulting in higher firm turnover among smaller businesses. However, in the case of competition from imports, larger firms are more affected, in part because they have a higher propensity to import and a greater tendency to populate importsensitive sectors than do their smaller counterparts.

The sectors in Africa that exhibit more competition are not only able to attract more FDI, but also are more effective in penetrating foreign markets through exports. In this way, domestic competition and international integration are mutually reinforcing. The lesson for African firms is clear: "success at home breeds success abroad," a finding consistent with recent experience in other regions of the world, including firms in the "transition" countries in the former Soviet Union.⁹

There is a clear role played by the entry of Chinese and Indian investors in fostering domestic competition in African markets; see figure 8. In fact, a mutually reinforcing effect is found: African firms that face more competitive markets at home have greater involvement with Chinese and Indian capital, while the African markets where Chinese and Indian investors are most prevalent tend to be the most competitive. The analysis also shows that the major source of the competition engendered in the African markets by the presence of Chinese and Indian investors is competition from imports—indeed imports from China and India themselves.

Figure 8 Chinese and Indian Foreign Investors Foster Competition in African Markets



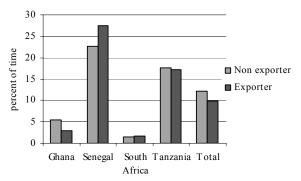
Source: World Bank staff.

As is the case throughout much of the African continent, Chinese and Indian businesses face high transactions costs behind-the-border in the locales in which they operate. The result is diminished attraction of trade and investment by investors from China and India (as well as from other countries) than otherwise would be the case. Four elements of the high cost of doing business in Africa by Chinese and Indian firms stand out:

- (i) poor quality of infrastructure services (power supply, telephone services, Internet access),
- (ii) inefficient factor markets (lack of skilled labor, rigidities in the domestic labor market, and limited access to local finance),
- (iii) unfavorable regulatory regimes, and
- (iv) weak governance disciplines.

Figure 9 illustrates the burden that exporters face from the interruption of electric service from the public grid.

Figure 9 Exporters in Africa Face Significant Interruption in Electricity Service from the Public Grid



Source: World Bank Investment Climate Assessment for Senegal, South Africa, and Tanzania. Teal et al. (2006) for Ghana.

"Between-the-Border" Factors

Africa's trade and investment flows with Asia are affected by the amount of economic or institutional "friction" between-the-borders, as is the case for trade and investment between other regions of the world. As a result, building new trade and investment relations is associated with incurring certain—and often, large—costs. Such costs arise from, among other things, assessing new

Table 3 Ethnicity vs. Nationality: Indian Investors are More Integrated into Africa than are Chinese Investors

			Ethnic Origin of Owner						
		African	African Chinese Indian European						
Nationality of Owner	African	100%	4%	48%	51%				
	Chinese	0%	93%	0%	1%				
	Indian	0%	0%	45%	0%				
	European	0%	0%	4%	41%				
	Other	0%	4%	3%	7%				

Source: World Bank staff.

market opportunities, searching for new trading or investment partners, establishing financing and marketing channels, transferring personnel and technology, conforming with customs regulations and technical standards, and determining how best to utilize logistical, transport, and communications systems, especially for landlocked countries, which are prominent on the Sub-Saharan continent.

These costs can be lowered through a variety of means. Search costs, for example, can be reduced through use of either formal channels—whether on a businesses-to-business or a government-to-government basis—or informal "soft" networks, such as ethnic networks and the diasporas. Reducing costs arising from logistical bottlenecks can come about through improvement in (or development of) trade facilitation infrastructure and related institutions. The availability of trade finance and risk insurance can help address commercial considerations. In some respects, Africa and Asia are two regions that are still widely apart: there are large gaps of knowledge about each other's markets, and there are only limited direct inter-regional transport services (air, maritime shipping services, and passenger routes). The limited provision of such services could be binding constraints to trade and investment flows between the two regions.

For African, Chinese, and Indian investors, there are significant imperfections and asymmetries in the quality of market information regarding potential cross-border commercial opportunities for the two regions. Ethnic networks are increasingly relied on to facilitate the flow of such information and to compensate for these imperfections and asymmetries. There is a striking difference in the reliance on ethnic networks between Indian and Chinese firms operating on the continent; see table 3. About one-half of the owners of surveyed firms in Africa that are of Indian ethnic origin are in fact African by nationality. (A similar proportion exists for European owners of the surveyed African firms.)

