



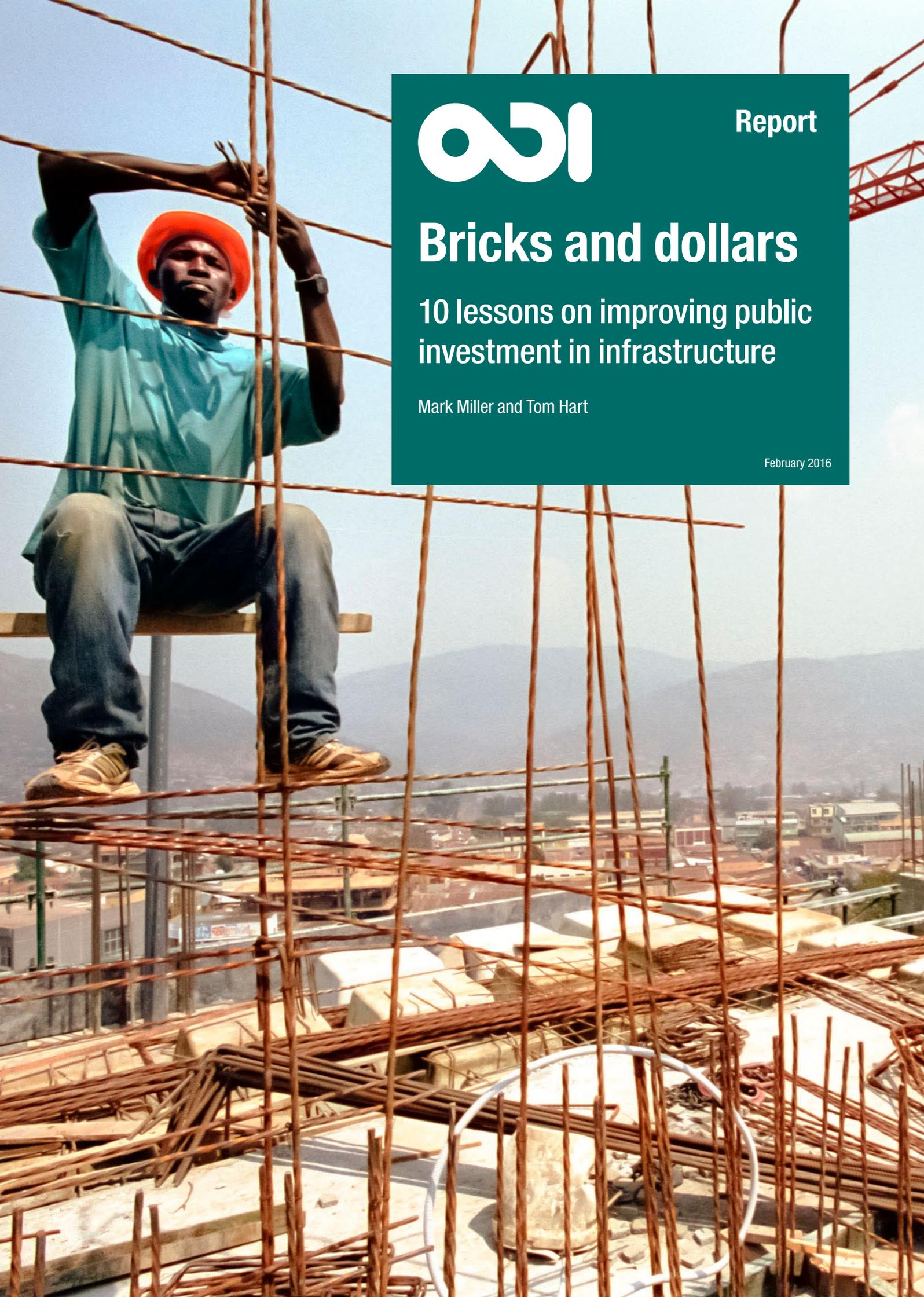
Report

Bricks and dollars

10 lessons on improving public investment in infrastructure

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Cover photo: Sven Torfiinn, Panos. Rwanda, Kigali, construction workers on a building site.

The 2015 CAPE Conference presented a multitude of perspectives on how governments can avoid the mistakes of the past and effectively deliver greater investment in infrastructure. This note aims to set out ten key lessons that government officials (particularly in finance and planning ministries) and international actors looking to strengthen investment in infrastructure in developing countries can draw from the conference. All presentations are available at: <http://www.odi.org/cape-2015>. Where a source is not a conference presentation, it is cited.

1. Recognise that infrastructure problems are ‘different in kind, not in degree’

Conference panellists presented a multitude of different kinds of infrastructure problems that countries are facing across the globe. We heard examples from Geoffrey Spence and Geraldine Barker about how the UK government is aiming to ensure value for money in developing the infrastructure services to keep up with a growing population. We heard from Marissa Moore in South Africa about the need for greater equity in municipal infrastructure services to overcome the legacy of apartheid. Perhaps most memorably, Gyude Moore spoke of efforts to bolster a total installed capacity of 22 MW and presented images of the Liberian road network; as he put it: ‘When we talk about infrastructure, it is different in kind, not in degree’.

