5

"BETWEEN-THE-BORDER" FACTORS IN AFRICAN-ASIAN TRADE AND INVESTMENT

INTRODUCTION

The friction arising from "between-the-border" barriers to international commerce between Sub-Saharan Africa and Asia limits the flows of trade and investment between the two regions. These barriers make firms in both regions incur high transactions costs. These costs arise in a variety of dimensions and in both direct and indirect forms. For instance, there are costs associated with compliance to procedures for the collection and processing of international transactions; transport costs; and search costs associated with imperfections in the "market for information" about trade and investment opportunities.

This chapter assesses the nature and extent of such between-the-border barriers to African-Asian trade and investment and analyzes a variety of ways that these costs can be reduced. We first focus on the fact that foreign market information on potential demand and investment opportunities is essential in facilitating trade and investment between Africa and Asia. Four mechanisms for reducing asymmetric information are discussed: (i) the role of institutional providers of export market information, such as export promotion agencies; (ii) the role of institutional providers of foreign investment information, such as investment promotion agencies; (iii) the role of technical standards in bridging information gaps; and (iv) the role of ethnic networks and the diaspora in facilitating information flows. Given imperfect cross-border information flows, which are inherent to international trade and particularly so among developing countries, public information services run by government or by private firms can be effective. The use of standards and accreditation schemes may reduce difficulties in assessing the quality of a product by enhancing the availability of reliable, accessible, information on aspects of quality considered important by exporters, importers and consumers. Ethnic networks that operate across national borders can help overcome between-the-border barriers as well.

The analysis also discusses how flows of technology and people between Africa and Asia facilitate the formation of business links, which then lead to trade and foreign direct investment flows. There is a mutually reinforcing effect between trade and investment flows on the one hand and technology transfers and migration on the other. The World Bank Africa-Asia Trade and Investment (WBAATI) Survey, as well as business case studies, clearly suggest the presence of such two-way links in the context of China and India's trade and investment ties with African countries. The complementary relationship among migration, trade, and capital flows, suggests that removal of certain between-the-border barriers can facilitate all of these flows. Increases in these three flows are likely to accelerate the pace of technological diffusion throughout Africa and Asia.

Of course, Africa faces significant challenges in the adoption of advances in technology. Perhaps most visible is the fact that the workforce in most countries on the continent have very weak, although improving, skills. Local technological transfers can be compromised when foreign skilled workers are simply brought in with foreign capital and without any effective means of transferring the requisite skills to local workers. An emerging agenda for African firms is how to effectively capture opportunities for the acquisition of advances in technology and skill through participating in the international production networks, as discussed in chapter 6.

Finally, enhancing the capacity for trade facilitation could offer tremendous opportunities to reduce direct and indirect costs. African, Chinese, and Indian all firms have been hampered by inadequate and costly transport and logistics services in Africa. The ability to compete in today's global marketplace depends on a complex chain of trade support services that include customs and border procedures, management and control of freight movements, transaction documentation, and banking instruments. African firms continue to face problems in accessing trade finance, which is particularly serious among small- and medium-size enterprises. At the same time, evidence shows that investment by Chinese and Indian firms in Africa has been significantly aided by public trade finance programs by the export-import banks of those two countries.

The chapter concludes with a discussion of the policy implications from the analysis concerning the alleviation of between-the-border constraints.

REMEDIES FOR IMPERFECTIONS IN THE MARKET FOR INFORMATION

Information on overseas markets is critically important for firms to make decisions on exporting their products and services, sourcing their inputs outside of domestic markets, and investing in other countries. One of the major constraints African firms face in penetrating the export markets is their limited access to global market information, including information on prices and consumer tastes. The problem of poor market information in Africa is particularly acute among small and medium enterprises (SMEs), as well as local farmers. There are several mechanisms through which these constraints can be reduced. This section discusses four such mechanisms: (i) institutional providers of export market information; (ii) institutional providers of foreign direct investment information; (iii) the role of standards in mitigating information gaps; and (iv) the role of ethnic networks in facilitating market information flows.

Institutional Providers of Export Market Information

The current level of market information inflows to private firms in African countries is not sufficient to allow them to effectively respond to the emerging demands in overseas markets. There are three types of information-related bottlenecks: (i) lack of general knowledge of foreign markets; (ii) lack of knowledge as to how to identify foreign agents or buyers in destination markets; and (iii) lack of credential information on those foreign agents or buyers, which results in increased uncertainty, including fears for delinquency.

Information flows on export markets are in fact endogenous to actual flows of exports. While market information facilitates exporting, exporting itself enables a firm to obtain knowledge about foreign markets ("learning-by-exporting"). Firms collect market information directly or indirectly from overseas business partners through their exporting activities. This learning process allows firms to further expand their exports by adding new product lines to their exports and/or to enter into new markets. There is a mutually reinforcing effect between exporting and acquisition of export market information.

Firms can also receive market information indirectly from their customers or suppliers of their inputs. In their search for low-cost, quality products among various suppliers, buyers often tacitly transmit to a supplier proprietary knowledge obtained from another supplier. Or a supplier may transmit such knowledge to a buyer as well. This type of implicit knowledge transfer is more common in simple production sectors such as clothing and

footwear. The business case studies of African firms developed for this analysis have many examples where this true. For instance, a South African blanket firm obtained from its Italian supplier of fabric new information about who in Italy manufactured a particular type of machinery.

Export market information could well be kept as *private information* in the sense that it is collected in an implicit form and kept closely held. However, when a firm has little or no export experience to begin with, it has to rely on outside knowledge. Just like firms in other regions, firms in Africa seek market information from public or private suppliers. It is common for governments to sponsor trade missions and to run export promotion agencies (EPAs) (see box 5.1 for Uganda's EPA).

Box 5.1 The Uganda Export Promotion Board and the Role of Exporters' Associations

Trade promotion is experiencing radical changes. Technology, economic integration, and instant communications have transformed the way in which products are made and distributed. Furthermore, as a consequence of lower barriers on trade, investment, and technology, products are being increasingly broken down into components—not only in terms of goods, but of services—produced or delivered in the most advantageous locations. The model in the twenty-first century is one of global supply chains, with linkages between investment and trade, and the leverage of outbound foreign direct investment to open up new markets. This new reality is the international competition for capital, technology, and markets.

In October 2004, the International Trade Center of the UNCTAD/WTO declared the Uganda Export Promotion Board (UEPB) the best trade promotion organization in the least developed countries. Trade Promotion Organizations (TPOs) were created in response to the strong advice and support of the International Trade Center from UNCTAD. These institutions are used by many countries to promote their exports by delivering commercial intelligence, market research, services to foreign buyers, group promotions, and advice on shipping, transport, and packaging. The Ugandan board provides services in the following areas: conducting market studies to support exports; providing market information and training to the business community; supporting companies to participate in trade fairs and exhibitions; organizing trade missions; helping exporters overcome trade barriers, especially in the regional markets; and counseling SME exporters. In order to continue the upward trend in exports, the UEPB is focusing on the following activities during the period 2005–2009:

- Promoting market standards
- Diversifying the export base – Programs such as promoting trade in biodiversity and natural ingredients and promoting trade opportunities in organic agriculture with the support of UNCTAD are already being implemented. The board will develop more of these alternatives.

(cont.)

- Establishing a strong presence in emerging markets. Market studies and contract promotion programs will be undertaken especially in markets where trade preferences have been offered to Uganda, including China and Canada.
- Overcoming supply-side Constraints. The board will implement tested concepts such as the export production villages, nucleus farming, and clustering as the existing practices in overcoming supply-side constraints associated with fragmented agriculture in Uganda.

Trade promoting agencies have come under a lot of scrutiny, especially the ones that are supported by state funds. However, sometimes the role of promoting exports can be conducted by private associations such as Chambers of Commerce or Exporters' Associations. Trade promoting agencies are becoming more client oriented and provide more specialized services to their clients. The Uganda Trade Board is working with SMEs to support them in export services. SME coalitions now are helping in trade negotiations. The Uganda Services Exporters' Association is a small private sector association working on trade in services through the Private Sector Foundation Uganda, an apex body whose members include all organized groups for industry, professionals, and trade in Uganda. This has allowed Ugandan services firms, even small ones, to contribute to Uganda's negotiating proposals. It also serves as a basis to select private sector representatives to a number of WTO and regional negotiation forums.

Source: World Bank staff.

Typically, EPAs are agencies providing four broad categories of services: (i) image building; (ii) export support services (i.e., information on trade finance, logistics, customs, packaging, pricing, etc); (iii) marketing services (e.g., trade fairs and commercial missions); and (iv) market research. As discussed in chapter 3, African governments provide various forms of export incentives to domestic firms for the purpose of promoting exports. As a part of the incentive programs, government-run EPAs assist domestic exporters in identifying new market opportunities for exporting their products by providing them with information on the types of products that are demanded in different overseas markets as well as the necessary steps for firms to take to initiate export transactions. Export market information, if only supplied privately, tends to be undersupplied. The rationale for these agencies is to provide export market information as public goods rather than private information.

In Sub-Saharan Africa, the presence of export promotion agencies is relatively rare. However, recent research suggests that for every U.S. dollar in an EPA budget, there are an additional $137 of exports from Sub-Saharan Africa.[1] The few EPAs in Africa concentrate their budget resources on export support services (exporter training; technical assistance; capacity building, including regulatory compliance; and information on trade finance, logistics, customs, packaging, and pricing).

In addition to governmental agencies, market information is supplied by private firms in the form of consultancy services. Private companies sell market information to their clients. The information gaps between supply and demand could generate profitable business opportunities for entrepreneurs if it were properly packaged.

Information Flows for Foreign Direct Investment

While there are many academic discussions as to how to compare the attractiveness of countries for foreign direct investment, the perspective of the actual investors has been less explored. International firms faced with choosing the next location for their operations generally focus on a few, narrowly defined criteria, based on the particular needs of their industry. Broad dissemination of investor-relevant information in a timely fashion is an issue that needs to be addressed if African countries are to feature on the radar screen of international investors. One way is to make use of benchmarking exercises that compare different countries in terms of their FDI attractiveness (see box 5.2).

Box 5.2 Benchmarking FDI Competitiveness

At the most basic level, the EBP methodology aims to answer questions like "How much would it cost to run my operations in Location A, given these specific operating parameters? How does this compare with Locations B and C?" It should be stressed that the benchmarking framework does not attempt to determine "absolute" competitiveness. Rather, it seeks to identify the location that provides the most suitable mix of cost and operating conditions to meet the specific needs of a particular investor in a particular industry. Through the EBP program, it is hoped that these investors' perspectives will be conveyed to client governments, to assist in identifying industries in which these countries can be attractive destinations for foreign investment.

The initial EBP study in 2003 considered the relative attractiveness of electronics manufacturing and offshore office operations in four countries in East Asia. The recently completed Africa EBP encompassed research in 11 countries—Ghana, Kenya, Lesotho, Madagascar, Mali, Mauritius Mozambique, Senegal, South Africa, Tanzania, and Uganda—and covered six sectors for the majority of the countries: apparel, textiles, call centers, tourism, horticulture, and food and beverages processing. An important lesson that has been learned through the EBP in Africa is that there is a lack of quality information, which hinders many international firms from even considering Africa in the first place. Given the scarcity of reliable and up-to-date information available at the desktop level, the benchmarking in Africa could not have been conducted without field work. In other words, field work would have been required even to make a company's initial list of potential candidates. This is a significant cost for a firm to assume simply to be able to consider an African country as a candidate for its operations. Broad dissemination of investor-relevant information in a timely fashion is an issue that needs to be addressed if African countries are to feature on the radar screen of international investors, when compared to leading investment locations, such as China and India.