These figures suggest that Indian (and European) migrants are substantially integrated into the business community in Africa.

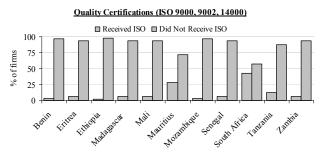
On the other hand, there is near identity in the proportion of owners of surveyed Chinese firms operating in Africa who are Chinese both by nationality and by ethnicity. This underscores the fact that Chinese investors in Africa are relative newcomers and have not, at this juncture, integrated into the African business community to any significant degree; this notion is explored more deeply in chapter 6. Instead, recent Chinese investments in Africa, as evidenced in virtually all of the business case studies carried out for this analysis, have been largely accompanied by temporary assignments of executives to the African continent. As Chinese investment in Africa has grown, it is estimated that some 80,000 migrant workers from China have moved to Africa, creating a new Chinese diaspora.¹⁰

At the same time, given that impediments to cross-border information flows are inherent in international trade and investment—particularly in the most underdeveloped counties in the world—public information services run by governments or by private firms are proving to be very important. In addition, there has been a growing role for institutional providers of export market information, such as export promotion agencies, and the similar providers of foreign investment information, such as investment promotion agencies.

The adherence by African firms to internationally recognized technical standards and accreditation schemes, such as those governed by the International Standards Organization (ISO), is extremely low; see figure 10. Indeed, only 34 countries in Sub-Saharan Africa belong to the ISO. This limits the ability of potential importers in Chinese and Indian markets to readily assess the quality of an African export in comparison to other internationally transacted products.

The flows of technology and labor—line workers as well as professionals—between Africa and Asia are facilitating the formation of business links between the two regions, which then lead to trade and foreign direct investment flows. In fact, there is a mutually reinforcing effect between trade and investment on the one hand, and skills and technology transfers on the other. For example, among surveyed Chinese and Indian firms operating in Africa, on average, those that export more from the continent have a higher proportion of workers from their corporate headquarters at home than those who export less.

Figure 10 African Exports are Constrained Because Domestic Firms Do Not Meet International Technical Standards



Source: World Bank.

But Africans and the Chinese and Indian investors operating on the continent face significant challenges in effectively exploiting such synergies. Local technological transfers or skills transfers are compromised when foreign skilled workers, brought in with foreign capital, are not given the resources, let alone the incentives, to engage in effective skill transfers to local workers. At the same time, because of inadequate education or training, Africans are often illequipped to adopt the new skills even when such transfers are being attempted.

Importantly, Chinese and Indian governments are providing or investing in resources for greater technical cooperation with African countries so as to facilitate such technological transfers, among other objectives. Greater participation by African firms in international network production increasingly being carried out by Chinese and Indian investors on the continent is another way for Africans to effectively capture opportunities for the acquisition of advances in technology and modern skills (this will be described in greater detail below).

Chinese and Indian firms (as well as other foreign investors) operating in Africa—not to mention African firms themselves—are being hampered by the inadequate and costly transport and logistics services currently found in Africa. Enhancing trade-facilitation infrastructure systems and related institutions could offer tremendous opportunities for reducing the direct and indirect transactions costs of African-Asian trade and investment. Evidence from the business case studies illustrates the point. A Chinese firm in South Africa finds that sending products from Angola to South Africa is as expensive as shipping them to China. An Indian firm in Ghana reports that shipping costs and tariffs within the Economic Community Of West African States (ECOWAS) are very expensive. It costs \$1,000 to send a container from Accra to Lagos. For that reason, the firm decided to do a cross-border investment rather than export. For firms operating in

Africa to be able to effectively compete in today's global marketplace will require dramatic improvements in the complex chain of trade-supporting services that includes customs and border procedures, management and control of freight movements, transaction documentation, and banking instruments. Indeed, the weaknesses in the continent's trade support services undermine the international competitiveness of African products, and constrain the ability of otherwise internationally competitive African firms to take advantage of new global market opportunities, including those in China and India.

Both domestic and foreign-invested firms in Africa face major problems in accessing local trade financing, which is particularly serious among small- and medium-sized enterprises. At the same time, investment by Chinese and Indian firms in Africa is being significantly aided by public trade finance programs offered by the export-import banks of the two countries.

