INFRASTRUCTURE DEVELOPMENT IN SUB-SAHARAN AFRICA DRIVING DEMAND FOR IMPORTS OF MACHINERY, EQUIPMENT, AND TRANSPORTATION GOODS

Arona Butcher (Arona.Butcher@usitc.gov), Cathy Jabara (Cathy.Jabara@usitc.gov), Lin Jones (lin.jones@usitc.gov)

In the last decade, Sub-Saharan Africa (SSA) experienced robust growth in imports of infrastructure-related capital goods,[1] such as telecommunication equipment, machinery, vehicles, aircraft, railway, and ships and boats. SSA's strong demand for such imports has been attributed to its growing economy and expanding infrastructure development. Although the United States lags behind the EU27, China, and South Africa in its share of SSA's imports of machinery, equipment, and transportation goods, U.S. exports of these goods to the region increased six fold from 2000 to 2011. As SSA's infrastructure development is expected to continue to grow in the future, the United States may see increased opportunities for U.S. machinery, equipment, and transportation goods exports to the region, and subsequently, the effects from SSA's infrastructure improvement could further stimulate demand for other U.S. exports and investment.

SSA's Growing Imports of Machinery, Equipment, and Transportation Goods

Benefiting from rising commodity prices, growing exports, and increasing foreign direct investment, SSA's (excluding South Africa) GDP has grown at an average annual rate of 6 percent since 2000 (Figure 1), making SSA one of the fastest growing developing regions. This sustained economic growth underpins SSA's expanding infrastructure development and growing demand for infrastructure-related capital goods.

- SSA's construction output grew from 4.7 percent of GDP in 1995 to 6.9 percent of GDP in 2010, or from $8.2 billion in 1995 to $51.6 billion in 2010, fueling the demand for machinery and equipment;
- SSA's mobile cellular subscriptions jumped from 1.7 per 100 people in 2000 to 52.9 per 100 people in 2011, driving up the demand for telecommunication equipment; and
- Improved roads, ports, and airports stimulated the demand for transport equipment, such as vehicles, ships and boats, and aircraft.

With its increasing focus on infrastructure investment, SSA's imports of infrastructure-related machinery, equipment, and transportation goods have grown rapidly. The compound annual growth rate (CAGR) of 21 percent between 2000 and 2011 for such imports (Figure 2) far exceeds the comparable rate of 7 percent for the rest of the world. In 2011, SSA's imports of such goods amounted to $41.4 billion.

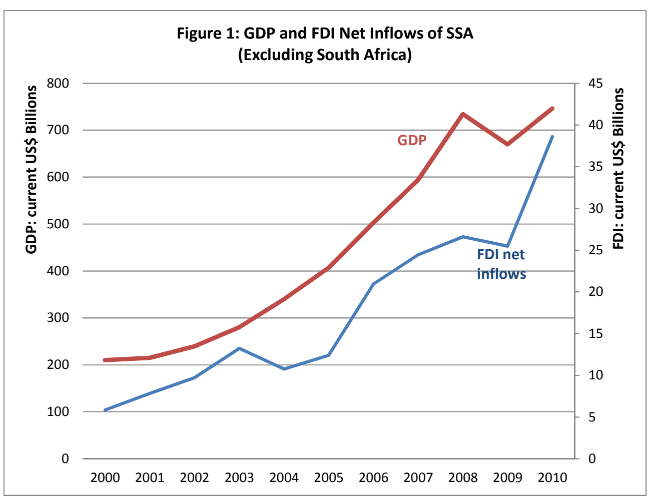

Figure 1: GDP and FDI Net Inflows of SSA (Excluding South Africa)

Source: Africa Development Indicators

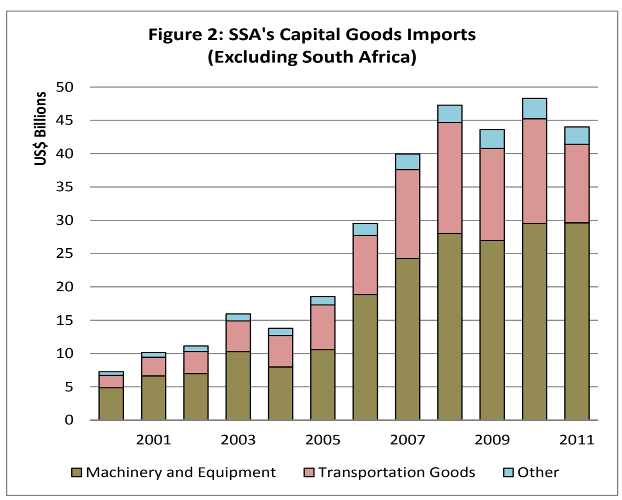

Figure 2: SSA's Capital Goods Imports (Excluding South Africa)