Source: World Bank Group/MIGA staff.

In addition to the compiled information to be disseminated to potential investors, proper information intermediaries also need to be in place. As discussed in chapter 3, one of the fundamental roles of investment promotion agencies (IPAs) is collecting and providing accurate information on linkages opportunities to investors. According to a recent UNIDO study on IPAs, the most common activity undertaken by IPAs with business linkages programs is the provision of information services that are conducted in collaboration with the private sector and international agencies.[2]

IPAs seek to provide up-to-date information on local laws, regulations, and the characteristics of the local economy and markets, positioning the country or province high on the "long list" of a potential investor. The critical first step in the corporation selection process is now increasingly implemented online. Those IPAs that could provide tailored services on line are even more effective in bridging the information gap, leading their locations for follow-up investigations and site visits. In a continent known for its infrastructural shortcomings, African IPAs are remarkably well-connected to the online community. Although the content and quality vary greatly, there are 35 countries with national IPA Web sites listed in the World Bank Group's Multilateral Investment Guarantee Agency's (MIGA's) online investment promotion "yellow pages" in IPAnet; see the annex to this chapter.

IPA's Role in Facilitating Network Production. Given the new trend toward international network production—the focus of the next chapter—as well as the R&D networks of multinational corporations, IPAs can serve as a bridge between the private and public sectors, helping to improve the understanding of what is required to benefit from international production networks. Indeed, IPAs can be used to draw the attention of policy makers to areas that are important for making a location more attractive for knowledge-based activities. In Africa, only a minority of IPAs (only 9) promote R&D-related FDI[3] (UNCTAD 2005). Computer and ICT services are the industries most commonly targeted by IPAs in developing countries that promote R&D-related FDI. Costa Rica is a good example of a developing country that tapped into the R&D networks through FDI. R&D investment by MNC is likely to be found among already-existing foreign affiliates. The experience of Costa Rica with Intel, for example, suggests that close collaboration with existing investors can pay off if supported by other policies to make the country environment more conducive to such investments.

Bilateral Market Information between African Countries and China and India

In the case of trade and investment between Chinese and African firms, there are some private firms providing information on mutual trade and investment opportunities, which range from information related to sourcing in China and Africa to basic business contacts and investment advisory services. Also, they provide services of arranging business travel and products exhibition; helping African delegations to contact Chinese government, enterprise associations, and factories; promoting Chinese products in the African markets and vice versa; and logistics and shipping consultancy, among others (see box 5.3).

Box 5.3 Private Companies promoting China-Africa Trade and Investment

Africaccess Consulting Company Limited is a Sino-African trade and investment consulting company based in Beijing. This company is helping Chinese companies set up business operations in Africa. It has been collaborating with the China State Development Bank, the Cameroon Chamber of Commerce and Industry, and the China Center for the promotion of International Trade. As part of its activities, the company has organized identification mission trips to Africa for Chinese businesses and also arranged for African businesses to explore business opportunities in China.

The company was created by a Cameroonian businessman, who studied at a graduate program in Beijing, in partnership with a Chinese woman. He realized that Chinese companies did not possess accurate information about Africa, while many African firms also lacked sufficient knowledge on business opportunities in China. This motivated him to create this company to close this information gap.

Some of the company's initiatives include: cooperation with the Cameroon Ministry of Post and Telecommunications on a project to set up 400 multimedia centers throughout the country. The company also facilitated the exports of Beijing Tianzhushengiie sunshade coverings to Botswana. In addition, the firm is working with the Cameroon Real State Company (SIC) to find reliable business partners in China for low-cost housing schemes.

Africa-Invest.Net, created by Beijing Yeaco Investment Consulting Co., Ltd. in 1999, is the largest Web site in China featuring information on Africa. Beijing Yeaco Investment Consulting Co., Ltd. is a professional company, specialized in promoting economic and trade exchange between Africa and China. During 2006, Africa-Invest.Net opened a new country-business online portal called Lesotho Business Online and renewed another called Nigeria Business Online.

(www.invest.net.cn/swzx/lesotho/index.html)

(www.invest.net.cn/swzx/Nigeria/index.htm)

(cont.)

Before he set up the company, the general manager of the company worked at the Department of West Asia and Africa of the Ministry of Commerce of China for 11 years, and worked in African countries for more than five years before he set up this company. Up to now, the company has received more than 50 African business and government delegations. The company has also arranged more than 50 Chinese delegations to visit Africa.

Source: Corporate Web sites.

In addition to private consulting companies, the governments of China and India, as well as African countries, are equally active in facilitating information flows on bilateral trade and investment opportunities between China and Africa as well as between India and Africa. The Chinese Government has set up centers for "investment and trade promotion" in various locations in the world. There are 10 centers located in Sub-Saharan Africa (Gabon, Guinea, Cameroon, Cote d'Ivore, Kenya, Mali, Mozambique, Nigeria, Tanzania, and Zambia).[4] Those centers provide business consultation services to Chinese enterprises in Africa. They also provide special funds and simplified procedures to encourage Chinese enterprises to invest in Africa.

Moreover, trade and investment ties with Africa are being strengthened through various bilateral and multilateral public-private initiatives between China and African countries. For example, the China-Africa Business Council, a joint initiative of China with the United Nations Development Programme, aims to support China's private sector investment in Cameroon, Ghana, Mozambique, Nigeria, South Africa, and Tanzania. China also uses summit and informal meetings to reach out to African business leaders. The firms' Sino-African business conference was held in Ethiopia in December 2003. It resulted in agreements on 20 projects with a total value of $680 million. In August 2004, China held a China-Africa Youth Festival in Beijing.

As to India-Africa bilateral information, as part of India's Ex-Im Bank's 2002–07 policy program, the Government of India launched "Focus Africa" to boost Indian exports to the Sub-Saharan Africa region. The program seeks to reduce the uncertainty in doing business with Africa. During the first phase of the program, Nigeria, South Africa, Mauritius, Kenya, Ethiopia, Tanzania, and Ghana were selected as the target countries. The scope of the program was further extend in 2003 to cover all of the other Sub-Saharan countries where India has diplomatic missions, i.e., Angola, Botswana, Cote d'Ivoire, Madagascar, Mozambique, Senegal, Seychelles, Uganda, Zambia, Namibia, and Zimbabwe, along with six North African countries.

Several industry associations in India also play a pivotal role in disseminating market information. In November 2005, the Confederation of Indian Industry (CII) and the Export-Import Bank of India, in collaboration with the Ministry of External Affairs and the Ministry of Commerce and Industry, organized the Conclave on India-Africa Project Partnership 2005 "Expanding Horizons." It was attended by 160 delegates from 32 African countries and led to over 600 meetings between African and Indian entrepreneurs.[5] Over 70 projects were discussed. Also, the Federation of Indian Chambers of Commerce and Industry prepared a study titled "Destination Africa: India's Vision." The study identified the top seven destinations in Sub-Saharan Africa for India's exports markets, which are Nigeria, South Africa, Kenya, Mauritius, Ghana, Tanzania, and Sudan. In the study, the sectors of pharmaceutical and health care, information technology, water management, food processing, and education were identified as those that could can act as "engines of growth" to boost Indo-African trade.

Role of Technical Standards in Bridging Market Information Gaps

Technical standards applied to products and services have both positive and negative effects on trade. In chapter 3, it was discussed how standards could become barriers to trade. In fact, standards and technical regulations in overseas markets are increasingly mentioned by African firms as barriers to exporting to those markets. However, standards have a very potent role as facilitators of international trade and investment. The use of standards and accreditation schemes alleviates difficulties that firms face in export markets in relation to asymmetric information on their products vis-a-vis their buyers in export markets.

As their primary function, standards are expected to enhance reliability and accessibility of information on the quality aspects of products, which are deemed essential by buyers. Thus, standards could play an important role in international markets by reducing information costs. This is the case for both exporters and importers. For importers, standards reduce the uncertainty about product quality. For exporters, standards lower production costs, facilitate the exchange of information, and reduce the imitation costs.

In fact, this positive effect of standards is present for Chinese and Indian firms in Africa. Unlike developed countries, developing countries often lack effective and efficient consumer organizations as well as governmental product-approval and surveillance mechanisms. In such cases, quality and safety standards have an even more important role as instruments of self-regulation. Box 5.4 illustrates how Chinese firms utilize standards as a tool to communicate the quality of their products and services in African countries.

Box 5.4 Local Standards in Africa and Chinese Construction Firms

Foreign firms entering into Africa, including Chinese construction firms, need to pass the "quality" test to satisfy consumer demands on road construction. The WBAATI Business Case Studies covered several Chinese companies operating in Senegal and Tanzania, who reported that their companies complied with domestic standards in the respective countries.

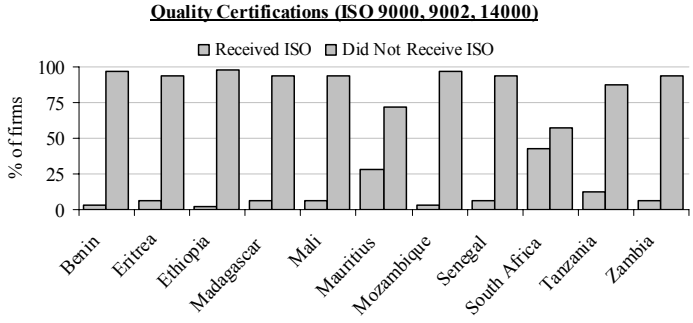
A Chinese construction firm in Tanzania indicated that it needed to keep its operation license current. The firm has met requirements on health and safety regulations. The firm has not had any accidents. The firm pays $20,000 per year to be certified properly, which is a significant expense for the firm. However, the firm is aware of building its reputation in African markets.

Construction standards in Senegal are aligned with French standards. A Chinese construction firm in Senegal said it had been applying Senegalese standards. According to the firm, these standards are comparable to Chinese standards. The firm recognizes the importance of gaining a reliable reputation as a provider of high quality products in construction services in Africa.

Source: World Bank staff.

Capacity building among African firms in complying with international standards is an urgent agenda item for private sector development in African countries. Only a small percentage of firms in Africa have obtained ISO certification (figure 5.1). Many surveyed firms in Africa report that product quality and low demand are the most important factors that affect their firm's ability to export.[6] African countries can increase their exports if firms in those countries have sufficient capacity to comply with global technical standards. However, standards and regulations raise production costs on firms seeking to export from developing countries. In Africa, the costs to get certified under ISO 9000, ISO 9002, and ISO 14000 are particularly high among small and medium enterprises.

Figure 5.1 Firms with ISO 9000, 9002, and 14000 Certification



Source: World Bank Investment Climate Assessments.

Apart from the issue of capacity shortage in meeting global standards, African firms are also short on access to updated information on standards. For example, Sub-Saharan countries are not well represented in international standards meetings and relevant processes. Only 34 countries from Sub-Saharan Africa belong to the International Standard Organization (ISO). As such, only the local standards bureau and development agencies in individual countries provide firms with relevant information on standards for their products. Lack of information on the new standards potentially affects firms' ability to market their products in international markets. There is a clear need for a high-impact awareness campaign and information centers from which information about standards and quality is readily accessible.