FDI-Trade Complementarities and Network Production-Sharing Opportunities

Firms in Africa—both domestic and foreign-owned—have combined international investments and trading relationships for decades. In recent years, however, the globalized marketplace has witnessed the fragmentation of the production process and the formation of new global production and distribution networks that are tightly integrated. The rise of trade in intermediate goods and parts and components constitutes a fundamental shift in the structure of the world trading system. These transformations pose a major challenge to the businesses already operating in Africa, including Chinese- and Indian-owned, as well as those who are contemplating doing so. They also pose a challenge—and opportunity—to African policymakers in their understanding of how their countries fit into today's "international division of labor."

Under traditional notions of international trade, the direction of trade (i.e., which countries produce what goods for export) was determined by the principle of "comparative advantage," and a country specialized in the production and export of the good (or goods) for which its relative productivity advantage exceeded that of foreign countries. It is clear, however, that a radically different notion of comparative advantage has now emerged due to the cross-leveraging of investment and trade flows and the significant role that intermediate goods play in overall international trade.

Technological advances in information, logistics, and production have enabled corporations to divide value chains into functions performed by foreign subsidiaries or suppliers and to become more footloose. The availability of real-time supply-chain data has allowed for the shipping for large distances not only of durable goods, but also components for just-in-time manufacturing and—importantly for developing countries such as those in Africa—perishable goods. The result has been the rapid growth of intraindustry trade—"network trade"—relative to the more traditional interindustry trade of final goods and services. In this environment, it is hard to imagine that the future of Africa's economic development can be isolated from these networks.

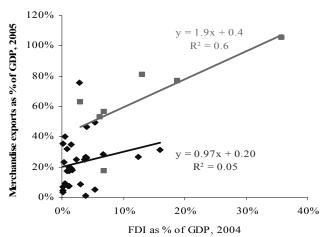
"Buyer-driven networks" are usually built without direct ownership and tend to exist in industries in which large retailers, branded marketers, and branded manufacturers play the central role in the organization of the value chain. Buyer-driven commodity chains are characterized by highly competitive, locally owned, and globally dispersed production systems. The products are typically labor-intensive consumer goods such as apparel, footwear, food and furniture, among others. "Producer-driven networks" are often coordinated by large multinationals. They are vertical, multilayered arrangements, usually with a direct ownership structure including parents, subsidiaries, and subcontractors. They tend to be found in more capital- and technology-intensive sectors, often dominated by global oligopolies, such as automobiles, machinery, and electronics. The manufacturers control "upstream" relations with suppliers of intermediate components and "downstream" or forward links with distribution and retailing services.

New statistical analysis at the country level indicates that in both Africa and Asia there are strong complementary relationships between FDI and trade; in particular, a greater inward stock of FDI is associated with higher exports. For the African countries taken together as a group, these country-level complementarities are more muted than they are for the Asian countries. However, among non-oil-exporting African countries, the complementary effects are actually larger than they are for the Asian countries. Similar results are obtained from a comparison of FDI per GDP and exports per GDP among African countries; see figure 11.

Chinese and Indian firms operating in Africa have been playing a significant role in facilitating these linkages between FDI and trade on the African continent. Indeed, firm-level evidence on these businesses' operations from new survey data and original business case studies developed in the field shows that their trade and FDI flows are complementary activities, rather than substitutes. What gives rise to this behavior?

Figure 11 African FDI and Exports are Complements

The correlation coefficient between FDI as % of GDP and merchandise exports as % of GDP



Source: IMF WEO; oil countries include Angola, Chad, Republic of Congo, Equatorial Guinea, Nigeria, and Sudan. Key: Purple line is for oil-producing countries; blue line for non-oil-producing countries.

For one thing, Chinese and Indian businesses in Africa tend to achieve larger-sized operations than do their African counterparts within the same sectors, and this appears to allow them to realize economies of scale. Thus, it is not surprising that the evidence shows that, all other things being equal, Chinese and Indian firms have significantly greater export intensity than do African firms. Moreover, the exports from Africa produced by Chinese and Indian businesses are considerably more diversified and higher up the value chain than exports sold by domestic firms.