Source: UN Comtrade

[1] This briefing uses the WTO classification of capital goods at the 6 digit HS level. See the complete list at http://wits.worldbank.org/wits/data_details.html under "HS Standard Product Group\WTO-SoP4: Capital goods." Infrastructure-related capital goods in this briefing refer to capital goods in chapter 84-89, including machinery, equipment, transportation goods.

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SSA's Infrastructure Development

SSA's infrastructure coverage lags behind other developing-country regions, indicating substantial growth opportunities in related sectors (Table 1). According to a World Bank 2010 report, the cost of addressing SSA's needs for sustained infrastructure improvement is estimated to be approximately $93 billion a year: one third for infrastructure operation and maintenance services, and two thirds ($62 billion) for infrastructure-related capital expenditures, potentially leading to increases in imports for related goods.

Table 1: SSA's Infrastructure Deficit

Infrastructure	Measure	SSA*	Latin America & Caribbean*	South Asia	East Asia & Pacific*
Transport	Roads, paved (% of total roads, 2009)	19	22	54	31
Information and communication technology	Mobile Subscription (per 100 population, 2011)	53	107	69	80
Energy	Electric power consumption (kWh per capita, 2010)	553	1,973	555	2,337
	Electricity production (kWh, 2010)	441 billion	1,356 billion	1,120 billion	4,889 billion
Water	Improved water (% population with access, 2010)	49 (rural) 83 (urban)	81 (rural) 98 (urban)	88 (rural) 95 (urban)	84 (rural) 97 (urban)
Sanitation	Improved sanitation (% of population with access, 2010)	31	79	38	66

** Including developing countries in the region only.*
Source: World Bank, World Development Indicators

In addition to SSA governments' public expenditures and multilateral development assistance, the growing participation of non-traditional sources of infrastructure finance, such as private investors and non-OECD countries, is likely to continue to fuel SSA's infrastructure development and its demand for related capital goods imports in the future.

- Private investment in SSA's infrastructure increased noticeably from $3.5 billion in 2000 to $11.4 billion in 2011, becoming one of the largest funding sources of infrastructure capital expenditures (World Bank PPI).
- Non-OECD countries, including China, the Persian Gulf countries, and India, also play a more important role in financing SSA infrastructure projects. For instance, it is estimated that China committed $14.9 billion to SSA's transport and energy projects in 2011 (ICA 2012).

SSA's Major Suppliers

The EU27, China, South Africa, the United States, India, and Japan are the major suppliers of SSA's imports of machinery, equipment, and transportation goods, together providing 81% of these imports in 2011. Since 2000, their exports of these goods to SSA all experienced double-digit annual growth rates, reflecting SSA's sustained demand for such imports, and signaling the long-term potential for market growth (Table 2).

Table 2: Major Suppliers of SSA's Machinery, Equipment, and Transportation Goods Imports

Supplier	Market Share		CAGR
	2000	2011	
EU27	46%	29%	13%
China	3%	21%	42%
South Africa	17%	12%	15%
USA	8%	9%	19%
India	2%	5%	27%
Japan	9%	4%	11%
ROW	14%	19%	21%

Source: UN Comtrade

- Due to geographic proximity and historical linkage, the EU27 remains the dominant SSA market player, although its share has been shrinking rapidly.
- China's market share jumped sharply from 2000 to 2011, echoing China's increasing economic ties with SSA in the last decade.
- The United States benefited from SSA's market growth as its export share increased slightly from 8 percent in 2000 to 9 percent in 2011, and the value of its exports increased by $3.2 billion. However, its export growth rate to SSA lags behind those of China, India, and the rest of world, suggesting the existence of further opportunities to explore in this expanding market.

Sources: World Bank Africa Development Indicators; PPI database; IMF Regional Economic Outlook-SSA; UN Comtrade; World Bank 2010, "Africa's Infrastructure: A Time for Transformation;" ICA 2011 Annual Report, "Financial Commitments and Disbursements for Infrastructure in Africa for 2011;", "The Changing Landscape of Infrastructure Finance in Africa."

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