

Financing transportation projects in Africa

To meet Africa's development goals, the World Bank estimates that over US\$250bn in transportation infrastructure will be required over the next 15 years. Even with substantial donor support, this annual investment of US\$16.7bn is a hard target to meet. Attracting private sector financing will be critical in filling the gap.

As a result of years of underinvestment, there exists a tremendous need for development and rehabilitation of transportation infrastructure on the African continent. There is limited access to transportation networks for much of the population – within the 25 African countries included in the International Development Association's Rural Access Index, only 36% of the sizable rural population lives within 2km of an all-season road – and this lack of transportation has also become a critical constraint on economic growth. Demonstrating the scale of the problem, Uganda, one of Africa's 15 landlocked countries, suffers the equivalent of an 80% tax on its clothing exports due to transportation costs.

Sources of finance

Transportation infrastructure for much of Africa has historically been funded by national governments and multilateral institutions. Total private investment in African transportation infrastructure from 1990-2006 was only US\$12.6bn, less than the forecast annual investment needs over each of the next 10 years. Moreover, in this 16-year period, 40% of the combined amount occurred in South Africa and 61% of the total investment occurred in 2005 and 2006, highlighting the long-standing lack of participation of the private sector in African transport.

Public and local finance

Public sector financing of African transport infrastructure faces a number of challenges, not least the scale of development needs in the continent.

Transportation competes with health care, sanitation, education, debt service, and numerous other high-priority areas for public funds. Furthermore, many national governments are tightly constrained in

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their national budgets due to their limited ability to borrow either at home or abroad. Only 25 African countries currently have credit ratings, and of those only five are investment grade. Although lack of a rating may not preclude a country from borrowing, the lending terms in such cases can be prohibitive. With forecast annual

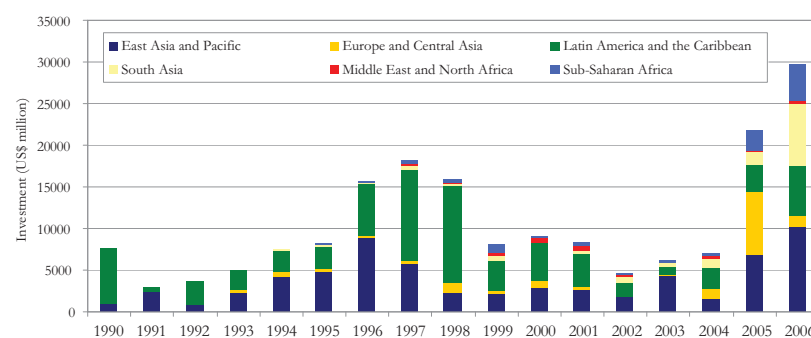
transportation investment requirements equaling 7% of African central government revenues, most countries are unable to fulfill these needs without substantial support from other sources.

With the exception of South Africa, African debt and capital markets are still in the early stages of development and are ill-equipped to finance the continent's overwhelming transportation needs. Most local debt markets are characterised by low capital availability, short-term debt tenors, and high transaction costs. External sources of capital continue to be a critical component in the development of infrastructure – including transport infrastructure – in Africa.

Development agencies

For those projects with financial returns insufficient to attract the private sector, but with large (positive) social externalities, multilateral institutions are an important source of funding. These agencies are focused on broad economic development goals that take social benefits into account when evaluating infrastructure projects. Where other investors or lenders might be reluctant to participate in these projects, multilaterals can provide a valuable source of financing in the form of development grants or low-interest, long-term loans.

Figure 1: Private sector participation in infrastructure investments by region



Source: World Bank PPI Database

Funding from international development agencies is limited and subject to change as a result of shifts in institutional priorities. Although infrastructure has become a priority sector for donor countries and agencies, and official development assistance (ODA) for all infrastructure sectors grew from US\$5bn to US\$5.6bn from 2005 to 2006, funds currently allocated to transportation are insufficient to meet the continent's investment needs.