The corporate structures of Chinese and Indian firms also differ from those of African businesses. First, the former have more extensive participation in international group enterprises or holding companies (with headquarters in their home countries); see table 4.

At the same time, Chinese and Indian firms engage more extensively in regional integration on the African continent relative to African firms themselves. They also exhibit more extensive integration into a more geographically diverse set of third country markets outside of Africa than do African businesses; see table 5. These are important findings, suggesting that

Table 4 Extent of Scale and Geographic Spread: Number of Separate Firms Belonging to Holding Companies/Group Enterprises

	African	Chinese	Indian	European
Domestic	8	1	2	3
Other Africa	2	4	1	8
Outside Africa	2	16	5	58

Source: World Bank staff.

Note: Data pertain to median values.

Chinese and Indian firms are effecting greater integration of the African economy—whether on the continent itself or into the global marketplace—than heretofore has been the case by Africa's own businesses.

Table 5 Distribution of Output Sales by Destination Market and Nationality

	African	Chinese	Indian	European
Domestic	85%	81%	89%	76%
Other Africa	10%	20%	18%	17%
Europe	5%	0%	0%	13%
North America	2%	0%	0%	2%
India	0%	0%	0%	1%
Other South Asia	1%	1%	0%	1%
China	0%	3%	0%	1%
Other East Asia	0%	0%	0%	3%
Other	1%	1%	1%	3%

Source: World Bank staff.

Note: Data pertain to 2005 median annual sales.

There is also strong evidence that Chinese and Indian firms are vehicles for the transmission of advances in technology and skills, as well as new equipment, to the African continent. This is the classic case of spillovers in the host market that often accompany flows of FDI; see table 6.

Table 6 Purchases of New Machinery by Import Origin and Firm Nationality

Nationality	African	Chinese	Indian	European
Domestic	55%	32%	15%	28%
Other Africa	3%	1%	7%	12%
China	6%	60%	13%	1%
India	5%	0%	22%	2%
Other	31%	8%	44%	56%

Source: World Bank staff.

Note: Data pertain to 2005 median values.

To be sure, there are significant differences between Chinese and Indian firms operating in Africa. Chinese businesses in Africa tend to have a different risk-aversion profile than do Indian firms, as reflected in their foreign investment decisions regarding mode of entry, their degree of vertical integration, the origin of source markets for their inputs, and the strength of affiliation with state (as opposed to private) entities in conducting transactions, among other attributes. Chinese businesses in Africa pursue business strategies that yield them greater control up and down the production line, resulting in enclave types of corporate profiles, with more limited spillover effects. Indian firms, on the other hand, pursue African investment strategies that result in greater integration into domestic markets and operate extensively through informal channels, indeed even into facets of the local political economy, surely a result of the fact that there is a longer tradition of Indian ethnic ties to Africa¹¹ (see tables 7 and 8).

Table 7 Distribution of Material Input Purchases by Origin Market and Nationality

	African	Chinese	Indian	European
Domestic	60%	31%	27%	40%
Other Africa	7%	4%	9%	9%
Europe	13%	1%	13%	34%
North America	3%	5%	1%	6%
India	5%	2%	26%	3%
Other South Asia	3%	1%	4%	1%
China	4%	55%	7%	3%
Other East Asia	2%	1%	3%	3%
Other	2%	0%	11%	1%

Source: World Bank staff.

Note: Data pertain to 2005 median annual purchases.

Table 8 Extent of Vertical Integration by Nationality

	African	Chinese	Indian	European
Output Sales to Parent Firm				
or Affiliate	9%	19%	0%	14%
Input Purchases from Parent				
Firm or Affiliate	3%	23%	9%	15%

Source: World Bank staff.

Note: Data pertain to 2005 median values.

Global value chains offer real opportunities for African countries to use Chinese and Indian investment and trade activities to increase the volume, diversity, and value-added of exports from the continent; see table 9. Indeed, as has happened elsewhere in the world by developing countries and economies making the transition from central planning to capitalism, even landlocked

countries in Africa—with the right mix of policies—may well engage in network trade. 12

Table 9 Extent of Value-added in Output Sales and Exports, by Destination Market and Firm Nationality

Firm Nationality		African	Chinese	Indian	European
	Product				
Domestic Sales	Finished Assembled	88%	90%	90%	89%
	Partially Finished	5%	9%	4%	4%
	Raw Material	6%	0%	5%	6%
Sales to Other African Countries	Finished Assembled	83%	89%	100%	78%
	Partially Finished	8%	11%	0%	15%
	Raw Material	9%	0%	0%	7%
Export Sales Outside of Africa	Finished Assembled	77%	75%	100%	90%
	Partially Finished	10%	25%	0%	10%
	Raw Material	13%	0%	0%	0%

Source: World Bank staff.