Market Information through Ethnic Networks and Migration

Ethnic Networks. Worldwide, increasing attention is being paid to the role of ethnic networks in overcoming inadequate information about international trade and investment opportunities, and there is evidence that ethnic networks promote bilateral trade by providing market information and supplying matching and referral services to their members.[7] To be sure, as discussed in chapter 4, ethnic networks in Africa can cause market segmentation and reduced competition by deterring market entry by parties outside a group. But it is also the case that such networks have a catalytic role in cross-border exchanges of market information. In a foreign market, ethnic networks facilitate a range of business-to-business contact, including between producers of consumer products and their distributors, assemblers, and component suppliers, as well as foreign investors and their local joint venture partners.

Migrants usually maintain personal connections with their families and with other personal contacts in their home countries. These groups form what are called *diasporas*. Chinese and Indian *diasporas* are serving as vehicles for diffusion of information about investments and trade opportunities between the countries where they reside and the countries of their ethnic ancestries. Benefits from ethnic networks are particularly large in an environment where formal networking opportunities are limited. Contacts among expatriate communities across international boundaries play a crucial role in exchanging market information for international trade. Chinese entrepreneurs use their diaspora to overcome the constraints they face from the lack of formal channels available to them.

Speaking a common languages or sharing similar cultural backgrounds eases communication and allows better understanding of documentation,

Box 5.5 Using Chinese Ethnic Networks to Help African Firms to Find Suppliers in China

The WBAATI Business Case Studies found that one South African firm imported blankets from China. The firm, which was originally started by a European family, engages a Chinese trader or what is called in the literature an "ethnic network intermediary" who sells access to and use of his network in China. The firm has paid a commission on the value of the involved transactions. This ethnic intermediary has knowledge of the capabilities and preferences of the sellers of blankets in China. The manager of this South African firm had never been to China. The firm chose the fabrics from a catalogue that the trader provided. In this way, the Chinese trader connected the South African firm with the suitable Chinese retailers of fabrics.

Source: World Bank staff.

procedures, and regulations related to cross-border trade. Chinese expatriates are widely used by "outsiders" to facilitate their business relations in China (see box 5.5).

Ethnic networks bring a valuable reservoir of knowledge and information on trade and investment opportunities. India is one notable example of a country that is using its diaspora to enhance bilateral trade and investment expansion.[8] China also benefits from its diaspora. In one estimate, as much as 45 percent of its total US$41 billion in foreign direct investment came from the Chinese diaspora in 2000.[9]

In Africa, there is a striking difference in the reliance on ethnic networks between Indian and Chinese firms operating on the continent; see table 5.1. 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.

Table 5.1 Ownership of African Firms: Nationality versus Ethnic Origin

		Ethnic Origin of Owner			
		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.

On the other hand, there is near identity of the proportion of owners of surveyed Chinese firms operating in Africa that 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, a notion that 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 has been estimated that some 80,000 migrant workers from China have moved to Africa, creating a new Chinese diaspora.[10]

Table 5.2 shows that, among surveyed firms, Chinese firms hire the largest percentage of workers from China or other East Asian countries, accounting for 17 percent of total employees. Indian firms hire about half as many of their workers from India (9.8 percent).

Table 5.2 Sources of Labor Force by Location of Employee's Previous Residence

Firm Nationality	Previous Location of Employees before Hiring						
	Domestic	Other Africa	Europe & N. America	India	Other South Asia	China	Other East Asia
African	96.3%	1.6%	0.4%	1.4%	0.0%	0.0%	0.0%
Chinese	80.8%	0.6%	0.0%	0.4%	0.1%	9.5%	7.4%
Indian	89.5%	0.1%	0.2%	9.8%	0.1%	0.0%	0.1%
European	92.5%	3.1%	1.1%	2.2%	0.2%	0.3%	0.0%

Source: World Bank staff.

By differentiating between firms that export more than 10 percent of their output (exporters) and those that do not (nonexporters), it becomes clear that exporting firms tend to have higher proportions of employees hired outside of the countries where firms are located, regardless of firm nationality (table 5.3). In the case of Chinese, Indian, and European firms, exporters have a significantly higher proportion of employees brought from the firms' home country or home region. In the case of African firms, exporters also hire a greater proportion of employees from other African countries than do nonexporters. Taken together, this is clear evidence that foreign workers, particularly those from foreign firms' home countries, play a catalytic role in facilitating firms' exports from Africa. On the other hand, locally hired workers contribute to local sales. This is also quite

Table 5.3 Sources of Labor Force by Location of Employee's Previous Residence: Exporter versus Nonexporter Firms

Firm Nationality	Exporter	Previous Location of Employees before Hiring						
		Domestic	Other Africa	Europe & N. America	India	Other South Asia	China	Other East Asia
African	Nonexporter	97.3%	0.6%	0.2%	1.8%	0.0%	0.0%	0.0%
African	Exporter	93.8%	4.1%	1.0%	0.6%	0.0%	0.1%	0.0%
Chinese	Nonexporter	82.6%	0.0%	0.0%	0.0%	0.1%	6.5%	8.8%
Chinese	Exporter	77.6%	1.7%	0.0%	1.0%	0.0%	14.7%	5.0%
Indian	Nonexporter	93.4%	0.2%	0.0%	6.0%	0.1%	0.0%	0.2%
Indian	Exporter	77.3%	0.0%	1.0%	21.7%	0.0%	0.0%	0.0%
European	Nonexporter	94.1%	4.5%	0.7%	0.7%	0.0%	0.0%	0.0%
European	Exporter	90.4%	1.3%	1.5%	4.3%	0.5%	0.6%	0.0%

Source: World Bank staff.

intuitive because of their comparative advantage in knowledge of local markets and commercial practices.

Migration and Mode IV. Reducing between-the-borders barriers to African-Asian trade and investment is also coming about through the flow of people. Indeed, there is increasing evidence that the cross-border movement of people is a complement to rather than a substitute for trade and investment flows.

The temporary movement of persons for delivery of services, so-called Mode IV services delivery, was negotiated under the General Agreement on Trade in Services (GATS); see box 5.6. The agreement defined four possible modes for which services can be traded between members of the World Trade Organization (WTO). The four are: Mode I: "cross-border supply" (e.g., the provision of architectural blueprints via fax); Mode II: "consumption abroad" (e.g., tourism); Mode III: "commercial presence," which typically, though not always, means that foreign direct investment is part of the provision of the service (e.g., establishment of a foreign law practice in the host country); and Mode IV: "presence of natural persons" (e.g., a foreign computer software consultant).

Box 5.6 The General Agreement on Trade in Services (GATS)

The GATS accord was part of the Uruguay Round negotiations, which began in 1986 under the auspices of the GATT and concluded with the establishment of the WTO in 1995. The GATS represents the first attempt to devise a multilateral, legally enforceable understanding covering trade and investment in the services sector. Like the GATT, which was updated as part of the Uruguay Round and still forms the WTO's principal rule-book for trade in goods, the GATS provides a legal basis on which to negotiate the multilateral elimination of barriers that discriminate against foreign services providers and otherwise deny them market access. The GATS differs from the GATT in several respects. Perhaps the most important difference is: the principles of national treatment (i.e., nondiscrimination) and market access (i.e., freedom of entry and exit) are provided automatically under the GATT, but are negotiated rights and obligations in the GATS. The negotiations on national treatment and market access for services in the GATS constitute the equivalent of tariff negotiations for goods in the GATT. In services trade there is effectively no "border," as there is in goods trade. The restrictions on international transactions in services are embedded in countries' domestic laws, regulations, and other measures. Under the GATS obligations these restrictions are liberalized (in varying degrees), thus creating for services a regime that is the equivalent of a duty-free regime for goods.

The GATS is comprised of two principal components. The first is a textual framework that sets out general multilateral rules governing trade and investment in services. The second complements the rules framework. It is the set of binding commitments to market access and national treatment of individual services industries; countries append these commitments to the agreement in the form of a "schedule." Like tariff negotiations in goods, these multilateral services commitments result from iterative bilateral "request and offer" negotiations conducted seriatim on a county-by-country basis. Supplementing the rules framework are sectoral annexes and understandings that contain specific rules dealing with, among other things, issues affecting financial services, aviation services, and access to telecommunications networks. While some of the provisions of the overall rules framework apply to all services industries, regardless of whether or not they are "scheduled," many only pertain to industries for which market access or national treatment commitments are assumed. As a result, on balance, the GATS employs what has become known as a "positive list" approach: unless an industry is scheduled, it is, in the main, automatically excluded from the most meaningful terms of the agreement.

The mechanism fundamental to the GATS that engenders the agreement's multilateral liberalizing character is the rule that also serves as the basis of the GATT: Most Favored Nation (MFN) treatment. Like the GATT, the MFN principle—that a signatory treat all countries in a manner no less favorable than its treatment of a particular country—generally applies for all services included in the GATS regardless of whether a particular industry is included in a country's schedule of commitments. However, the GATS allows for flexibility in the application of MFN. In particular, it permits exemptions to MFN for specific laws, regulations, and administrative practices. Such flexibility is essential because of the need to be able to maintain

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existing regulations or agreements not consistent with MFN, or the need to preserve the prospective use of reciprocal or unilateral measures, particularly when a country has concluded, as a tactical matter, that the GATS commitments offered by other countries for a specific industry generally are not sufficiently liberalizing.

In addition to the negotiated rights and obligations of market access and national treatment as well as the MFN rule, other core provisions of the GATS include the requirement for countries to publish all domestic laws and regulations affecting services; assurances for due process in notifying interested services providers of the status of license applications; disciplines on public monopolies; rights governing the mutual recognition and harmonization of regulatory standards; consultation procedures on competition matters; and exceptions for national security, safety and health, and the enforcement of tax laws.

Source: Broadman (1994).

Some free trade agreements (FTAs) contain provisions allowing the temporary entry of business professionals into the other country for the purpose of facilitating trade in services.[11] As services become one of the driving forces in trade, cross-border mobility of business professionals, particularly those providing professional services, has gained considerable attention from countries as an important aspect of expanding market access for suppliers of such services. Facilitating the movement of professionals allows trade partners to more efficiently provide each other with services such as architecture, engineering, consulting, and construction. However, in the case of the FTA being discussed between South Africa and China, trade in services, including mode IV-related issues, are not yet on the agenda; see chapter 3.

As in other regions, there are still barriers to the movement of people in Africa. Most countries in Africa have enacted or retained a series of laws that in effect restrict "foreigners" from participating in certain kinds of economic activities. On the other hand, with some variation in terms of degree of liberalization, several regional economic communities (RECs) in the SSA have made progress in liberalizing the movement of people among their member countries. For example, Economic and Monetary Community of Central Africa (CEMAC), Economic Community of West African States (ECOWAS), and West African Economic and Monetary Union (UEMOA) have recently introduced the use of intraregional passports. However, the level of liberalization varies. The Common Market for Eastern and Southern Africa (COMESA) has adopted the Protocol on the Free Movement of Persons, Labor, and Services.

Some foreign companies operating in Africa face significant impediments to relocating staff and families. Immigration services, including

processing of work permit, study permit, and visitors permit applications, have become a significant concern for Chinese and Indian firms in Africa. The business case studies reveal that several Chinese and Indian firms in South Africa and Tanzania face serious difficulties in obtaining study permits for the children of their expatriate staff, either because the process of obtaining a working permit takes a long time, or because the process is not clear. In one case, one firm that located in Tanzania had to pay $600 for a two-year work permit. In another case, Chinese expatriates were also requested to show a return ticket to China at the point of entry.

