

A Market-based Mechanism to Improve Capital Expenditures

Eric Werker

Harvard Business School

December 10, 2013

Most governments in Sub-Saharan Africa have a capital spending problem. They don't spend enough money to build or improve infrastructure that is in obviously short supply. What has emerged as a "second-best" solution to this problem is infrastructure-directed lending by the development agencies. This is an unfortunate solution, not just for the weakness in state capacity that it perpetuates, and the fiscal space it frees up for countries to undertake expensive commercial borrowing, but also because it links unnecessary debt to necessary infrastructure. I propose a private sector-based solution that links infrastructure spending to contemporaneous revenues, in which the useful functions of the development agency are opened up to competition and the debt financing is replaced by markets for political risk. This solution could not only reduce the cost and debt burden of building infrastructure, but also create high-powered incentives that would solve the weaknesses in state capacity that made debt-linked infrastructure necessary in the first place.

The capital spending problem

Consider the case of Ghana, chosen for being a beacon of democracy and high state capacity. According to the latest IMF figures,¹ Ghana's 2012 budget came out to around 25 percent of GDP, of which 6.8 percentage points went to capital expenditures. Over half of the capital expenditures were foreign-financed, to the tune of GHc 2.5 billion or around US\$1.4 billion. World Bank disbursements, meanwhile, were \$343 million in 2012, while African Development Bank loans were also in the hundreds of millions. A typical project is the World Bank's "Transport Sector Project" approved in 2009 for \$225 million,² which is mostly a concessional loan to improve trunk roads, urban roads, and urban infrastructure. The loan also covers feasibility studies and project management, as well as minor support to an alphabet soup of transportation-related organizations in Ghana. (Similar projects funded by the African Development Bank financed specific sections of roads in Northern Ghana as well as greater Accra.) Why would the Ghanaian government need a 6-year \$225 million loan from the World Bank, when its *growth* in government revenue from 2011 to 2012 was over \$1.4 billion?

The easy answer is that the loan is highly concessional, so offers financing at a cheaper cost than the government's discount rate (and indeed cheaper than the rate of inflation), and the government would be foolish not to take it. This of course is correct, but begs the question: why

¹ <http://www.imf.org/external/pubs/ft/scr/2013/cr13187.pdf>

² <http://www.worldbank.org/projects/P102000/transport-sector-project?lang=en&tab=overview>

not separate out the subsidized component of the loan and call it a grant, then let the government do its own road construction? Ignoring the politics of World Bank lending, which are partly to blame, I argue that the loan is not just an infusion of revenue, but rather a project-finance product with at least three separate functions: (1) financing, (2) project development, procurement and monitoring functions, as well as (3) the commitment to honor the multi-year expenditure path to complete the relevant infrastructure. In short, by signing up to a loan like this (or similar ones from other development finance institutions), the Ghanaian government commits itself to building a relatively simple piece of infrastructure, but one that requires a feasibility study, project management, and several years of financial outlays.

This example is not meant to single out Ghana, which in many ways is a model of African development. We could look closely at any number of Sub-Saharan countries, in particular the resource-rich ones, and see a similar story of foreign-financed basic infrastructure combined with a growing national budget with a very small envelope dedicated to capital expenditure.

Do African governments need the money?

Despite growing its revenues by \$1.4 billion, Ghana faced a \$4.4 billion shortfall in 2012, with expenditure growth led by employee compensation.³ Other new resource exporters face a similar dynamic. In Tanzania, despite 6 percent real GDP growth and an increase in revenue to GDP, the government ran a pre-grant budget deficit of almost 9 percent of GDP, meanwhile financing the majority of its development budget through foreign loans.⁴ Mozambique looks almost identical.⁵ The growth records and low rates on concessional financing give these countries the credit profile to float debt at commercial rates, which they are all doing. Ghana recently had to pay 8 percent on a dollar-denominated loan⁶ and Mozambique 8.5 percent.⁷

This indicates that the “fungibility” critique is at play here: the development banks’ cheap loans are merely allowing the government to borrow at expensive rates. A 2008 African Development Bank study⁸ found that governments face challenges in budget execution as well as multiple opportunities for reallocation. This means that capital expenditures, which require an extensive amount of things to go right before allocated funds can be dispensed, can easily be reallocated to current expenditure uses, which often require simply issuing the funds. Governments are left with a dual problem, despite their strong underlying fiscal potential: a high cost of financing, and the marginal dollar being spent on current expenditure. The challenge of undertaking multi-year infrastructure projects is left to the development banks. That the development banks continue to deliver these projects saves the governments from crises of legitimacy that could otherwise get them thrown out of office.