Note: Pertains to sales to private firms. Data pertain to 2005 median values.

Detailed value chain analysis of industry cases in Africa shows that certain factors are likely to be especially critical for African businesses wanting to successfully engage in network trade. These include implementing pricing schemes that fully take into account market conditions; taking steps to enhance product quality, for example through ISO certification; organizing lines of business to be as flexible and as responsive as possible to changes in demand and supply; developing the capacity to maximize speed to market; and working to enhance labor productivity through fostering skills and technology transfers as well as requiring training.

There are several industries in Africa that have either already engaged in or have strong prospects for engaging in buyer-driven network trade, including food, fresh-cut flowers, apparel, and fisheries, among others. These are all products where African exports face far tougher competition in international markets than do the continent's traditional raw commodities, and they must meet world-class standards. The prospects for African industries engaging in producer-driven network trade in the short to medium run are far more limited—without implementing concrete and economywide reforms that will attract substantial FDI by international firms plugged into such networks. There are some

exceptions, however, such as South Africa's automotive assembly and parts and components industry, a sector in which Chinese and Indian multinational firms are rapidly participating.

On the other hand, there is evidence of significant opportunities for greater African participation in network trade in services exports. And these can engender significant supply chain spillovers effects domestically, as well. One possible area is outsourcing and back-office services, such as those already being implemented in Ghana, Senegal, and Tanzania, among others. This is especially relevant to India in light of the commonality of language.

A second concrete opportunity for growth in services network exports is tourism. With rising middle classes in China and India looking to spend a significant part of their increased disposable incomes on holidays, there is clear potential for Africa to reap the benefits. Through positioning itself as a relatively close and attractive holiday destination, the gain for Sub-Saharan Africa would not just be direct (in tourism services, hotels, restaurants, etc.) but also indirect: the fact that more and more flights arrived in African airports would make transport cheaper and Asian markets more readily accessible for African goods and services

In the main, opportunities are offered by trade in global supply chains, although few African countries have been able to make the leap and exploit these opportunities. To take but one example, India's large exports of diamonds are in part based on the polishing and cutting of unfinished diamonds imported from Africa. Yet the higher value-added process of diamond finishing could well be retained in Africa, possibly by inviting Indian investment.

Investment and trade by China and India could facilitate the African continent's ability to avail itself of such opportunities. Indeed, Africa's rapid export growth to China and India could contribute even more to Africa's export diversification, in terms of products and trading partners, than has already been the case. The strong and intensifying complementarities between the two regions provide African countries with increased opportunities to use FDI and trade flows from China and India to help boost domestic growth by increasing participation in global network trade in nontraditional exports, by developing value-added, local industries through deepening forward and backward linkages to resource-based products, and by enhancing regional economic integration.

If the African continent is to effectively take advantage of the opportunities afforded by China and India's already sizable and growing

commercial interest in Africa, it will have to successfully leverage this newfound interest and be a more proactive player in global network trade. Elsewhere in the world, countries' differential performance in terms of network trade can be attributed to the large variation in the amount of FDI received.

FDI inflows are largely determined not only by traditional macropolitical and macroeconomic factors, but also by the quality of the *underlying* domestic business climate and related institutional conditions, both within individual countries and on a regional basis. Thus, the focus of reforms to enhance participation in network trade should be on a set of factors that shape a country's microeconomic fabric at a *deeper* level beyond that touched by the reform of so-called administrative barriers—such as speeding up the pace of business registration or of obtaining a business license—which has become in the conventional wisdom the way in which improvement in the investment climate comes about.