South Africa has become the predominant platform for the entry of multinational corporations, including from China and India, with plans for regional integration on the Sub-Saharan continent. The result is the attraction of thousands of non-African expatriates. But for the companies to effectively operate in South Africa, there is a need to institutionalize simplified procedures on facilitating cross-border movements of professionals. Despite the two changes in the country's immigration legislation in the past three years designed to simplify the procedures, obtaining work permits, however, still requires a lengthy process. On the other hand, a bilateral immigration arrangement can facilitate the movement of people. For example, as of summer 2006, Indian nationals transiting through South Africa no longer are required to obtain transit visas. This policy change is part of South Africa's strategy to forge closer trade and investment ties with India.[12]

TRADE FACILITATION IN AFRICA-ASIAN COMMERCE: TRANSPORT, LOGISTICS AND FINANCE

Interest among countries to reduce direct and indirect costs related to international trade has placed trade facilitation (TF) at the forefront of the global trade dialogue. Trade facilitation aims to make trade procedures as efficient as possible through the simplification and harmonization of documentation, procedures, and information flows.[13] Trade facilitation issues generally include: (i) physical movement of consignment (transport and transit) and border-crossing problems; (ii) import and export procedures, including customs; (iii) information and communications technology; (iv) payment systems, insurance, and other financial requirements that affect cross-border movements of goods in international trade; and (v) international trade standards.

The high transactions costs of engaging in international trade—such those arising from gaps in transport infrastructure, inefficiency in customs procedures, and poor quality in logistics services due to weak (or nonexistent) competition by service providers—are increasingly outweighing the costs of tariffs in global trade. A number of empirical studies on various regions of the world have estimated these costs and the potential impacts specific policy reforms in trade facilitation can have on increasing trade flows.[14] In most cases, the net benefits are huge. The African continent is particularly affected by a "trade facilitation deficit," with only a few exceptions. The gravity model analysis in chapter 2 confirmed such findings in the context of assessing the factors that shape the extent of aggregate trade flows between African and Asian countries.

Transport and Logistics

Poorly developed transport, communications, and logistics systems lie at the core of the trade facilitation problem in Sub-Saharan African countries. These countries' limited capacity to meet the growing demand of an increasingly complex global economy hampers trade and investment both within and outside the region. 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; see box 5.7.

On average, freight costs for all developing countries worldwide are nearly twice as high as those for developed countries. Including costs related to conveyance, storage, and handling of goods, Africa has the highest transports costs among developing countries. A recent study by UNCTAD indicates that the freight cost as a percentage of total import value was 13 percent for Africa in 2000, compared to 8.8 percent for all developing countries and 5.2 percent for developed countries.[15] Some African countries have made some improvements in reducing freight costs, largely due to improvements in terminal handling that offset insufficient infrastructure facilities and inefficient practices for transit transport, and terminal equipment. However, that is not sufficient to change the position of African countries as high-transport-costs countries. As figure 5.2 shows clearly, among select Africa countries relatively little progress has been made in reducing transport costs.

Box 5.7 Trade Facilitation, Customs, and Logistics Barriers in Africa

Many of the firms covered in the WBAATI Business Case Studies report logistical obstacles in exporting. The key bottlenecks include: inefficient trucking and transport services; low export volume that results in higher costs; burdensome customs procedures; and inefficient cross-border transit procedures, among others.

For example, there are serious bottlenecks at the border between South Africa and Zambia, where the border control documentation seems to be quite cumbersome. South African firms reported that they used trade logistics companies for moving products between Zambia and South Africa. Even with utilizing service from a trade logistics company, communication between its South Africa and Zambia offices remains a problem, hindering the firms' ability to ship their products from Zambia and South Africa.

In fact, a few firms feel that intra-Africa exports are very expensive given the physical proximity of neighboring countries. For example, sending products from South Africa to Angola is as expensive as sending products from China to Angola. Maritime shipment seems to be three times as costly as road shipment due to the monopolized shipping line market in Africa. A Ghanaian firm reported that shipping costs and tariffs within 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.

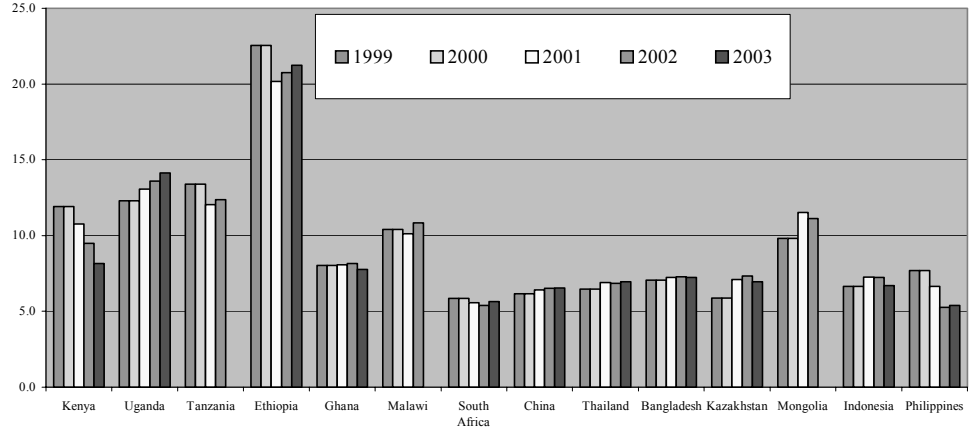
Due to such high costs in shipping, firms devise some mechanisms to internalize shipping costs so that they can remain competitive. For example, one construction firm operating in South Africa reported that it bears shipping costs when the firm bids for the entire project. Before posting its bids, the firm makes sure to obtain quotations first from shipping companies to see if they can be competitive in the bid.

The firms perceive that inefficiency in customs often involves lack of transparent management. For example, a firm in South Africa hired a private investigator to detect whether other companies were smuggling goods through the Port of Durban. The private investigator detected 11 smuggled containers sitting at the port of Durban. After the firm contacted the authorities regarding the smuggled containers, the containers disappeared without a trace. Most goods imported by small traders for sale in local markets are smuggled in without paying duties. This is the case of blankets in South Africa. Several blankets from China and Turkey are smuggled by informal traders. There are still a lot of undervalued and undeclared imports of finished products. In Tanzania, there are several bureaucratic processes for imports and exports. Underinvoiced imports and smuggling are continuing problems. Firms report that they need to make informal payments to get their products from the port.

The firms commonly voiced the opinion that removing these types of impediments associated with bureaucratic red-tape increases productivity, helps reduce corruption, and encourages investments in infrastructure.

Source: World Bank staff.

Figure 5.2 Africa Has Made Little Progress in Lowering Transport Costs



Source: World Bank. Note: Data are not available for 2003 for Tanzania, Malawi, and Mongolia.

Maritime Transport. Port-related bottlenecks include poor rail-to-road interfaces, inadequate shunting locomotives, insufficient cargo-handling equipment, absence of reliable shipper information, and port congestion. As a result, transport time takes longer than in other regions. For example, the average port turnaround time in South Africa tends to be up to five times longer than that of its of competitor countries.[16] Many firms that are part of the business case studies report that they did not export *within* Africa because of high intraregional maritime transport costs. Indeed, some Chinese firms operating in Africa report that such transport costs to ship on the continent from South Africa are greater than shipping from South Africa to China.

Road Transport. Costs of road transport are also high, attributed in part to low volumes of cargo, imbalanced trade flows between origins and destinations, and long travel time. Moreover, there are serious impediments at borders due to a lack of harmonization in customs procedures; see below. The costs are the highest in Africa's landlocked countries; see box 5.8.[17] Table 5.4 shows that inland freight rates faced by importers and exporters in (landlocked) Zimbabwe are significantly higher than those faced by their counterparts in (coastal) Mozambique or South Africa. On average, it is estimated that landlocked countries incur 50 percent higher transport costs than those countries with coastal access. Goods transported to and from landlocked countries generally must travel longer distances, which may entail varying road conditions, border crossings, and greater opportunity for breakdown.

Box 5.8 Logistics and Transport Issues in East African Countries

The international trade routes in East Africa mostly use the Northern and Central transport corridors, which link the ports of Mombasa and Dar-es-Salaam by road and rail to the landlocked countries. The main Northern Corridor route runs inland from Mombasa via Nairobi to Kampala, with extensions to Democratic Republic of Congo, Rwanda, and Burundi. The Central Corridor runs from Dar-es-Salaam via Dodoma to North-Western Tanzania, with extensions to Congo, Burundi, Rwanda, and Uganda. Road infrastructure in the two major transport corridors has improved substantially over the last few years, while the performance of the railway networks has deteriorated considerably.

Transport costs are estimated at 35 percent of the value of exports for Uganda and more for the other Great Lakes countries. Some World Bank studies found that the costs per ton-km to/from Rwanda to Mombasa through the Northern Corridor are twice the cost per ton-km between Nairobi and Mombasa, which stresses the large impact of border crossing and trade volumes on logistics costs.

Transport delays and uncertainty contribute to higher transportation costs. On average, it takes almost three weeks for a container between the day it lands in the port of Mombasa and the day it arrives in Kampala: almost two weeks for dwell time in the port and six days for road transport between Mombasa and Kampala. Along the Central corridor from Dar-es-Salaam to Kampala, it normally takes eight days, which means that the return trip should take less than 20 days. Nevertheless, some freight forwarders acknowledge that it takes longer. The return trip takes 45 days (20 days to go, 5 days for clearance, and 20 days to return).

Current operating conditions in Tanzania Railways cannot allow predictions to be accurate at four or five days for any shipment, and the situation is also complicated in Kenya Railways. Locomotive shortages, as well as wagons mismanagement, may explain transport uncertainty. Due to this uncertainty, exporters prefer to send goods by road, despite the increased risk of theft and higher freight costs. Frequently, departure times are missed and goods remain at the port for an extended period of time. In an uncertain environment, transport companies strive to cope with these problems by investing in costly information systems or employing additional people in charge of smoothing transactions.

Source: World Bank East Africa Trade Facilitation Project (2005).

Air Cargo. Air transport services are inefficient and charges for freight remain high. Given the low cargo shipping volumes, companies in Africa tend to rely on the freight capacity of passenger airlines instead of chartered freighters or cargo planes. This lowers the efficiency of air cargo transport.

Although countries in Africa differ greatly, a great percentage of the total lift capacity in Sub-Saharan Africa countries is handled by passenger airlines, either through their national carriers (such as South African Airlines, Air Kenya, or Air Senegal) or through the carriers of countries that have signed bilateral air

Table 5.4 Comparative Intra-African Road Transport Costs ($ per TEU Dry Container)

Origin	Destination	Cost $/TEU
Harare, Zimbabwe	Durban, South Africa	$1,362
Harare, Zimbabwe	Beira, Mozambique	$775
Durban, South Africa	Harare, Zimbabwe	$1,297
Beira, Mozambique	Harare, Zimbabwe	$1,522

Source: Quotes from freight forwarders and shipping agents, CARANA.

service agreements. Reliance on passenger airlines to carry the majority of cargo has several impacts.

