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Sharing knowledge, experiences, and innovations in public-private partnerships in infrastructure

The changing landscape of infrastructure finance in Africa Nontraditional sources take on a growing role

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Africa has traditionally depended on official development assistance to meet its infrastructure needs. But a growing share of the region's infrastructure finance is now coming from nontraditional sources. Leading this trend are non-OECD financiers, chiefly China, India, and Arab countries. While Arab funds have been operating in Africa for decades, China and India began to step up their involvement in the early 2000s. Flows from these non-OECD sources are now broadly comparable to traditional development assistance in dollars committed. The largest flows have gone to energy—especially hydropower—and rail transport.

In recent years non-OECD economies have begun to play a growing role in financing infrastructure in Sub-Saharan Africa. Particularly strong growth has been seen in financial flows from emerging economies, or “emerging financiers,” chiefly China and India. And substantial resources have continued to flow from Arab donor countries. Financing commitments for African infrastructure by these non-OECD financiers—China, India, and Arab states—jumped from less than US\$1 billion before 2000 to about US\$9 billion in 2006.

These resource flows are large enough to make a material contribution toward meeting Africa's infrastructure financing needs. Indeed, the combined flows from these non-OECD financiers are now comparable in size to traditional official development assistance (ODA) from OECD countries and to commitments through private participation in infrastructure (PPI). While non-OECD financiers committed US\$9 billion for infrastructure projects in Africa in 2006, ODA commitments amounted to US\$5.3 billion and PPI commitments to US\$8 billion. (figure 1)

China leading the way

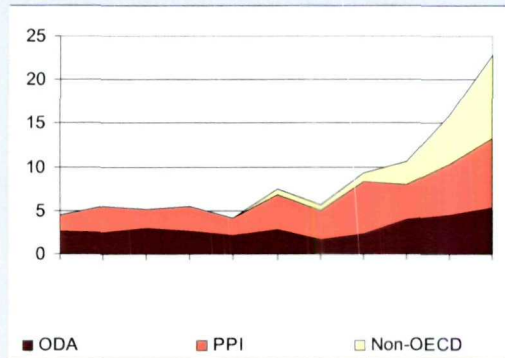
Among the emerging financiers of African infrastructure, China is by far the largest. Its commitments to infrastructure projects in the region are estimated to have risen from less than US\$1 billion a year in 2001–03 to about US\$2 billion a year in 2004–05—and to at least US\$8.4 billion in 2006 and US\$5 billion in 2007 (figure 2). Most of the financing is channeled through the Export-Import Bank of China. Large amounts often flow to single projects. Among about 40 confirmed projects with financial commitments from China, about half a dozen had commitments of more than US\$1 billion.

The energy sector receives the largest share of infrastructure finance from China, followed by transport and, with much smaller shares, water and telecommunications. This sectoral distribution reflects the general pattern of emerging financiers concentrating on infrastructure linked to natural resource development. In the energy sector China's activities have focused on the construction of large hydropower schemes. By the end of 2006 China had committed US\$5.4 billion in financing to the sector, including the construction of ten hydropower projects that, once completed, will increase the available hydropower generation capacity in Africa by 30 percent.

In the rail sector China has made financing commitments of US\$4 billion so far. They include rehabilitation of more than 4,000 kilometers of existing railway lines and the construction of more than 1,000 kilometers of new railroad. In telecommunications, China's involvement takes the form mainly of equipment sales to state-owned incumbents, either

FIGURE 1

Non-OECD finance takes off
Annual commitments to infrastructure projects in Sub-Saharan Africa, 1996–2008 (projected)



Source: World Bank–PPIAF Chinese Projects Database, 2008.
Note: Data for China include only projects that could be confirmed by Chinese sources.

through normal commercial contracts or through intergovernmental financing tied to purchases of Chinese equipment. In the road and water sectors China has provided financing for a large number of projects, though the sums involved are relatively small; no more than US\$700 million has gone to these two sectors combined.

Infrastructure finance from China has been recorded in more than 35 countries across Africa. Yet despite this broad reach, the finance is heavily concentrated geographically. More than 75 percent has gone to Nigeria, Angola, Zimbabwe, Sudan and Ethiopia. Most of the rest has been spread across some 14 recipients, the largest being the Republic of Congo, Guinea, Ghana, and Mauritania.