To be sure, there have been visible efforts taken by several African governments in reforming their domestic business environments. However, African countries overall still lag behind other regions with whom they are competing, both in terms of attracting investment and in exporting to foreign markets

CONCLUSIONS AND POLICY IMPLICATIONS

Market opportunities for trade and investment in the world economy will no doubt continue to grow for the countries of Sub-Saharan Africa. However, as the international economy continues to globalize, market competition from other regions—especially those in the South—will only become stronger. This poses a challenge to African policymakers to make better use of international trade and investment as levers for growth.

China and India's rapidly growing commerce with the African continent presents to its people a major opportunity. In particular, the intense interest by these two Asian economic giants to pursue commercial relations with Africa could lead to greater diversification of Africa's exports away from excessive reliance on a few commodities and toward increased production of labor-intensive light manufactured goods and services. It could also enable Africa to build on the strength of its endowment of natural resources and develop backward and forward linkages to extract more value from processing, and in some cases participate in modern global production-sharing networks. This

intense interest could also lead to enhanced efficiency of African businesses through their being more exposed to foreign competition, advances in technology, and modern labor skills; and to greater international integration, not only with other regions of the world, but perhaps most importantly *within* Africa itself, where most domestic markets are too shallow and small to allow for the scale needed to produce exports that are internationally competitive.

To be sure, there are major imbalances in the current commercial relationships that Africa has with China and India. For example, whereas China and India are emerging as increasingly important destination markets for African exports, from the perspective of these Asian countries, imports from Africa represent only a very small fraction of their global imports. At the same time, FDI inflows to Africa from China and India, although still small in an absolute sense, are growing rapidly. But both the level and growth rate of African FDI going to China and India remains extremely limited.

Absent certain policy reforms, the opportunities presented by China and India's interest in Africa may not be fully realized, while the existing imbalances could continue for the foreseeable future. All other things equal, taken together, these could reduce the likelihood of a boost in Africa's prospects for economic growth and prosperity.

The reform experience in Africa, as well as in other regions of the world, shows that reform success in such an environment requires a *combination* of actions. In particular, the lessons from these experiences are that it is not only important to implement sound, market-based at-the-border trade and investment policies, but also to take actions that deal with the impediments to trade and investment that exist behind-the-border as well as between-the-border. Indeed, these experiences suggest that, if anything, behind-the-border and between-the-border reforms actually provide for trade to have greater leverage on growth than do at-the-border formal trade and investment policies. Moreover, the evidence suggests that these reforms should be designed in such a way as to exploit the growth-enhancing complementarities between trade and investment.

The study of which this *Overview* is a part discusses such policy implications based on the empirical findings presented. Below, the principal policy implications that deserve priority attention are summarized. A "division of labor" for the responsibilities of the various stakeholders with policy-making roles in furthering Africa-Asian trade and investment is also suggested.

It is important to emphasize that, because of the significant heterogeneity among the 47 countries of Sub-Saharan Africa, the enunciated policy reforms should *not* be interpreted as being "one-size-fits-all" actions. Indeed, in practice, the reforms must be designed to take into account country-specific circumstances. These circumstances will affect not only the actual contours of actions to be taken, but also the speed and sequencing of their implementation.

Summary of Policy Implications

In view of the fact that reforms of formal trade and investment policies have long been the starting point of negotiations on international commercial relations, the discussion here focuses on them first. However, following this convention should not be interpreted as assigning greater importance to these reforms relative to those pertaining to behind-the-border and between-the-border factors and to capitalizing on FDI-trade linkages. As noted, the contrary is more likely to be the case.

At-the-Border Formal Policy Reforms

Various elements of the policy regimes governing trade and investment between Africa and Asia are driven by traditional protectionist motives. If Africa is to take full advantage of trade and investment opportunities with Asia, especially those arising with China and India, a number of reforms to these policies will be important.

- For all countries: Lowering the level of tariffs overall. Ideally, this
 should be done on an MFN basis in the context of WTO negotiations.
 Should the currently suspended Doha Round terminate, consideration
 might be given to a pan-Asian-pan-African FTA, but doing so only in
 a WTO-consistent manner and ensuring that opportunities for "tradediversion" are minimized.
- For China and India: Eliminating the numerous escalating tariffs that limit Africa's leading exports from entering their markets at competitive prices.
- For most African countries: Mitigating elements of the trade policy regime, such as tariffs on imports of certain material inputs, which serve to impart a bias toward exports. Reforms are also needed to reduce the bias in investment decisions across sectors and reduce disincentives for greater product diversification.