In the East Africa Region, Kenya Airways (and its Tanzanian affiliate Precision Air) has emerged as the region's leading carrier. In the Southern region, South Africa exports the largest amount of air transport services to it neighboring countries and the rest of Africa. It handles about 87 percent of the region's passengers. The handling of passengers is dominated by South African airlines. In addition, South Africa also dominates the share of the region's cargo. However, Air Mauritius, Kenya Airlines, and Air Zimbabwe also play important roles. In West Africa, some countries do not have their own fleet aircraft (i.e., Sierra Leone).

Almost all of the private airlines in the region rely more on passenger traffic than on cargo traffic for their operations. Cargo is often left behind in favor of passenger and baggage carriage when there is competition for space. Cargo generally flows one way. As a result, airlines are subject to the same economics as maritime carriers in the case of empty backhauls, which leads to highly divergent inbound and outbound cargo rates.

Table 5.5 shows cargo rates according to the Air Cargo Tariff (TACT) list published quarterly by the International Air Transport Association (IATA). The TACT rates indicate clear differences for inbound and outbound rate structures. The cost for 400 kgs from Singapore to Dakar, Senegal to Singapore is $19.78 per kilo, while the rate for Dakar, Senegal to Singapore is $16.43 per kilo.

Table 5.5 Inbound and Outbound Air Cargo Rates ($ per kilo)

	Origin						
Destination	**Dar es Salaam, Tanzania**	**Dakar, Senegal**	**Hanoi, Vietnam**	**New York**	**Singapore**	**Amsterdam**	**La Paz, Bolivia**
Dar es Salaam, Tanzania	-	8.77	10.08	11.98	11.12	13.35	14.42
Dakar, Senegal	5.93	-	16.37	8.01	19.78	7.96	9.15
Hanoi, Vietnam	7.51	16.20	-	5.94	3.06	17.77	10.88
New York	5.20	4.91	6.94	-	7.49	3.87	2.99
Singapore	6.52	16.43	2.97	4.88	-	4.52	9.83
Amsterdam	3.61	4.75	10.55	2.49	4.74	-	6.76
La Paz, Bolivia	15.10	11.23	12.58	5.66	17.44	11.26	-

Source: CARANA Report. "The Role of Transportation and Logistics in International Trade: The Developing Country Context." 2003

Liberalization and Competition in Services. Competition among providers of transport services is largely absent on the African continent. Due to policy-based barriers to entry, private service companies have only a weak commercial presence in Africa. Where they do exist, incumbent providers—often monopolies created and/or sanctioned by government—have the upper hand in the market. This has adversely affected the rate of investment in, and the maintenance of, the transport infrastructure. The result is either incomplete (or nonexistent) transport connections or poor service quality where facilities do exist.

Where regulatory reform has taken hold, such as in South Africa, and there has been liberalization in the provision of such services, especially allowing for the entry of foreign vendors who have skilled personnel and more advanced technologies, competition has led to substantial improvements in service delivery. With the rise of global trade networks engendering a premium to countries that exhibit greater economic flexibility and mobility in international commerce, it is increasingly clear that such improvements are critical ingredients of a successful economic development and growth strategy. Not only would they help to facilitate trade, they would be trade creating themselves, such as in tourism; see chapter 6. Box 5.9 illustrates what is at stake in this regard for Mauritius.

Box 5.9 Promoting Competition in Air Transport Services in Mauritius

Protection of the air transport market has been justified on the basis that Air Mauritius provides an essential service to an island nation, as carriers making decisions on a purely commercial basis could decide to no longer serve the Mauritian market, cutting critical trade and transport links. As a high-end tourist destination, Mauritius believed it did not need to provide service to the low-cost mass transport. Yet as the global tourism market has become more competitive, in part due "open skies" policies in other destinations, there is increasing recognition that, in order to grow, the Mauritian tourism industry requires expanded capacity, new routes, and lower costs. Beyond benefits to the tourism sector, increasing air access to Mauritius would also *enable greater competition in the air cargo sector, with benefits for Mauritian exporters in other sectors*. Cost-effective air cargo is becoming increasingly important to the textiles sector, for example, where restructuring is requiring the industry to move into higher-end products for which rapid delivery is critical.

In balancing these factors, Mauritius has moved toward a policy of gradual liberalization, which involves selective opening of particular routes, including by third carriers (e.g., Corsair from France to Mauritius, ComAir to South Africa); adoption of a more flexible approach to capacity increases of existing carriers; additional flights by existing carriers in peak seasons; and opening new markets, including direct flights from Spain and China, and special flights targeting markets in Central and Eastern Europe.

There is some evidence that the relatively modest increases in capacity to date have released pent-up demand. Year-on-year December growth in passenger arrivals was relatively steady at between 2,000 and 4,000 per year between 2000 and 2004. Introduction of further capacity in 2005 (via additional flights from Air Europe) saw arrivals in December 2005 increase by 13,000, or 16.3 percent, over the previous year, and increases in arrivals for 2006 to date of 15–18 percent over 2005. Price competition remains an issue on major routes served by two carriers. With around 80 percent of Mauritius' tourism taking the form of packages, the air component is considered to be higher than for competing routes (some tour operators claim that the UK-Mauritius route is around £200 too high in comparison to the UK-Thailand route). Price competition is also not assisted by the presence on the Air Mauritius Board of airlines that ostensibly compete with Air Mauritius on its major routes—Air France, British Airways, and Air India. Introduction of third carriers (such as Corsair on the French route) is expected to assist in reducing prices.

While there appears to be a degree of consensus on gradual liberalization—disagreements persist over whether the emphasis should be on "gradual" or on "liberalization." In either case, some additional complementary measures are critical to its success.

1) *Gradual liberalization requires ongoing monitoring and assessment of the sector* to ensure that the goals of increased capacity, lower prices, and greater connectivity are being met and to provide a clear direction to market participants of the direction of policy in the sector. A well-resourced and expert—and independent—

(cont.)

regulator is required. While the present policy consensus and the desire to group air transport and tourism under one roof have led to consideration of an Air Access Policy Unit under the Ministry of Tourism and External Communications, an independent regulator provides a greater degree of confidence to potential market entrants of a level playing field, particularly in view of the government's continuing share in Air Mauritius.

2) The *requirement for Air Mauritius to operate in a more competitive environment* necessitates changes to its present governance structure to remove its competitors from the Board. One solution would be to create a holding company, under which competing airlines with a presence on the Board would be able to receive shareholder value but would be separated from strategic and operational aspects. While the presence of these airlines has in the past been argued to provide international credibility and reduce potential government interference, these goals may be better met by an independent regulator and quality management. Efforts by the new management of Air Mauritius to reduce costs and improve competitiveness should not be impeded by the governance structure and should be encouraged by a sufficient level of competition in the market.

3**)** *Reforms to introduce a penalty for late (15 days or less) handing back of seats by tour operators* would also strengthen the ability of Air Mauritius to compete, including in the fast-growing market of last-minute online bookings made by individuals. Online bookings currently account for around 60 percent of the global market.

Source: "Mauritius, From Preferences to Global Competitiveness." Mission Report, World Bank. April 26, 2006.

Customs and Border Procedures

Inefficiency in most African countries' customs severely affects cross-border trade and investment between Africa and India and China. This finding was expressed by virtually all firms that were part of the business case studies. Customs in African countries face a host of problems that include complicated and excessive documentary requirements; outdated official procedures; insufficient use of automated systems; a lack of transparency predictability and consistency in customs activities; and inadequate modernization of, and cooperation among, customs and other governmental agencies. Table 5.6 presents evidence on this score in the four countries in which the WBAATI Survey and Business Case Studies were conducted, as well as in China and India. Compared to exporting, importing overall takes much longer and incurs more procedures, both in terms of signatures and documents. The four African countries have efficient ports and customs relative to the Sub-Saharan African average. However, they are still less efficient than the level of China.

Table 5.6 Port and Customs Efficiency in Export and Import

	Export			Import		
	Documents for export (number)	Signatures for export (number)	Time for export (days)	Documents for import (number)	Signatures for import (number)	Time for import (days)
Sub-Saharan Africa Average	8.5	18.9	48.6	12.8	29.9	60.5
Ghana	6	11	47	13	13	55
Senegal	6	8	23	10	12	26
South Africa	5	7	31	9	9	34
Tanzania	7	10	30	13	16	51
East Asia and Pacific Average	7.1	7.2	25.8	10.3	9	28.6
China	6	7	20	11	8	24
South Asia Average	8.1	12.1	33.7	12.8	24	46.5
India	10	22	36	15	27	43

Source: World Bank Doing Business 2006.

According to Chinese and Indian firms covered by the business case studies, the problem of distance for landlocked African countries is compounded by the multiple regulatory environments through which cargo has to go. In addition, the crossing of the drivers and their vehicles is also subject to various cross-border regulations. Immigration services and vehicle inspection stations often do not allow for predictable and timely border crossings. For example, requirements for drivers to leave their vehicles and process visa papers slow down border crossing significantly. Adding to the delays are the manual processes for visa record keeping and issuance. Delays are often so significant that shippers are often forced to pass cargo on to local haulers, incurring additional cargo handling costs.

Trade Finance

Poor access to trade finance also significantly increases nonmodal costs of trade and investment in African countries by Chinese and Indian firms. Many such firms—as well as African firms—report they do not have sufficient access to private trade finance or instruments to support their operations in Africa related to international trade and investment. However, some government agencies and financial institutions do make trade finance available.[18] Limited use of political risk insurance by Chinese and Indian investors in Africa—despite its availability—compounds the problem arising from poor access to trade finance; see box 5.10.

Box 5.10 The Availability of Political Risk Insurance for Trade and Investment with Africa

The tendency to portray Africa in a less-than-favorable light is echoed in broadcast media, according to DFID research.[19] The steady stream of news about political instability in Africa—civil strife, contested elections, etc.—often makes investors wary of political risk. With regard to Chinese firms in particular, in a 2005 FIAS/MIGA study of outward investment from China, 94 percent of the companies surveyed believed Africa to be the region of the world most beset by political risk.[20]

Political risk insurance is coverage intended to mitigate the perceived or demonstrated risk associated with a particular investment. It generally includes four types of coverage—transfer restriction; war and civil disturbance; expropriation; and breach of contract. While these political risks are considered "non-commercial" in nature, the line between political and commercial risks is increasingly blurred in today's business environment.

There are significant gaps in the private political and credit risk insurance market when it comes to the assumption of risk in cross-border transactions involving African countries. Political risk coverage from commercial sources or export credit agencies is not available at all for some African countries, and where coverage is available it is usually very costly and on unfavorable terms.

To address the problem resulting from the lack of political risk coverage, the Multilateral Investment Guarantee Agency (MIGA) of the World Bank Group provides guarantees to private investors investing in developing countries, including those in Africa. Since its inception, MIGA has issued more than 750 political risk guarantees worth $14 billion in coverage for projects around the developing world. Of this, 150 contracts totaling $1.64 billion in coverage have been issued in support of projects in sub-Saharan Africa.

The Africa Trade Insurance Agency (ATI) was establish by African states by 2001, bringing together a growing group of countries that are willing to address the market's perception by setting up a credible insurance mechanism against losses caused by political risks. ATI provides a broad range of innovative and competitively priced insurance products and services customized to support African-related investments and trade transactions.

While OECD investors only occasionally use such coverage in selective circumstances, at least it is known to them, and, with varying skill and adroitness, they can effectively utilize it. This is not the case for Chinese and Indian investors, for whom there are several factors at work. While there are relatively new nationally funded programs of political risk investment insurance in both countries, they are not even well known to most national investors. National insurers/guarantors have not done an appreciable volume of business and thus often lack the experience to respond flexibly and swiftly to investor needs. On the other hand, most Indian and Chinese companies are not well-known to private international insurance brokers. Hence the ability of these firms to access the private insurance market is limited.