Private sector finance

Less than 6% of the global total of private investments in transportation went to Sub-Saharan Africa regions from 1990-2006 (see Figure 1). Over this 16-year period, the private sector was involved in only approximately 100 transportation projects across the entire African continent. Also, much of this private sector involvement was limited to operating contracts, which did not require any equity investment. Although private sector investment has dramatically increased over the past few years, it still remains well below the US\$16.7bn that will be required on an annual basis for the next 15 years. This limited private participation in

and – in some cases – civil unrest has left many African countries with a reputation for economic and political instability. The fixed nature of infrastructure assets, combined with the high upfront capital costs and long build-out and payback periods, requires both long-term predictability and stability. Uncertainties regarding the African political climate have consequently discouraged private sector infrastructure investors.

As a result, those projects that have managed to attract private sector capital have either been small-scale or have benefited from significant risk mitigation. This mitigation has typically taken the form of dollar-denominated revenues – as in the case of seaports, which account for half of all African infrastructure projects with private participation – or government and multilateral guarantees. To bridge the gap between public and multilateral funds and investment needs, it will be necessary to further develop methods for sharing or mitigating risks so as to improve the climate for private investment.

Bridging the gap

African nations are increasingly looking

of tolls or other user-paid fees.

PPPs have been successfully implemented in numerous European and North American countries since the 1990s and are being explored by governments in emerging markets worldwide. PPP structures are able to incorporate the benefits of reduced political risk caused by government participation and the advantages of experience and creditworthiness of international sponsors to attract higher debt leverage.

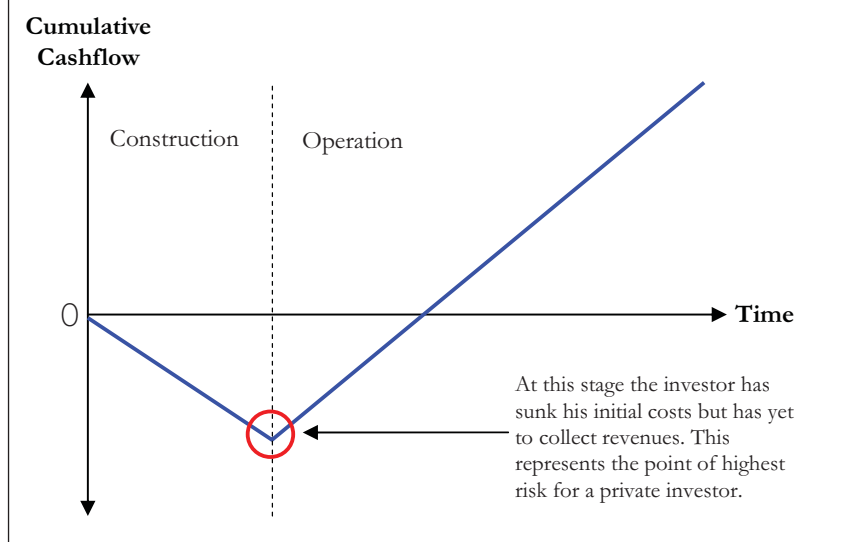
PPPs can be a valuable tool for African governments, as they leverage public funds by attracting both private sector equity and debt. Other benefits include efficiencies resulting from improved design, construction and operations, and from risk sharing. The potential of these structures for African transportation projects is evidenced by increased interest in PPPs and accompanying capacity-building programmes among donor and multilateral institutions.

Many African nations, however, lack the necessary institutional frameworks and experience that these highly complex project structures involve. PPP structures can also be time-consuming, as evidenced by the delays in reaching financial close for the Gautrain PPP in South Africa. Multilateral development institutions, with their specialised knowledge and skill in capacity-building, have an important role to play by supporting national governments in the development and execution of PPP programmes. Nevertheless, it is important to recognise that PPPs are just one of the many financing options available to attract private sector participation in infrastructure development. Build-operate-transfer (BOT) structures and privatisation are two additional financing methods available to draw private sector involvement in infrastructure development.

The value of multilaterals

Transportation projects, by their very nature, are highly sensitive to political risk. Typically, these projects require substantial capital expenditures before they begin to generate returns. The moment immediately after a project's completion represents the point of greatest risk (see Figure 2). At this point the private sector partner's capital is sunk in an immovable asset. It also represents the point when the incentive

Figure 2: Private sector profits over time



infrastructure is a result of high real and perceived country and project risks. Although the region has undergone improvements in democratisation and sustained economic growth, a history of high debt levels, exchange rate risk, inflation, lack of regulatory frameworks,

to public-private partnerships (PPP) as a tool to finance transportation projects to address their own lack of public resources. Under a PPP structure, the private sector provides financing and expertise in exchange for the ability to share collected revenues, which usually come in the form

for the host government to renege on the original agreement is at its highest. Adverse shifts in the political environment can leave investors with little bargaining power.