- For most African countries, as well as China and India: Eliminating non-tariff barriers (NTBs), including not only quotas, but use of technical standards and similar instruments as protectionist measures.
- Primarily for African countries: Rationalizing and harmonizing existing bilateral and regional agreements. The current "spaghetti bowl" of intra-African RTAs provides little, if any, incentive for new trade and investment; in some cases they appear to be more "trade-diverting" than "trade-creating."
- For African countries: Strengthening the role of Investment Promotion Agencies (IPAs) and public-private investors' councils to proactively promote FDI opportunities and eliminate bottlenecks for foreign investors interested in Africa-Asian investment opportunities.
- Primarily for African countries: Based on the experiences of the "East Asian Miracle" countries over the last several decades, there is a legitimate role for using export and investment incentives. But as the evidence shows, use of these incentives must be tailored to country-specific circumstances and even then they entail risks, especially where the requisite institutional and governance capacities do not exist. Such incentives also must be implemented in concert with existing WTO rules.

Beyond Formal Trade and Investment Policy Reforms

Reforms of formal trade and investment policies in both Africa and Asia are certainly necessary to further facilitate the flows of African-Asian commerce and to enlarge the benefits that such commerce brings—and can bring—to both regions. However, they are not sufficient. While high Asian tariffs, for example, clearly curb and shape the contours of African exports to Asia, inefficiencies, distortions, weak market institutions, and lack of competitive productive capacity in Africa appear to be equally if not more critical in limiting the export penetration in Asian markets by African businesses. Thus, even if China and India were to immediately provide open and full market access to African producers, the intended outcomes probably would only materialize if certain reform actions were taken by African policymakers. Indeed, reforms that ameliorate both behind-the-border and between-the-border impediments to African-Asian commerce and that foster the exploitation of complementarities between investment and trade flows so that they leverage one another, would be needed.

Behind-the-Border Reforms

- Primarily for all African countries: Governments should work toward enhancing domestic interenterprise competition by eliminating fundamental economic and policy barriers to new business entry.
- Primarily for all African countries: Barriers to exit of commercially nonviable firms also need to be eliminated to enhance domestic competition, through reducing subsidies and eliminating the practice of tolerating arrears (with the government, banks, and among firms).
- Primarily for all African countries: Sound governance will also require mechanisms to ensure greater transparency and accountability of public officials' conduct. Improving governance will also require efficient institutions that facilitate effective resolution of commercial disputes. Policies toward the simplification and cost reduction of formal legal procedures as well as bolstering out-of-court mechanisms will strengthen contract sanctity and property rights and improve the level of investor confidence.
- All African countries: To reduce poverty impacts from changes in prices and outputs engendered by trade flows, measures should be implemented to promote labor mobility (e.g., enhancing wage differentiation and adaptability and improving the effectiveness of social safety nets).

Between-the-Border Reforms

- Primarily for all African countries: Further development of trade facilitation infrastructure, including improvement and modernization of ports, road, and rail transport, and telecommunications/IT capacity. These will foster not only Africa's further integration into the global marketplace, but also regional integration within Africa itself. Meeting this challenge will require continued privatization or privatepublic partnerships to entice new investments.
- Primarily for all African countries: In customs, the priority reforms are to improve coordination among border-related agencies, both in countries and across countries; simplify customs procedures; make customs codes and associated regulations rules-based, transparent, and commercially oriented, with proper incentives for employees; and introduce the use of IT into customs systems.

- Most African countries: Addressing imperfections in the "information market for trade and investment opportunities." Among other measures, this would include adopting international production technical standards, such as those certified by the ISO.
- Primarily for all African countries: Reviewing measures that restrict the movement of professionals (Mode IV reforms) so as to foster transfers of modern skills and technology.

Reforms for Enhancing FDI-Trade Complementarities and Participation by African Firms in Network Trade

- Most African countries: Bringing the regime governing FDI in line with international best practices so as to attract modern multinational corporate investment and global production-network trade. Typically this would include: (i) adhering to "national treatment" for foreign investors; (ii) prohibiting the imposition of new, and the phasing out of existing, trade-related investment measures (TRIMs), e.g., local content measures; and (iii) providing for binding international arbitration for investor-state disputes. However, the practical design of these reforms should be tailored to country-specific circumstances. Moreover, it may be desirable to phase in some measures over a longer time period than others.
- All African countries: Deregulating services should be the rule rather than the exception, and include the implementation of market-reinforcing reform of regulatory procedures and rules, including rate levels and structures. Of course, certain African countries, such as South Africa, are more advanced on this score than are others.
- All African countries: Enhancing flexibility in capital markets so that resources can respond more efficiently to changes in market forces.
- All African countries: Strengthening training and secondary and postsecondary educational programs for workers and managers.