³ <http://www.imf.org/external/pubs/ft/scr/2013/cr13187.pdf>

⁴ <http://www.imf.org/external/pubs/ft/scr/2013/cr1312.pdf>

⁵ <http://www.imf.org/external/pubs/ft/scr/2013/cr13200.pdf>

⁶ <http://blogs.wsj.com/moneybeat/2013/07/25/ghana-overseas-bond-sale-receives-modest-response/>

⁷ <http://www.economist.com/news/finance-and-economics/21590594-story-dollar-bond-issue-mozambique-parable-easy-money-fishy>

⁸ <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/CABRI%20AfDB%20ENG.pdf>

Untying the loan-infrastructure relationship

African governments have the opportunity to free themselves from the loan-infrastructure relationship while also protecting their budgets from being squandered on unnecessary current expenditures. The first step is to separate out the lending function from the other functions of infrastructure loans (project development/management and offering a commitment mechanism to finance a multi-year expenditure project) and to create a mechanism that directs new revenue toward these projects. The insight behind this proposal is that a loan is simply a commitment mechanism to pay for a multi-year project—but an expensive one if the true cost of capital is 8 percent, and a disingenuous one in the case of concessional loans if the risk of default is borne by taxpayers in developed countries who will finance another round of debt relief before the loans are paid back.

Rather than have a development bank structure an infrastructure project as a loan for a defined, managed infrastructure project with a repayment schedule, an investment or development bank could simply undertake the project development and management functions and then set up a more efficient commitment mechanism to fund the project itself. Consider the \$225 million loan to Ghana to build some roads over six years. Rather than receive disbursements in, say, six annual tranches to then repay it over 40 years, Ghana could simply pay directly in six tranches—easily financed by the country's rapid growth and gains in revenue mobilization. But if the project is to be implemented by a private construction firm, getting the government's word may not be enough. In order to protect those expenditures from being reallocated in the budgeting process—particularly for much larger projects—something else is needed.

The commitment mechanism proposed is to issue political risk insurance alongside the spending commitment schedule for the project. The government would have to take out insurance against its own risk of default. If the government failed to pay the \$35 million required in year five, for example, the insurance issuer would foot the bill and the contract with the construction firm would still be honored. At first glance, this seems like moral hazard, giving the government the incentive to default on its obligation since the cost would be borne by the insurer. But on closer scrutiny, it is the opposite: the more the government honors its obligations, the cheaper it is to insure projects in the future. Sovereign debt works in exactly the same fashion.

Political risk insurance is inherently cheaper than a straight-up loan, since a loan has to cover the investor's cost of capital as well as the political risk of default. Since underperformance would affect the cost of future risk insurance, it would also provide an incentive to the government to get its public finances in order, something a concessional loan doesn't do. And by committing itself to a multi-year contract intermediated by an investment bank, the government could ensure that its capital budget gets spent before it gets reallocated to current expenditures which, like a ratchet, are hard to retract once they have been increased. This commitment is a bigger advantage for most governments than the financial restrictions of reduced cashflow. As a bonus, separating out the project development and management from the loan itself would inject

competition into the market to create complex infrastructure, freeing developing countries from their dependence on the development finance institutions.

One could imagine a spectrum of different arrangements. For countries where the budgeting process is particularly uncondusive to multi-year capital projects, some revenue sources (such as royalties on natural resource activity) could be first routed through an overseas custodian account from which the contract would be honored. This is not unlike the U.S. bailout of Mexico during the 1994 Tequila crisis in which Mexico had to put up its oil production revenues as collateral.⁹ Such an arrangement would no doubt decrease the cost of the political risk insurance, and hence of project development.

Larger countries with bigger projects could attempt to securitize the risk insurance rather than paying an insurer directly. An investment bank could issue instruments similar to credit default swaps in which the credit event being scrutinized would be the government's honoring its contract with the infrastructure firm. As part of the arrangement, the government would have to buy these "contract default swaps" (CDS) for the firm. If the government defaulted on its obligation to the construction company, the sellers of the CDS would make a payment to honor the contract. (The sellers' claim in this case might be the right to collect via a dispute settlement process mediated through ICSID, rather than through bankruptcy procedure as with a normal CDS.) The spread on the CDS would be the cost of the insurance. The advantage of this structure over a direct payment to a risk insurer is that the investment bank could allow "naked" CDSs (bought and sold by those unrelated to the original buyer and seller of the insurance) to trade in a transparent exchange, and in so doing provide a barometer to the government and its constituents of the perceived likelihood of default. Being able to lower its spread would be an incentive to good governments to showcase their competence while decreasing their cost of capital spending towards the risk-free rate.

Towards a world of better, cheaper capital spending

This article has argued that the capital spending problem for many countries in Sub-Saharan Africa is that they don't do enough of it. In spite of an often advantageous fiscal situation, potentially transformational spending on infrastructure gets left out as budgets inefficiently allocate capital and trend towards large and barely-sustainable deficits. In this context, lending becomes the easy way to get real infrastructure built, since it comes with built-in project development and management functions, as well as a commitment mechanism to pay the construction company. But these functions can be separated and opened up to competition if lending itself is substituted for political risk insurance covering default risk for the firms building the infrastructure. In the process, this would lower the cost of capital spending for developing countries, improve the market for project origination and management, and generate incentives for governments to better manage their public expenditures.

⁹ <http://www.nytimes.com/1997/01/16/business/mexico-repays-bailout-by-us-ahead-of-time.html?pagewanted=all&src=pm>