Source: World Bank staff.

Three patterns of trade finance among firms operating in Africa are revealed from the WBAATI Survey and Business Case Studies; see box 5.11.

- First, informal trade credit is more common among micro and small firms. The pattern was particularly visible in the case of Senegal.
- Second, private external sources of finance are generally most used by larger firms. Letters of Credit are more expensive than supplier credit.
- Third, public assistance in export financing for their own companies operating in Africa is offered by the Government of India and the Government of China. Both governments provide export credits for working capital and acquisition of capital goods and machinery. Depending on the type of ownership, Chinese firms in Africa follow the same pattern of financial funding as those operating in China. The majority of the Chinese construction firms operating in Africa are state-owned enterprises (SOEs). Chinese SOEs receive funding from the Chinese financial system and from the Export-Import Bank of China, while Chinese private companies operating in Africa resort more to private or informal lending markets.

Box 5.11 Access to Trade Finance in Africa: Experiences of African, Chinese, and Indian Firms

Among firms covered by the WBAATI Business Case Studies, experience in the use of trade finance is rather diverse.

African Firms. Many firms in Africa do not have access to finance or do not have the ability to choose from a variety of trade instruments. The availability of trade finance to African firms has implications for their supply sourcing. Firms make their decision from where to acquire their inputs depending on the financing terms to which they have access. In some instances, foreign suppliers offered better terms than local banks. Despite the fact that there are a series of short-term trade instruments and banking institutions that offer trade finance in South Africa, firms in the country on average still face higher costs due to the perceived greater risk. For example, a South African textile firm commented that it preferred to choose suppliers that offer them open accounts for 90 days. Mexico and Thailand request them to open a Letter of Credit, which is very costly.

Chinese Firms. Chinese construction firms operating in Africa received export credit for feasibility studies, government guarantees for bank loans, export credits for financing the operational cost of projects, and lines of credit for capital goods and machinery. In Tanzania, a Chinese construction firm reported that all its machinery needed for a construction project was acquired new. The firm's headquarters purchased the equipment. It also reported that it obtained 100 percent credit for its working capital needs from its parent company.

Indian Firms. An Indian firm reports on the use of supplier credit from India for 60 days.

Source: World Bank Group/ MIGA staff.

Domestically Provided Trade Finance in Africa. In general, access to finance among businesses in Africa is particularly limited among smaller firms, as noted in chapter 4. Extending financial services to SMEs and the rural sector, each of which could become effective drivers for overall trade expansion and economic growth in Africa, remains constrained. However, larger firms have access to credit from importers, the banking system, or other nonbank financial institutions. These firms are able to provide trade credit to their suppliers (small suppliers), who in many cases do not have access to credit.

The ways in which firms operating in Africa secure financial sources varies with ownership, size of firm, and location on the continent. The WBAATI Survey data indicate that use of formal bank credit is low among firms operating in Africa. For both working capital and investment purposes, surveyed firms use primarily retained earnings or other internal funds, across different nationalities. As shown in table 5.7, among firms surveyed, African firms are financing more of their working capital and new investments through the formal banking sector in Africa relative to Chinese or Indian firms, which is what would be expected. These survey findings are consistent with the data gathered in the business case studies. In the construction sector, for example, Chinese firms use African banks only to receive payments from host governments as part of their public procurement contracts, to receive money transfers from their headquarters, or to make payments to the workers—both local and expatriates. They do not use the local banking system for investment financing. Where Chinese and Indian firms operate in the retail sector or in the informal sector in Africa, they engage in mainly cash transactions and rely on informal channels for finance.

Table 5.7 Average Share of Finance for Working Capital and New Investments Provided by Private Commercial Banks

	Firm Nationality				
	African	**Chinese**	**Indian**	**European**	**Other**
Working Capital	14%	9.6%	11.3%	12.4%	8.2%
New Investments	20%	8%	17%	15%	20.5%

Source: World Bank staff.

The share of working capital financed by trade credit is significantly smaller than formal banking sector loans and overdrafts. Among firms surveyed, only three percent of working capital is being financed through trade finance in the form of supplier or customer credit. When broken down by firm nationality, survey results show that Chinese and Indian firms finance less of their working capital through trade credit in comparison to African or European ones. The same pattern is evident for the financing of new investments (see table 5.8).

Table 5.8 Average Share of Working Capital and New Investment Composed of Trade Credit

	Firm Nationality					Overall
	African	Chinese	Indian	European	Other	
Working Capital	3%	0%	2.3%	5.2%	2.9%	3%
New Investments	1.8%	0%	0%	0.6%	0%	1.2%

Source: World Bank staff.

Chinese and Indian Government-Provided Trade Finance and Economic Assistance. The Chinese government, through the China Export-Import Bank, supports Chinese firms' investments and business operations in Africa. The scope of its activities includes provision of export credit (including export seller's credit and export buyer's credit); loans to overseas investment and construction projects; Chinese government concessional loans; and international guarantees. The Chinese ExIm Bank is playing a significant role in promoting bilateral trade and economic assistance between China and Africa; see box 5.12. To take two examples, the ExIm Bank is supporting a major Chinese telecommunications investment in Nigeria. It also has extended a credit line to the Angolan government for the amount of $1 billion to assist the country in the rebuilding of infrastructure. As a part of the agreement, public tenders for the construction and civil engineering contracts are to be awarded primarily to Chinese state-owned enterprises approved by the Chinese government. The ExIm Bank has compiled a list of 35 Chinese firms approved by both the Bank and the Chinese government to tender in Angola.

Box 5.12 China's Economic Assistance to Africa

The Chinese government began giving official aid to African countries in the 1970s. At the outset, the objectives of the aid were largely ideological in nature—to demonstrate China's solidarity with the developing world. After the advent of its economic reforms in 1978, China began to step up its official aid to Africa and such assistance began to serve multiple purposes, including economic objectives. In the last several years China has dramatically boosted its aid and economic support to Africa. Its aid to the continent also has become more sophisticated and more geographically diverse.

In the 1980s and 1990s, China focused its in-kind aid in the form of building large noncommercially oriented projects, such as sports stadiums and government office buildings, like those in Gambia and Sierra Leone, among other countries. Today, it is increasingly using in-kind aid to build more commercially oriented infrastructure, such as the new highway from the airport to downtown Dakar, along which new businesses are sprouting up.

(cont.)

It is among the monetary forms of official aid that China's economic support to Africa has recently exploded—initially in grants but recently more loans. In the case of loans, more are made on nonconcessional rather than concessional terms. In 2002, China officially gave $1.8 billion in development aid to African countries. Since then, official reporting of such figures has ceased.

Preliminary estimates compiled from public sources by World Bank staff suggest that much of China's recent official economic aid to Africa to support development of infrastructure is in the form of China Ex-Im Bank loan financing and amounts to over $12.5 billion as of mid-2006. The projects are in the power, telecom, transport, water and sewerage sectors. To put these figures in perspective, China Ex-Im Bank financing commitments to African infrastructure development now appear to be significantly overtaking traditional forms of Overseas Development Assistance (ODA) from OECD countries, which amounted to just over $4 billion in 2004, the most recent date for which data are available. Nevertheless, the Chinese support is highly concentrated in five countries: Angola, Nigeria, Mozambique, Sudan, and Zimbabwe, which account for over 80 percent of the total. Moreover, flows to the power sector make up about 40 percent of total commitments, followed by "general" or multiple-sector commitments (24 percent), transport (20 percent), telecom (12 percent), and lastly water (4 percent).

Finally, China is using debt relief to assist African nations, effectively turning loans into grants. Since 2000, Beijing has taken significant steps to cancel the debt of 31 African countries. That year China wrote off $1.2 billion in African debt; in 2003, it forgave another $750 million. Beijing's new "China's Africa Policy" white paper, released in early 2006, foresees more debt relief as part of the country's economic assistance strategy with the continent (see chapter 3).

Sources: World Bank staff estimates and Eisenman and Kurlantzick (2006).

Like its Chinese counterpart, India's Export-Import Bank plays a significant role in facilitating trade and investment between Indian and African countries. The Export-Import Bank of India launched a program called "Focus Africa" to increase interactions between the two regions by identifying priority areas for bilateral trade and investment.

The total operative Line of Credit (LOC) extended by India's Ex-Im Bank to Sub-Saharan African countries amounts to $558 million (table 5.9). The ExIm Bank extended an LOC of $250 million to the ECOWAS Bank for Investment and Development (EBID) in May 2006 to finance India's exports to the 15 member countries of EBID, namely Benin, Burkina Faso, Cape Verde, Ivory Coast, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. Another LOC was signed in 2005 between the ExIm Bank and the Eastern and Southern African Trade and Development Bank (PTA Bank) for a line of $5 million to promote India's exports to 16 Eastern and Southern African countries. This was the sixth LOC extended by the ExIm Bank to the PTA Bank.

Table 5.9 Export-Import Bank India—Operating Lines of Credit in Africa

Country/Institution	Amount (in millions)
Burkina Faso	US$ 30.97
Cote d'Ivoire	US$ 26.8
Gambia	US$ 6.7
Ghana	US$ 15.0; US$ 27.0; US$ 60.0 (3LOC)
Senegal	US$ 15.0; US$ 17.8; US$ 27.0 (3 LOC)
Mali	US$ 27.0
Mali and Senegal	US$ 27.7
Niger	US$ 17.0
West African Development Bank (BOAD)	US$ 10.0
ECOWAS Bank for Investment and Development (EBID)	US$ 250.0
Total Amount Operative LOC	US$ 558.0

Source: Export-Import Bank of India.

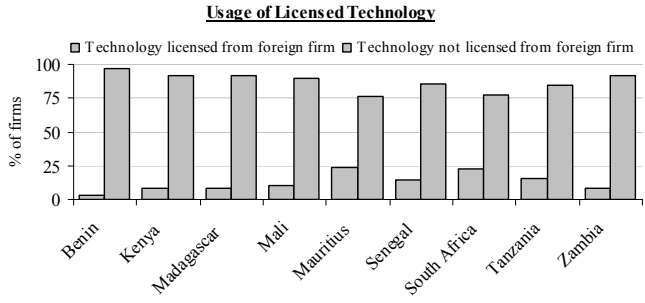
TRANSFERS OF TECHNOLOGY AND SKILLS

Formal Market Channels for Technology Transfers

There are several channels for technology transfer. These include purchasing of new equipment, transferring of nonproprietary technology, licensing, information from customers, knowledge from returning nationals, and domestic research. For firms in Sub-Saharan African countries, there is little scope for acquiring technology besides importing technology either by importing foreign technologies through licensing and imports of machinery and capital goods, or from foreign parent companies through their foreign direct investment; the latter is discussed in chapter 6.

Licensing of existing technologies, both rights to proprietary equipment and details about production processes, offers African countries opportunities for improving their levels of best practice. However, there is evidence that licensing is decreasing as an option for closing the technology gap. As shown in figure 5.3, the use of licensing technology as a channel for technology transfer is not very prevalent among firms in African countries. The most direct relation between trade and technology transfer lies in the direct imports of machinery goods.[21] Chapter 6 discusses the pattern of machinery imports among firms surveyed by the WBAATI Survey.