Division of Labor among Policymakers

International Community (Donors and International Organizations)

 Most, if not all, countries in Sub-Saharan Africa are in need of technical assistance (TA) and capacity building to strengthen traderelated institutions and policy implementation and management.
 Priority areas of focus for such TA would be in "aid-for-trade" issues, such as trade facilitation, technical standards, and improving customs regimes; harmonization of regional trade agreements; WTO accession (for current nonmembers); and governance reform.

African, Chinese, and Indian Governments

- Much of the reform agenda will largely depend on the implementation efforts of the countries themselves.
- Arguably, the most challenging of such tasks will be the vigorous implementation of economywide behind-the-border and between-the-border reforms, as well as reforms to leverage the complementarities between trade and FDI. These would involve actions to enhance competition in domestic markets and foster greater flexibility in labor markets; improve trade facilitation mechanisms; liberalize the services sectors and reform of associated regulation; and improve the climate to attract FDI.
- In the area of trade policy, actions would include tariff reductions; elimination of escalated tariffs; termination of NTBs; removal of disincentives to exporting; pursuit of WTO accession; and rationalization, harmonization, and modernization of existing RTAs.

REFERENCES

- Broadman, Harry. 2005. From Disintegration to Reintegration Eastern Europe and the Former Soviet Union in International Trade. Washington, DC: World Bank.
- Eisenman, Joshua, and Joshua Kurlantzick. 2006. "China's Africa Strategy" Current History (May): 219–224.
- IMF (International Monetary Fund). 2006. *Balance of Payments Statistics*. Washington, DC: International Monetary Fund.
- ——. 2005. *Direction of Trade Statistics Yearbook*. Washington, DC: International Monetary Fund.
- Ministry of Foreign Affairs of the People's Republic of China. 2006. "China's Africa Policy."
- Puri, Lakshmi. 2004. Silent Revolution in South-South Trade. Geneva: WTO.
- Teal, Francis, James Habyarimana, Papa Demba Thiam, and Ginger Turner. 2006. "Ghana: An Analysis of Firm Productivity." World Bank Africa Region Regional Program on Enterprise Development, World Bank, Washington, DC.
- UNCTAD (United Nations Conference on Trade and Development). 2005. Economic Development in Africa: Rethinking the Role of Foreign Direct Investment Geneva: UNCTAD
- World Bank. 2004. *Patterns of Africa-Asia Trade and Investment: Potentials and Ownership*. Washington, DC: World Bank.

ENDNOTES

- 1. UNCTAD has estimated that South-South trade accounts for about 11 percent of global trade and that 43 percent of the South's trade is with other developing countries. It also has estimated that South-South trade is growing about 10 percent per year. "A Silent Revolution in South-South Trade," WTO (2004) http://www.wto.org/english/tratop_e/dda_e/symp04_paper7_e.doc
- 2. Throughout this study, "Africa" refers to the countries of Sub-Saharan Africa.
- 3. Between 2000 and 2005, the share of Africa's exports destined for the EU was reduced by almost one-half—from 50 percent to 27percent. Data for 2000 are from World Bank (2004). Data for 2005 are from IMF Direction of Trade Statistics ("IMF DOT"); for details see chapter 2.
- 4 IMF DOT
- 5. UNCTAD (2006).
- 6. "Economic Development in Africa," UNCTAD (2005).
- 7. The new survey is referred to as WBAATI (World Bank African-Asian Trade and Investment) survey.
- 8. http://www.fmprc.gov.cn/eng/zxxx/t230615.htm
- 9. See Broadman (2005).
- 10. Eisenman and Kurlantzick (2006).
- 11. This finding of greater integration into African host markets by Indian firms is consistent with the evidence presented earlier regarding the ethnicity and nationality of managers.
- 12. See Broadman (2005).