India's growing role

China is not the only emerging financier playing a major role in Africa. India is also scaling up finance for infrastructure projects in the region, with commitments averaging US\$0.8 billion a year over the years 2003–07. In recent years India has committed funding to an estimated 13 African infrastructure projects worth a total of US\$4.3 billion. Like China's financing activities, India's are closely linked to interests in natural resource development, where another US\$3.4 billion of investment from that country was identified over the same. And, like China, the Export-Import Bank of India is the main conduit for infrastructure finance.

Most of India's financing is concentrated in a single Nigerian deal struck in November 2005. At that time ONGC Mittal made a commitment of US\$6 billion to build an oil refinery with annual capacity of 9 million tons, a 200-megawatt power plant, and a 1,000-kilometer cross-country railway. In Sudan, India has financed some US\$600 million of energy infrastructure, including a 741-kilometer oil pipeline and four 125-megawatt power plants along with an associated transmission system. And in Angola, India committed US\$40 million to the rehabilitation of the Namibe-Matala railroad in August 2004.

Arab donors also active

Arab donor countries too have been playing a substantial role in African infrastructure. Commitments averaged just over US\$500 million a year in 2001–07, with no discernible year-on-year trend. Finance from Arab donors is channeled through special funds or development agencies. Those providing the most support to African infrastructure projects are the Islamic Development Bank, the Arab Bank for Economic Development in Africa, the Kuwait Fund for Arab Economic Development, the OPEC Fund for International Development, and the Saudi Fund for Development.

Projects financed by Arab donors are relatively small, with an average value of US\$20 million. Activities are broadly spread across 36 countries in Africa, though concentrated more in countries with relatively large Muslim populations. About half the resources go to transport projects (mainly roads), 30 percent to energy projects, and 15 percent to water and sanitation activities.

Clear sectoral patterns

While the resources for African infrastructure from ODA, PPI, and non-OECD financiers are comparable in amount, the distribution by sector varies widely (figure 3). ODA is spread relatively evenly among transport, energy, and water and sanitation. PPI is skewed heavily toward information and telecommunications. And non-OECD finance is skewed heavily toward energy and transport.

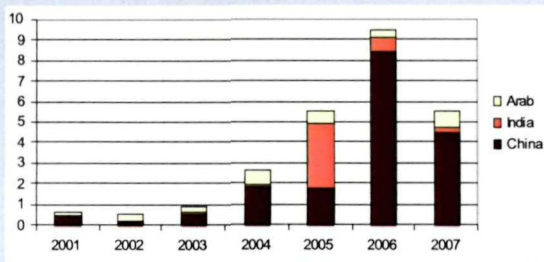
As a result, each of these sectors receives a different mix of the three sources of finance. For information and communication technology almost all the funding is through PPI. For the energy sector almost half comes from non-OECD

China is by far the largest of the emerging financiers active in Africa

FIGURE 2

A surge in infrastructure finance from China and India

Annual commitments to infrastructure projects in Sub-Saharan Africa by non-OECD financiers, 2001–07



Source: World Bank–PPIAF Chinese Projects Database, 2008.

financiers (focused primarily on generation and hydropower), with a substantial contribution from ODA (which also encompasses transmission and distribution). For transport about 60 percent comes from ODA (focused on roads), with a significant contribution from non-OECD financiers (focused on rail). Finally, for water and sanitation almost all the financing comes from ODA.

The distribution reflects the largely complementary interests driving the different sources of finance. ODA is focused on social concerns and the financing of public goods. Private investors seek the most commercially lucrative opportunities in telecommunications. And non-OECD financiers seek to improve the productive infrastructure needed for natural resource development.

Geographic specialization

A similar pattern of specialization emerges with respect to geography, with different countries benefiting disproportionately from different sources of finance. For purposes of comparison, countries can be divided into four categories: those relying primarily on PPI for external infrastructure finance, those relying primarily on ODA, those relying primarily on emerging financiers, and those that have a broad spread of external sources.

The countries most heavily reliant on PPI are Kenya and Nigeria, supplemented in Kenya by ODA and in Nigeria by Chinese

financing. The countries that rely predominantly on emerging financiers are Angola, Gabon, Guinea, Mauritania, Sudan and Togo. Most of the remaining countries rely primarily on traditional ODA (e.g. Burundi, Mali, Niger, Rwanda, Tanzania). A final group of countries draw significantly on both OECD and non-OECD sources (for example DRC and Guinea).