Figure 5.3 Use of Licensed Technology in Africa



Source: World Bank Investment Climate Assessments.

Drivers behind Transfers of Skills and Technology

We focus on two mechanisms that facilitate cross-border transfers of skills and technology: adherence to international technical standards and the movement of professionals.

Adherence to Standards as a Method for Technology Transfer. With most incremental improvements in products and processes, manufacturers follow existing industry production standards. This can lower production costs and facilitate the exchange of information (as discussed earlier). At the same time, an effort to meet foreign standards can trigger transfers of technology from overseas partners to firms operating in Africa. Evidence from the business case studies shows that when technical assistance is received by firms operating in Africa to meet technical standards required for them to export into higher positions in the value chain, the results are often positive. One example is an Indian-owned food processing firm in Tanzania (see box 5.13). Of course, simple importation of capital goods alone does not necessarily lead to an appropriate use of the machinery because it requires transfers of tacit knowledge. Nevertheless, it is difficult to learn new technologies through these mechanisms. The way that developing countries are learning new technologies more effectively is through their participation in the global production networks, as discussed in chapter 6.

Skills Transfer through the Migration of Professionals. Migration of professionals or diasporas can be effective resources for skills transfers. For a sending country, diaspora can be an important source as well as a facilitator of research and innovation, technology transfer, and skills development. Technology transfer through migration can take several forms. Those include: (i) licensing agreements to provide transfers of technology and know-how between diaspora-owned or managed firms in host countries and firms in sending

Box 5.13 Foreign Firms in Africa Use International Standards to Boost Higher-Value Exports from the Continent

An Indian-owned firm in Tanzania decided to export organic cashew nuts as a new product. The company made the necessary investments in processes to comply with the requirements of food quality and safety standards for organic cashew nuts. For organic products, informational requirements are high, and standards help to reduce the information costs to produce goods that require more sophisticated technology such as the production of organic food products.

The process of gathering information is costly for this type of firm in Africa. Firms trying to export to China, Europe, and India have to research technical specifications and preferences that prevail in those countries. In order to get information on how to establish a new organic product line, this firm contacted its machinery supplier, who provided him with all the required standards to establish it. A Swiss company has helped the firm to set the process and provided technical assistance.

In addition, the firm is finalizing the setting of the new process line to produce this organic cashew nut, following the standards of the buyer as well. Thus, the firm complements the information on production standards from the supplier of the machinery with the additional health and safety standards from the buyers.

Source: World Bank staff.

countries; (ii) knowledge spillovers when diaspora members assume top managerial positions in firms in their countries of origin; (iii) networks of scientists or professionals to promote research in host countries directed toward the needs of sending countries; (v) virtual return, through extended visits or electronic communications in professional fields such as medicine and engineering; and (vi) return to permanent employment in the sending country after work experience in the host country.

The functioning of the Indian diaspora is a clear example of how skills transfers have come about in that country's software sector. Table 5.10 summarizes various stages of growth in the IT industry in India, and the role the diaspora played in its evolution. A group as small as 200 professionals can provide reliable business and technologies linkages with the rest of the world. Replication of successful experiences in smaller countries will be more difficult, however, because they may be unable to reach a critical mass of influential people in any given sector (e.g., medicine, engineering, large corporations, etc).

Table 5.10 Evolving Roles of the Indian Diaspora

Stage of Growth	Characterization of the Stage of Growth of IT Industries	Role of Diaspora
The 1970s	Building a foundation for "first movers." Key role for the very few entrepreneurs who created initial entrepreneurial projects (both within established and new firms).	Exposure of Indian talent to U.S. firms. Executives of Indian origin start to outsource through "body shopping" contracts.
The 1980s	Emergence of a software cluster in Bangalore and a critical mass of professional entrepreneurs.	Continuation of business linkages and "body shopping" contracts.
The 1990s	Emergence of high value-added outsourcing (R&D and consulting)	Diaspora is engaged in a concerted effort to promote an image of India as an attractive outsourcing location. Diaspora firms provide the specifications for the software to be manufactured and as well as a market for the products.
Present Day	Emergence of knowledge-process outsourcing	Highly-placed executives of Indian origin pioneer knowledge-intensive outsourcing (R&D and professional services).

Source: Taken from Table 4 in India's Transformation to Knowledge Based Economy—Evolving Role of the Indian Diaspora. Abhishek Pandey, Alok Aggarwal, Richard Devane, and Yevgeny Kuznetsov, July 2004.

On the other hand, migration in the form of foreign investors' hiring of workers from their home countries may slow down the transfer of technology in the host country. As more skilled workers are transferred to host countries, foreign investors operating there have diminished incentives to be engaged in skills and technology transfers to local businesses or employees through either subcontracts or hiring (see box 5.14).

Box 5.14 Construction and Engineering Services and Foreign Workers: China in Africa

The construction industry is comprised of design services (architects and engineers), construction services (general and subcontractors, skilled and unskilled labor), and consulting services related to the others (including management and training personnel). One factor that makes firms competitive in the industry is related to the availability of low-cost professional staff rather than unskilled manual labor. In addition, government support is an important factor in cost competitiveness abroad. It seems that this is the strategy of China in exporting construction services to Africa. Foreign companies offering services in construction and engineering may face some non-trade barriers. Restrictions on Mode IV are one of the barriers in the construction sector in Africa.

In China, state-owned enterprises (SOEs) and construction collectives (run by local governments or communities in urban and rural areas) are the main providers of construction work. Prior to 1984, most SOEs were general construction companies, carrying out all of the trades needed for construction work. These were huge

(cont.)

organizations with a permanent workforce with fixed-worker status. Several of these SOEs are now exporting construction services in other parts of the world, including Africa.

Chinese firms are operating mainly in the physical construction services sector in Africa. They participate in road construction, water and sewerage, construction of government buildings and bridges. In the WBAATI Business Case Studies, the majority of the professional staff of Chinese construction firms were from China. Companies explained that managers needed to communicate effectively with workers about complex tasks in Chinese. On the other hand, the vast majority of nonskilled labor is Africans.

Chinese firms subcontract services to local firms. This provides opportunities for acquisition of experience and access to technology for developing country firms. However, African firms are not equally benefiting from acquisition of experience and access to technology through subcontracting. In the case of Angola, Chinese firms import all materials, technology, and staff from China, partly due to the high cost of local materials and lack of skilled labor. This results in little skill being transferred. A Chinese firm in Senegal only uses nominal local content in subcontracting services. For example, they subcontract drawings but not engineering services such as structural engineering, which provides opportunities for acquisition of experience and technology. On the other hand, in Tanzania, construction methods employed by Chinese firms are becoming more sophisticated. There are 14 Chinese firms registered in the country. The majority of the materials are procured locally and suppliers across the construction industry are increasingly using Chinese fittings and materials. The transfer of skills, technology, and work practices to Tanzanians and subcontractors is increasing as Chinese firms use new construction methods in the country.

Greater regional and global integration could also alleviate some of the constraints of the small African countries' services sector due to its limited endowments of capital and skills. In addition, weaknesses in the business environment are hampering the development of services in Africa. Several of these countries can export more services if they improve their business climate, infrastructure, and complementary services.

Source: World Bank staff.

Chinese Bilateral Initiatives for Technology Transfers to Africa. The China-Africa Cooperation Forum was established in 2000 as a framework for dialogue between China and African countries. During the First China-Africa Cooperation Forum in Beijing (October 2000), the Forum established a series of long-term economic partnerships in the fields of agriculture, light industry, infrastructure construction, and information technology. In January 2006 the Chinese government issued an official white paper on *China's Africa Policy*, calling for further strengthening of the traditionally friendly relations between the continent and China (see chapter 3). Among other areas, the white paper highlights the possibilities for deeper bilateral cooperation in technical

knowledge for development. In this regard, the current focus of China is to encourage the use of an appropriate level of technology to be transferred to Africa. Their cooperation programs include: (i) forming joint commissions on issues of economy, trade, and science and technology between China and Africa; (ii) providing technology training in agriculture and processing sectors; (iii) sending experts, teachers, and technologists to African countries; and (iv) bringing experience in telecoms, road construction, and power networks to African countries, such as supporting an electricity modernization program in Kenya.

There are a number of important initiatives by China in the human resources development area in Africa as well. For example, China has offered 1,500 scholarships to African students, providing them opportunities to gain skills and knowledge from Chinese universities. China's African Human Resources Development Fund has sponsored a variety of training courses geared to African professionals and has trained nearly 7,000 African personnel in different areas. The country also provides seminars and training classes given by senior African diplomats and economic and financial officials.

Indian Bilateral Initiatives in Technical Cooperation with Africa. India and Africa have an old relationship that is in the process of being given a new focus by closer collaboration in the areas of technology, trade, and training. There are a series of Indian initiatives to enhance economic and political cooperation with Africa. India has announced a Line of Credit of $200 million to assist the New Partnership for Africa's Development (NEPAD). Mali, Niger, Senegal, and the Democratic Republic of Congo have received project funds under this initiative.[22] The Indian government has also extended a $500 million line of credit for TEAM-9, a new initiative for a group of Francophone countries of West Africa including Burkina Faso, Chad, Ivory Coast, Equatorial Guinea, Ghana, Guinea Bissau, Mali, and Senegal.

In 2005, India became the first Asian country to become a full member of the Africa Capacity Building Foundation (ACBF). Indian engineers, doctors, accountants, and teachers are present in Africa. India is actively engaged in Africa's telecommunications, IT, and development of transport infrastructure (see box 5.15). It is also exploring possible collaboration in biotechnology.

India is also involved in a number of significant initiatives in human resources development in Africa. For example, more than 1,000 officials from Sub-Saharan Africa receive training annually in India under the Indian Technical

and Economic Cooperation Program (ITC). India spent more than $1 billion on such assistance, including training, deputation of experts, and implementation of projects. Over 15,000 African students study in India. Seminars and training classes are given to senior African diplomats and economic and financial officials.

Box 5.15 India's Contribution to the Pan-African E-network Project

Ethiopia has been selected as the first country to benefit from the pilot phase of the Pan-African E-network Project, a joint initiative between the Indian government and African Union (AU) to develop ICT infrastructure across the continent. Under the initiative, the Indian government will donate $1 billion to connect 53 African countries through satellite and fiber optic network to promote telemedicine and tele-education programs. The project is at "an advanced stage of implementation" in Ethiopia, and South Africa, Mauritius, and Ghana have also been short-listed for the pilot phase. The e-network initiative is being heralded by the local press as the largest infrastructure project in Africa's history, and the e-education and e-medicine programs are particularly expected to extend ICT infrastructure to certain rural communities and underserved areas. This announcement came during the recent "International Conference on ICT for Development, Education, and Training" in Addis Ababa, Ethiopia, and follows a major India-Africa trade summit in Accra, Ghana, dubbed as the "Making India a Partner of Choice" meeting.

Source: The Observatory on Borderless Higher Education
http://www.obhe.ac.uk/cgi-bin/news/article.pl?id=561

CONCLUSIONS AND POLICY IMPLICATIONS

Summary of Findings

This chapter assessed various between-the-border factors that facilitate trade and investment, particularly in the context of Africa's trade and investment ties with China and India. First, foreign market information on potential demand and investment opportunities is essential in facilitating trade and investment. Given the imperfect information flows now in existence for trade and investment with African countries, public information services, run by both the government or by private firms, have proven to be very important. While they also may work as a barrier to trade (chapter 3), standards and accreditation schemes may also reduce difficulties in assessing the quality of a product by enhancing the availability of reliable, accessible information on aspects considered important by exporters, importers, and consumers. Also while they run the danger of restricting domestic competition by segmenting markets (chapter 4), ethnic networks that operate across national borders can help overcome between-the-

border barriers by providing efficient circulation of market information within the networks that link African countries and India and China.