The idea that solving development problems requires country-specific approaches has become something of a truism. Yet listening to policy-makers from developing countries gave rise to a sense of frustration that practice still too often falls far short of rhetoric. Figures on infrastructure ‘financing gaps’ tend to be thrown around as if the infrastructure deficits in the UK and Liberia are one and the same. Yet we risk disillusion by implying there is a pot of untapped money that all projects may have equal access to. Mobilising private capital is an enormous opportunity for certain projects in certain sectors under certain conditions; but more needs to be done to nuance discussions in-country about how infrastructure can be financed.

Institutional challenges are also different in kind rather than degree. The history of the evolution of Korean project appraisal procedures, presented by Sungmin Han, is telling. The institutions that South Korea had in place to catapult it from low-income country (LIC) to middle-income country (MIC) status over the three decades from the 1960s to 1980s look very different to the systems designed in the wake of the East Asian crisis and which have supported its transition to a high-income economy. Similarly, the capabilities required to deliver public investment in infrastructure vary by sector. Those required to pave a rural road are very different from those needed to deliver a 1,000 MW hydropower project. By better

defining the types of capabilities needed for different types of infrastructure, we can better identify areas for reform.

2. Institutions matter, but beware of capability traps

A clear message of all speakers at the 2015 CAPE Conference was that meeting the challenge of improved infrastructure requires more than additional money. Speaker after speaker referred to various political and institutional factors that constrain infrastructure provision. Richard Hughes presented IMF research (IMF, 2015) showing that the quality of institutions involved in public investment management (for example, systems for appraising projects or overseeing public-private partnerships (PPPs)) was correlated with the efficiency of public investment. Ameet Morjaria described the role of regional and ethnic politics in influencing road investment choices in Kenya. Gordon Brown, Julia Prescott, Philippe Valahu and Amadou Hott all emphasised a shortage of government capacity to appropriately package projects to attract private sector involvement. Mark Harvey noted that a lack of qualified engineers is an impediment to the development of the construction sector in many developing countries.

This notion that politics and institutions matter, as well as money, may come as little comfort to a policy-maker looking to improve the provision of infrastructure services. Yet the CAPE Conference provided examples of countries, such as China and Ethiopia, that have managed to effectively mobilise and deliver considerable investment in infrastructure in the absence of institutions now deemed ‘must-haves’. Within countries, small differences in institutional rules can have large effects on project outcomes. A local government study in Ghana shows the best predictor of project completion is the source of funding; the highest completion rates are achieved by a development fund that stipulates new monies cannot be released until ongoing projects are completed (Williams, 2015).

The converse is that there are also numerous examples of institutional reform efforts that make little difference to outcomes, or that even undermine progress. Looking at efforts to reform public financial management systems, Pritchett et al. (2013) caution against the dangers of ‘capability traps’. Putting in place sophisticated systems of project appraisal for public investment will have limited impact if project selection is made solely by a president intent on rewarding backers from his or her home region. Reformers would be better advised to focus on strengthening implementation rather than introducing appraisal procedures that will not affect which projects are ultimately selected.

More can also be done to promote lesson learning on ‘good enough’ practices for infrastructure development. Experience has shown that exporting approaches from OECD countries to LICs rarely bears fruit. Rather than seeking to transplant so-called ‘best practice’, it may be more valuable to learn from the experiences of reform in countries such as China and Ethiopia, which have piloted incremental changes to their planning and implementation of infrastructure. The experiences of countries with records of substantial investment in infrastructure should be documented and shared so that other LICs and MICs can learn from them.

3. Identify the reforms that are most needed

Institutional reform is difficult: this puts a premium on identifying the institutional constraints that are binding. One way to do this is through country-level diagnostic studies. Several tools have been developed to assess the quality of institutions that manage infrastructure investment. The IMF has launched a Public Investment Management Assessment (PIMA). The World Bank has identified eight institutional ‘must-haves’ for promoting efficient investment spending (Rajaram et al., 2014). These studies have done much to advance knowledge of the diversity of challenges faced by different countries. These types of tools also lend themselves well to making international comparisons.

However, these assessments risk being simultaneously too wide and too narrow. They risk being too wide as the specific drivers of poor quality investment will vary between countries and between sectors within countries. Thus, some of the institutional features assessed may not be relevant in each context. The assessments risk being too narrow as there may be issues that are key to public investment performance but are not picked up by these diagnostic tools.

The challenge is to develop tools and methods that can cut through this complexity. Promising approaches are to better define the problems faced and objectives of reform, and to move from the broader public investment management system to investigating the performance of individual projects. By better defining the types of capabilities needed for different types of infrastructure, we can better identify areas for reform. More project-level studies of investment spending are needed to investigate the factors that drive investment management performance. These studies can uncover the key drivers of investment inefficiency and may reveal that procedures and practices that are not directly concerned with public investment management may be fundamental drivers of performance. A study on constraints to budget execution in Indonesia found that the key driver of project delays was issues related to land acquisition (World Bank, 2012). Similarly, in Nigeria, management practices in

different agencies have large impacts on project completion rates (Rasul and Rogger, 2013).