Conclusion

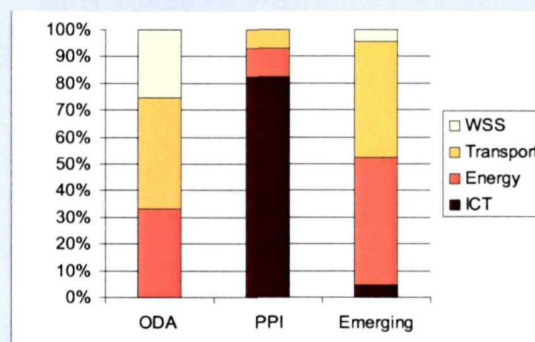
The expanding role of China, India, and other non-OECD financiers in Africa represents an encouraging trend for the region, which faces an enormous infrastructure deficit. The financing they provide is unprecedented in its scale and in its focus on large-scale infrastructure projects. Other nontraditional sources of development funding are playing new or growing roles in Africa as well, offering potential new directions for private participation in infrastructure (box 1).

Non-OECD finance for African infrastructure is skewed heavily toward energy and transport

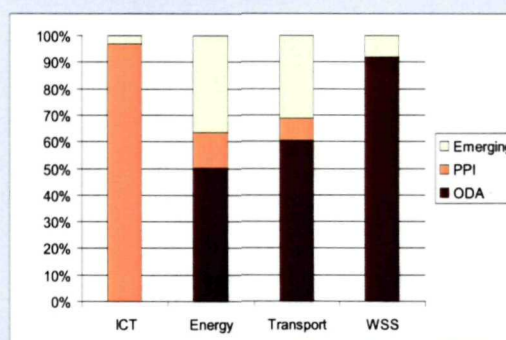
FIGURE 3

A clear pattern of sectoral specialization

Annual commitments to infrastructure projects in Sub-Saharan Africa by sector



Annual commitments to infrastructure projects in Sub-Saharan Africa by sector and source,



Source: World Bank–PPIAF Chinese Projects Database, 2008.

With new actors and new modes of financing, borrowers and financiers alike face a learning process—one that includes learning how to evaluate the potential social and environmental risks of new projects. For African governments the key challenge is how to make the best strategic use of infrastructure finance from all sources, including non-OECD financiers and other nontraditional investors.

Note

This note is adapted from Foster, Butterfield, and Chen (2006).

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Box 1 — Emerging and expanding roles for private aid actors

Non-OECD countries are not the only nontraditional funding sources making an impact in Africa. In 2004 philanthropic organizations committed an estimated US\$8.3 billion to international development causes (Adelman 2006). And while it is unclear how much of this total relates to Africa, it is clear that Africa is a focus for much of the international development work by private actors. Private aid actors encompass a range of types:

- **Megafoundations.** Among the biggest changes to the private funding scene in Africa has been the rise of "megafoundations" such as the Ford Foundation and the Bill & Melinda Gates Foundation. These foundations contribute resources on the scale of some OECD bilateral donors and are increasingly engaging with the larger development community and pursuing harmonized approaches.
- **Nongovernmental organizations.** NGOs often specialize in a particular country or sector and work on small, stand-alone projects. Some international NGOs raise their own resources and function much like a private foundation. Others rely on funding from donor governments, aid agencies, private foundations, or corporate philanthropists.
- **Private foundations.** The smaller cousins of megafoundations are far more numerous. These private foundations tend to be more specialized than bilateral aid agencies, but less specialized than development NGOs. Many of the smaller foundations target certain areas or sectors and channel their international giving through intermediaries.
- **Corporate philanthropists.** Multinational corporations are becoming more involved in poverty and development issues in Africa. The Google Foundation, for example, with US\$90 million in assets, has focused much of its attention on Africa. These corporate actors use sophisticated strategies, including cash and noncash grants, employee volunteer programs, cause-related marketing, and "bottom of the pyramid" strategies aimed at bringing goods and services to the poor. Some new corporate foundations (such as those of Nike and Shell) are pursuing innovative ideas developed in-house with external implementing partners carefully identified through networks or personal contacts.
- **Market-oriented hybrid actors.** A new generation of private actors are considering economic as well as social objectives, seeking local solutions to problems and then trying to make them commercial. These "social venture capitalists" provide financing to projects with a positive poverty and development impact.

Source: Adapted from White 2006.

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