It was also presented how flows of technology and people between Africa and Asia facilitate the formation of business links that lead to trade and foreign direct investment flows, and how the latter two enhance technology transfers and migration simultaneously. The World Bank Africa-Asia Trade and Investment (WBAATI) Survey as well as Business Case Studies clearly suggest such two-way links in the context of China and India's trade and investment ties with African countries. For example, Chinese investors operating in Africa tend to bring their workforce from China. Also, exporting firms tend to rely more on foreign workers, whose skills and knowledge help firms to link themselves with overseas markets. The complementary relationship among people flows, trade, and capital flows suggests that any removal of between-the-border barriers should facilitate all of these flows. Increases in these three flows are likely to accelerate the pace of technological diffusion throughout Africa and Asia.

However, it is also the case that local technological transfer or skills transfer is somewhat compromised when foreign skilled workers are simply brought in with foreign capital without effective skills transfer to local workers either through subcontracts or employment opportunities. Furthermore, the emerging agenda for African firms is how to effectively capture opportunities for acquisition of technology and skill through participating in the international production network as discussed in chapter 6. At the same time, this chapter also showed how Chinese and Indian governments have increasingly invested their resources in providing technical cooperation to African countries to foster technological transfer to African countries.

The ability to enhance trade facilitation could offer significant opportunities to reduce direct and indirect costs in Africa. African, Chinese, and Indian firms have been hampered by inadequate and costly transport and logistics services in Africa. African firms continue to experience difficulty in accessing necessary trade financing tools, which is a particularly acute issue among small- and medium-size enterprises. At the same time, it was found that investment by Chinese and Indian firms in Africa has been significantly aided by public trade finance programs by the Export-Import Banks of those two countries.

Policy Implications

The WBAATI Business Case Studies suggest that one area of emphasis in improving trade facilitation should be dealing with customs and reduction of

transport costs. Many government departments are involved in trade facilitation processes. For example, improving coordination among institutions to better link trade and transport initiatives, both within and across countries, will facilitate harmonization of customs reforms. Furthermore, implementation of already-agreed decisions on regional trade (i.e., particularly on documents requirements and implementation of regional transit systems) will reduce the delays and the unpredictable application of rules across borders.

African countries face significant constraints to trade facilitation stemming from their market size, the situation of their landlocked countries, and their lack of financial and capacity resources to reduce direct and indirect costs. Hence, considering alternative solutions—such as adopting a regional approach to trade-related infrastructure investments, and requesting technical assistance from donors on these issues—is worthwhile. Without significant support from national governments, international organizations, and donors in resources, technology, and capacity building, no accomplishments can be made in trade facilitation. It is quite clear from the experience of developed countries, India, and China, that capacity building is essential for streamlining various processes and institutional mechanisms. It is important that each of the African countries work out a comprehensive strategy on trade facilitation for a more focused, coordinated, and well-resourced approach. Regional cooperation between Africa and Asia may also play an important role.

In the emerging structure of global production systems, participating in the production network, building forward and backward linkages of foreign capital and technology, and expanding the area of services are increasingly relevant for Africa. Technology diffuses in the receiving country mainly through the purchase of new equipment, direct foreign investment, the transfer of nonproprietary technology, licensing, information from customers, knowledge from returning nationals, and domestic research. Thus, African countries should emphasize Mode III and Mode IV when they liberalize their services sectors.

Given the suspension of the Doha Round WTO negotiations apart from bilateral efforts to promote Mode IV in liberalizing trade in services, African countries should encourage unilateral reforms to trade in services. India is a good example of a successful technology transfer in services. IT services and telecommunications were among the sectors that were the most liberalized in the 1990s. A liberal regulatory and policy framework encouraged investment by multinationals and temporary movement of skilled labor. These people flows enabled technology transfers. However, services reforms are complex and

resource-intensive. Experience in services liberalization around the world suggests that the design of efficient regulation that could allow foreign providers to access the market while maintaining a competitive environment in which public policy objectives are enforced is key to success.

The WBAATI Business Case Studies showed in very concrete terms how Chinese networks living in Africa help to overcome between-the-border barriers in doing business with China. Ethnic networks promote bilateral trade and investment by providing market information and by supplying matching and referral services. Equally, the transfer of knowledge and experiences transmitted by the African diaspora living in Europe and Asia has improved export opportunities and increased information to new markets. Following the experiences of Taiwan, India, and Ireland, actions should be taken to foster further interactions between African diaspora and professionals in the home country. For example, a combination of Internet-based and relationship-based networks should be developed and linkages with the Chinese and Indian diaspora should be established to serve as bridges for doing business.

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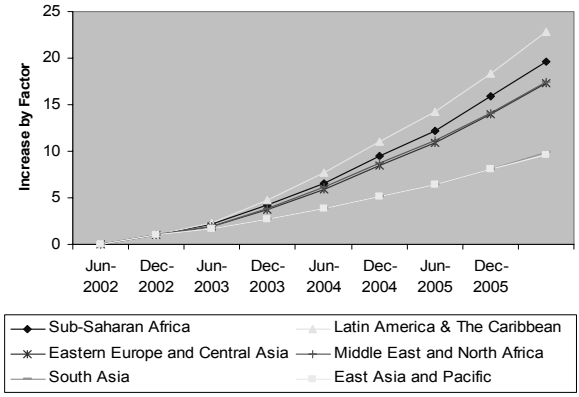
ANNEX

For more than a decade, the World Bank Group's Multilateral Investment Guarantee Agency (MIGA) has offered free online services to give investment promotion intermediaries a platform to effectively disseminate information on investment opportunities and to market their respective locations. The objective has been to provide information on investment opportunities and facilitate investment flows in emerging markets.[23] MIGA's online information dissemination services provide an interesting snapshot of the supply side of the FDI-information market. In terms of the number of FDI-information resources supplied through MIGA's online services, Sub-Saharan Africa is well represented compared to other regions. Out of nearly 8,400 investment-related information resources contained in the online services, 22 percent refer to Sub-Saharan Africa. Of the 55 national and provincial investment promotion agencies listed for Sub-Saharan Africa in MIGA's directories, 21 agencies supply content to the online services. South Africa, Tanzania, and Ghana appear consistently among the top countries in Sub-Saharan Africa in terms of the number of investment information resources available under each of the four subjects (legal, markets, business, opportunity). Also, South Africa tends to feature more prominently than the other countries.

An analysis of the number of users by region shows a very significant increase in the number of registered users based in East, South East, and South Asia who have selected Sub-Saharan Africa as a region of their interest for investment. Sub-Saharan Africa ranks second to Latin America and the Caribbean in terms of generating the most interest from Asian users (see figure 5A.1). Specifically, the number of FDI Xchange registered users who have selected Sub-Saharan Africa as a region of interest has increased 20 times during the period between June 2002, when the service was first launched, and December 2005.

The snapshot of investment information that is contained in MIGA's online services suggests that Sub-Saharan Africa overall is well represented. However, the "on-average" good picture of the continent hides significant asymmetries across countries in terms of investment information availability. Important gaps in the availability of information for many countries in Sub-Saharan Africa still exist. It should be noted that this analysis only points to a snapshot of the *quantity* of documents available in MIGA's online services database. Only a third of the investment promotion agencies from the continent listed on MIGA's online services supply content directly. These issues indicate

Figure 5A.1 Demand for FDI Information on Sub-Saharan Africa by Region



Source: MIGA.

the need to improve not only the quantity but also the quality of information resources focused on investor demands.[24] On the demand side, the evidence based on users' interests strongly suggests a growing attention to Sub-Saharan Africa by potential investors from Asia.

ENDNOTES

1. Lederman, Olarreaga, and Payton (2006).
2. UNIDO (2006).
3. UNCTAD (2005).
4. See the Web site of the Ministry of Foreign Trade and Economic Cooperation of China. There is also a center in Egypt. (www.cofortune.com/cn/moftec_cn/tzkfzx/tzkf_menu.html).
5. This was second in the conclave series organized by CII. The first one was held in March 2005. About 178 projects were discussed and 12 Memoranda of Understanding were signed. Regional mini-conclaves were held in 2006, including one in Lusaka, Zambia (April 2006), targeting Southern African countries, and another in Accra, Ghana (May 2006), targeting Western and Central African countries.
6. World Bank Global Technical Barrier to Trade Survey (2003).
7. Rauch (2001), Gould (1994), and Rauch and Casella (1998).
8. See http://indiandiaspora.nic.in/contents.htm.
9. Wei (2004). A recent strand in the literature emphasizes that trade and migration might appear as complements as opposed to substitutes (Gould 1990, 1994). Rauch (2003) and Rauch and Trindade (2002) also find that trade and migration are complements.
10. Eisenman and Kurlantzick (2006).
11. When FTAs are formed among developing countries or between developed and developing countries, they have generally limited their coverage to temporary location of skilled workers, if any, as illustrated in the case of the Chile and the Singapore agreement with the United States.
12. Announcing this at a meeting organized by the Southern Indian Chamber of Commerce and Industry (SICCI), South African High Commissioner to India Francis Moloi said orders in this regard were issued in July 2006. He said South Africa must re-examine its visa regulations, particularly in the context of forging closer ties and trade and business between the two countries. http://www.thehindu.com/2006/07/11/stories/2006071107960500.htm.

13. See Roy and Bagai (2005).

14. See Walkenhorst and Yasui (2003), Cudmore and Whalley (2004), Wilson, Luo, and Broadman (2006), Djankov, Freund, and Palmna (2006), Soloaga, Wilon, and Mejia (2006).

15. UNCTAD (2006).

16. Naude (2005).

17. Amjadi, A. and Yeats, A. (1985).

18. Based on the World Bank Investment Climate Assessments, trade finance programs are most effectively facilitating manufactured exports among African firms, compared to other export incentive schemes African governments extend to firms such duty drawback, bonded warehouse, and VAT exemption programs. See Yoshino (2006).

19. "Viewing the World: A study of British television coverage of developing countries," July 2000, DFID.

20. "China's Outward Foreign Direct Investment: A company survey." A MIGA-FIAS publication, based on research conducted by the China Center for Economic Research, Beijing University. Forthcoming.

21. Eaton and Kortum (2001) and Navaretti and Soloaga (2001).

22. "India, Africa ready to embrace global destiny." An Article by Minister of State for External Affairs Rao Inderjit Singh. In http://meaindia.nic.in/ interview/2006/01/25in01.htm. January 25, 2006.

23. MIGA's online services for foreign investors comprise IPAnet, PrivatizationLink and FDI Xchange. When MIGA launched IPAnet in 1995, it was considered a pioneer in the use of the Internet for disseminating information on investment opportunities and the business environment in developing countries. Subsequently, MIGA diversified its information services by launching PrivatizationLink (1998), FDI Xchange (2002), and the FDI Promotion Center (2004).

24. Although a recent evaluation of MIGA indicated that the services appeared to be providing reliable, accurate, timely, and current information, in Africa there is a quality deficit. Independent Evaluation Group-MIGA 2006 Annual Report.