

## CHAPTER 3

# Key Logistics and Market Characteristics of the Transport Corridors

Logistics in Africa are organized along key trade and transport corridors originating from the ports of entry and exit to the hinterland.<sup>1</sup> In this chapter, the various transport corridors are characterized as follows:

- geography (entry ports and landlocked areas served)
- corridor institutional structure and the degree of competition between corridors and transport modes
- shipping connections
- regulatory regime and market structure

Table 3.1 shows the key international trade corridors from ports to their hinterlands. Table 3.2 shows the economic importance and volume of traffic for the relevant corridors.

The trucking environment and market structure in West and Central Africa are characterized by cartels offering low transport quality, while in East Africa the trucking environment is more competitive and more mature. Major corridors in Southern Africa are the most advanced of all the study corridors in terms of competitive and efficient services.

**Table 3.1 The Four Key Transport Corridors in Africa: Ports and Countries**

	<i>Corridors</i>			
	<i>West Africa</i>	<i>Central Africa</i>	<i>East Africa</i>	<i>Southern Africa</i>
Main ports of entry	Abidjan, Tema, Lomé, Cotonou, Dakar	Douala	Mombasa, Dar-es-Salaam	Durban, Maputo, Beira, Dar-es-Salaam
Landlocked countries served	Mali, Burkina, Niger	Chad, Central African Republic	Uganda, Rwanda, Burundi, Democratic Republic of Congo (east)	Botswana, Malawi, Zambia, Zimbabwe, Democratic Republic of Congo (south)

*Source:* Task team compilation.

**Table 3.2 The Four Key Transport Corridors in Africa: Key Economic Data**

<i>Region and country</i>	<i>GDP (US\$ billion)</i>	<i>Population (million)</i>	<i>GDP per capita (US\$)</i>	<i>Annual imports (US\$ million)</i>	<i>Annual exports (US\$ million)</i>
<b>West Africa</b>					
Togo	2.2	6.1	359	1,026	743
Benin	4.3	8.4	508	1,120	577
Ghana	10.7	22.1	485	6,610	3,869
Niger	3.4	14.0	244	825	512
Burkina Faso	5.2	13.2	391	1,132	449
<b>Central Africa</b>					
Cameroon	16.9	16.3	1,034	4,282	3,922
Central African Republic	1.4	4.0	339	174	126
Chad	5.5	9.8	561	2,150	3,219
<b>East Africa</b>					
Kenya	18.7	34.3	547	6,540	5,126
Rwanda	2.2	9.0	238	667	228
Uganda	8.7	28.8	303	2,370	1,145
<b>Southern Africa</b>					
South Africa	239.5	46.9	5,109	68,412	64,904
Zimbabwe	3.4	13.0	259	1,785	1,443
Zambia	7.3	11.7	623	1,835	1,192

*Source:* World Development Indicators, World Bank.

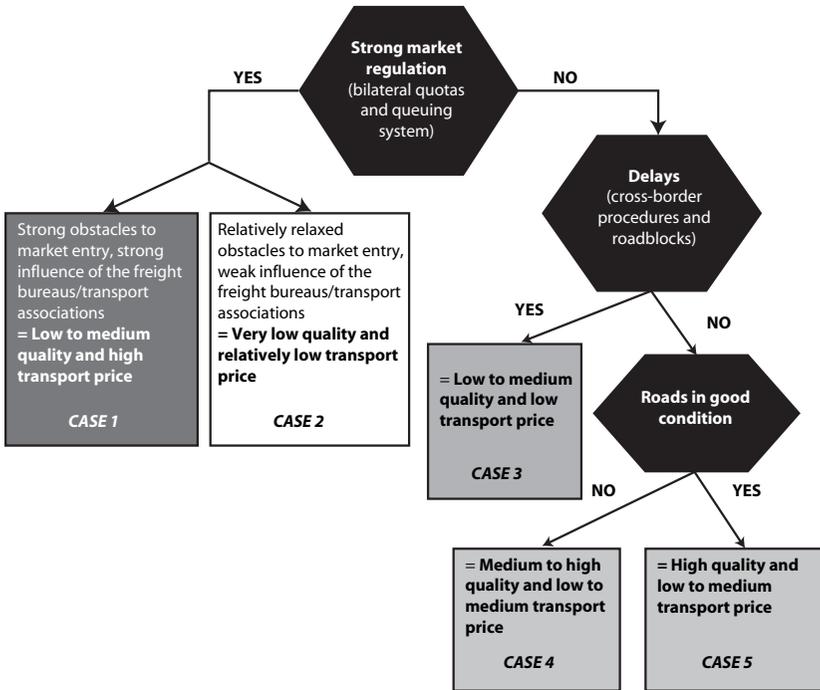
Date of all countries except the Central African Republic corresponds to year 2005, and Central African Republic to 2002. Amounts are in current market prices, U.S. dollars.