Due to the perceived political risk, investors in African projects will demand a premium over the typical equity internal rate of return of 12-20% that is expected of transportation projects in the US. Where country risks are discouraging investment, multilateral institutions have the ability to provide support through their willingness to address political risk. The World Bank's Miga (as well as other bilateral agencies and private sector insurers) provides political risk insurance, where the agency guarantees reimbursement of private investors, or lenders, for any losses incurred as a result of political risk (currency inconvertibility, political violence, expropriation). Multilateral organisations can also mitigate risk indirectly by investing in a portion of the project themselves. By investing in a project, the organisation signals its support and provides a 'halo effect,' reassuring co-investors that, should the government back out of its commitments, it would not simply be acting against individual private sector companies, but against a powerful international institution with strong political support.

Multilateral institutions can also support the transaction itself. The World Bank's Public-Private Infrastructure Advisory Facility has noted that one of the most significant barriers to attracting foreign investment is the lack of packaged, bankable projects in the region. Due to the scale of most infrastructure projects, sponsors require a high degree of certainty about the financial viability of a project before pursuing it. High-priority projects in Africa, however, frequently lack adequate feasibility studies. With the cost of project preparation reaching as high as 10% of a project's total cost, multilaterals can play a critical role in stimulating private investment by funding project preparation work and by hiring private sector advisors and engineers to support host governments.

What now?

Both development experts and African governments recognise the significance of infrastructure development to the

long-term prosperity of their countries. Yet the transportation sector continues to face problems of underinvestment, inefficient management of many government-owned transportation assets, and a lack of maintenance of existing infrastructure. The capital costs for much needed transportation infrastructure are staggering. Traditional sources of finance for infrastructure – national governments and multilateral institutions – cannot meet these financing needs, leaving a funding gap that calls for increased private sector participation.

The private sector has the capacity to meet this funding gap, but new government

policies and regulations are necessary in order to attract sufficient private sector capital. Multilateral development institutions can play a critical role in this process, both in the short and the long term. Their ability to mitigate risks on individual projects and build the capacity of governments as regulators and as participants in partnerships with the private sector is vital for Africa to reach its development goals.

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Case studies: Bridging the financing gap

Doraleh Container Terminal Project

With its strategic location on the Red Sea, Djibouti has the potential to become a regional transportation hub. With the recent financial close of the Doraleh Port project financing in 2007, Djibouti is rapidly approaching this goal. In November 2006, the UAE state-owned company DP World began construction on a US\$396mn dollar container terminal at Djibouti's port of Doraleh. The port was the first project financing in the country, consisting of US\$133mn in equity from DP World and a US\$263mn Islamic *musharaka*. The debt financing was fully guaranteed by the World Bank's Multilateral Investment Guarantee Agency (Miga) in its first Islamic guarantee transaction, demonstrating the significance of support by multilateral institutions in regional infrastructure.

Kenya-Uganda Railway Concession

The Kenyan and Ugandan railways form part of a regional link connecting the countries of East Africa to Kenya's port of Mombasa. In 2006, the two governments, concerned over the state of the rail networks, agreed to a 25-year concession of their railway systems to

the privately owned Rift Valley Railways Consortium (RVRC). As part of the concession agreement, RVRC was required to make an initial payment of US\$3mn to the government of Kenya and US\$2mn to that of Uganda. In addition, RVRC agreed to pay an annual fee equivalent to 11% of each railway's gross revenues to its respective government.

The capital requirements over the life of the project are expected to total US\$400mn. RVRC provided an initial investment of US\$28mn and raised US\$64mn in debt financing, half of which was made up of loans provided by the International Finance Corporation and Germany's KfW. The remaining financing is expected to be generated from project revenues. The project's political risks are covered by IDA partial risk guarantees.

Since taking control of the railway, RVRC has substantially improved the overall quality of service. *Business Daily* has reported a 60% rise in the railway's operating efficiency and reliability, as well as an 80% reduction in average inland cargo transit times to Kampala. Through private participation, the line has become a model of the benefits that private financing can bring to Sub-Saharan Africa's transportation network.