**West Africa**

**Economic importance.** West Africa comprises several gateways (Ghana, Benin, Côte d’Ivoire, Senegal, Guinea, and Togo) and three inland countries (Burkina Faso, Mali, and Niger). The 2002 crisis in Côte d’Ivoire, which resulted in the closing of the international road and rail routes starting from Abidjan, caused a rerouting of freight to other ports in Togo, Benin, and Ghana. For Burkina Faso, the rerouting resulted in Lomé and Tema increasing their share of the country’s trade (for Lomé, from 20 percent in 1999 to 50 percent in 2004, and for Tema, from 7 percent to 36 percent during the same period). The crisis also affected Mali traffic, and as a result Burkina Faso became a transit country for Mali trade.

**Trucking environment and market structure.** West Africa is characterized by strong market regulation through freight bureaus and shippers’ councils (see chapter 5 and annex 4 for more details). The quality of transport services is uniformly low. There are no large trucking

**Figure 3.1 A Typology of Transport Corridors in Africa Based on Market Access**



Source: Task team.

Note: Figure 3.1 defines a typology of corridors with market access at the core of the distinction.

companies and few new trucks, yet transport prices are relatively low (case 2 in figure 3.1).<sup>2</sup>

## Central Africa

**Economic importance.** Traditionally, the regional transport industry in Central Africa, particularly with respect to transit traffic, has been shared between the road and road-rail corridors originating from the gateway port of Douala and the rail-river-road corridors between Pointe-Noire (the Republic of Congo) or Matadi (the Democratic Republic of Congo [DRC]) and Bangui in the Central African Republic (rail-river) up to N'Djaména in Chad. However, the rail-river corridor has lost all its market shares of the Chadian trade since the early 1990s and has become marginal for the Central African Republic trade (except for oil products through Matadi).

The regional transport industry thus is mainly dominated today by two road and road-rail corridors that link the port of Douala to the capital cities of the Central African Republic and Chad. These corridors provide the economic lifeline between the coastal (Cameroon) and the two land-locked countries (Chad and the Central African Republic). Besides the two capital cities, two other subregions play a crucial role for international trade. These are the southwest region in Chad, where most of the country's cotton exports and all the country's oil exports are produced, and the southwest forest region in the Central African Republic, where the logging industry is concentrated. Thus, Douala is one of the most important ports in West and Central Africa.

**Trucking environment and market structure.** Central Africa's international transport is characterized by cartels. Transport quality is low but prices are high despite the fact that prices may differ widely along corridors of the region. In this subregion, freight bureaus and transport associations are very powerful and do not allow many truck operators to bypass the system (case 1 in figure 3.1).

## The Northern Corridor in East Africa

**Economic importance.** The long-established northern corridor runs from the port of Mombasa via Nairobi to Kampala, with extensions to the Democratic Republic of Congo, Rwanda, and Burundi. Mombasa, the largest port in East Africa, is well endowed with equipment and facilities, has a natural port whose berths do not require constant dredging, and

has an adequate dock infrastructure. Mombasa now handles more than 13 million tons a year. Although intraregional trade in the East African Community (EAC) has been growing fast in recent years, it contributes only 20 percent of the trade volume in the subregion, while more than 80 percent of the trade flows are still going to and coming from outside the region. This corridor is now taking a new political and economic dimension with the recently reformed EAC, the regional organization of Kenya, Uganda, and Tanzania.

***Trucking environment and market structure.*** East Africa is a competitive and mature market with “rates determined by market forces,” especially for corridors originating from the port (Oyer 2007) (cases 3 and 4 in figure 3.1).<sup>3</sup> The largest professionalized trucking companies account for approximately 20 percent of total market shares according to our estimates,<sup>4</sup> which is comparable to any mature trucking market in Europe or North America. There are about 20 large companies that operate more than 100 trucks each. The largest Kenyan company owns a fleet of 600 trucks. These large companies obtain loads from long-term direct contracting (from one to three years). Their yearly mileage to Kampala can reach more than 100,000 kilometers, which is much higher than the average mileage in Central Africa (at most 60,000 kilometers per year).

Transport quality in East Africa is higher than in Central or West Africa, with larger and more modern truck fleets. However, on average, transport prices are lower, especially services to Uganda. There is no abnormal disconnect between prices and costs along the Northern Corridor (up to Kampala).

## **The North-South Corridor in Southern Africa**

***Economic importance.*** Four main trade corridors link Zambia and the southeast Democratic Republic of Congo to the subregion and overseas markets. These are Dar-es-Salaam, Walvis Bay, Beira, and the north-south corridor through Durban. The north-south corridor serves a dual purpose: First, it serves as an intraregional trade route between Zambia (and further southeast, the Democratic Republic of Congo and western Malawi) and its neighbors, Botswana, Zimbabwe, and South Africa, and as a link to the port of Durban for overseas imports and exports. From south to north, the two main border crossing points are Beit Bridge between South Africa and Zimbabwe, and Groblers Bridge/Martins Drift between South Africa and Botswana. Beit Bridge is the busiest border post in the region, handling as

many as 500 trucks per day, whereas volumes through Martins Drift are about half that number.

Freight demand in Zambia has been rising rapidly with the opening of new mines, the increase of copper prices, and the growth of the economy (see annex 5). In 2005, approximately 1.6 million tons were exported, and 3.3 million tons were imported. The main exports from Zambia are mineral and agricultural commodities. The main imports, volumewise, were mineral products, chemicals, heavy mining equipment, and manufactured goods. However, valuewise, Zambia's main imports were machinery and mechanical appliances, fuels, electrical machinery, and vehicles.

Although the port of Beira in Mozambique is closer than Durban for most Zambian shippers, Durban is more convenient as it can be accessed directly by reliable road infrastructure and with channel-dredging equipment. Durban's port equipment and lower maritime transport rates make it also attractive for Zambian shippers.<sup>5</sup>

Durban is the largest port in the area, accounting for at least three-quarters of the total capacity provided by the various ports serving the corridors in the subregion. The Durban–Lusaka corridor route is then the most utilized corridor for Zambia.

***Trucking environment and market structure.*** The Southern Africa corridor is the most advanced of all corridors in this study, both in terms of regulatory regimes and efficiency of logistics services<sup>6</sup> (cases 4 and 5 in figure 3.1).

The transport market and operations in Southern Africa are of great interest for other countries in the subregion because they combine liberalization with enforcement of quality and load control rules applicable to all trucking operators.

Operations to and from Southern Africa are governed by bilateral agreements. Unlike West and Central Africa, the Southern African agreements do not establish quotas. This enables direct contracting between shippers and transporters and creates incentives for transporters to be more efficient. The agreements contain the following provisions, among others:

- restrict the carriage of bilateral trade to carriers from the two countries
- prohibit cabotage
- provide that the regulatory authorities of the two parties shall share information concerning traffic development
- define the types of permits that may be issued, namely 14 days, short term (3 months), and long term (12 months)

- state that cargo rates and charges shall be determined by the market
- provide for the establishment of a joint route management group to determine transport needs on a route, among other things

## Notes

1. Southern Africa is slightly different as a significant proportion of the import traffic into neighboring countries originates from the industrial core of South Africa and not from overseas through Durban.
2. Prices are relatively low compared with international standards, but this does not prevent profitability.
3. As in Central Africa, prices and profits may widely differ. Some oligopolies may be found on some marginal international routes, for instance after Kampala.
4. This is confirmed by Oyer (2007) who surveyed 15 percent of Kenyan trucking companies.
5. Since Durban is the hub port of the subregions, operators often prefer to truck containers directly from this port over longer distances instead of adding a feeder link to less well served but closer ports.
6. For the Durban–Johannesburg corridor, the rail market remains relatively important with 20 percent of the total market share (CSIR 2006, 18).