Finance and planning ministries are often particularly well placed to identify bottlenecks to infrastructure delivery because of their access to data on the execution of capital projects. The Indonesian study cited above was carried out in partnership with the Ministry of Finance. There is also scope to make better use of existing administrative data sets. For example, Joel Turkewitz spoke of the potential for using contract data to better understand procurement outcomes.

4. Consider the incentives for making change

We still understand little about how reform happens. Whilst we are making progress in understanding the institutional features that seem to be associated with efficient delivery of infrastructure projects, our understanding of how and why reform of existing systems and institutions happens is more limited. What are the incentives or sanctions that lead to changes being made?

The conference explored the role of central-local relations in unlocking entrepreneurial solutions to constraints to infrastructure. Zhi Liu explained how putting in place the right incentives for local governments has been a critical factor in the success of municipal infrastructure development in China. Local governments had incentives to develop their own solutions for overcoming infrastructure bottlenecks. Xaypaseuth Phomsoupha noted that the fiscal autonomy provided to provincial governments in Laos meant they could keep revenues from the hydropower projects. This has helped to garner the necessary political buy-in at the provincial level to encourage foreign investment to the sector.

The private sector is also a key potential source of innovation. Paola Lazarte spoke of the PPP framework developed by Peru’s Finance Ministry that has empowered line ministries to come up with innovative contracting modalities.

5. Infrastructure financing considerations cannot be separated from affordability

Many countries have insufficient funds to meet their stated infrastructure goals. The shortage of funding for infrastructure has been brought into sharp relief by calculations of spending gaps. Infrastructure is expensive, lumpy and needs upfront investment. In poor countries, even modest goals may require large shares of GDP to be spent. This has led to a greater focus on how to improve spending efficiency and raise increased resources. Improving spending efficiency must also be about providing funding for maintenance. Investment alone will not deliver sustained benefits; and without maintenance, future investment will be diverted to rehabilitation.

Mobilising money for investment is not just about finding capital – it is also about how infrastructure services are paid for. Ultimately taxpayers or users must *fund* infrastructure, even if *financing* comes from the private sector. Too much of the debate around PPPs revolves around seeing them as an additional source of funding. This has three implications.

First, the debate around PPPs needs to shift from seeing them as a means to leverage additional finance, to seeing them as a potentially more efficient mode of delivery. It needs to be about how different contractual forms can help the public sector deliver infrastructure more efficiently, rather than about the magnitudes of private finance that can be raised.

Second, we need to recognise that often there is a lack of ‘bankable projects’ because of fundamental affordability and funding issues. People – taxpayers and infrastructure users – may be extremely poor. A country may be politically unstable, meaning future revenue streams may be unstable. This may make it extremely challenging to capture a share of the benefits from even the most transformative infrastructure projects to finance investment, operations and maintenance.

Third, long-term affordability cannot be forgotten in discussing financing. The current and future implications of new sources of financing for external debt sustainability need to be considered. Countries need to have the capacity to monitor and manage these financing sources and to ensure that their debt management strategies can take these sources into account if they are to avoid future debt crises. Consideration also needs to be given to the relationship between the projects in question and economic growth.

6. Review the suitability of standard appraisal methodologies for low-income countries

The limitations of cost-benefit analyses need to be recognised in the context of LICs. Gyude Moore cited the example of a donor undertaking a growth diagnostic that identified power and transport networks as key constraints to economic growth. However, the same donor was unwilling to finance individual road projects, because each project was calculated to have an insufficient internal rate of return. This is not altogether surprising. Poverty affects the rate of return: the demand for infrastructure services is likely to be low unless the economy can achieve much higher rates of economic growth. The returns from any individual project also depend upon the network that supports it: the returns from a power station are limited in the absence of a transmission network. Forecasts of demand for services that draw on historical trends are also likely to project limited growth given weak historical performance.

The challenge in LICs is to develop infrastructure networks that facilitate the economic and social transformation. In this context, forecasting demand for assets with lifespans of 30 years or more is extremely

difficult. An economy that grows at 6% for 30 years would be almost unrecognisable from one that grows at 3% for 30 years. This does not mean dispensing with standard tools of financial and economic appraisal, but their limitations need to be recognised in this context. Complementary tools such as growth diagnostics should also be adopted to help identify those projects – or groups of projects – that are most likely to address existing constraints to growth.

7. Synthesise knowledge on crowding in domestic private capital for infrastructure investment and operation

A large part of the CAPE Conference was devoted to discussing issues around the processes for increasing the efficiency of investment spending. This is consistent with the focus of the growing literature on public investment management.

The available literature on mobilising additional resources for infrastructure is more limited, particularly in terms of crowding in domestic private capital. The conference touched upon questions in this sphere: How can you raise electricity tariffs in a way that does not bring people onto the streets rioting? How do you structure fiscal incentives that can be used to crowd in private capital? How do you capture the value of land to finance infrastructure? How do you raise revenues from road users without suppressing demand? How do you balance cost recovery and social needs in water supply? What role can development banks play in channelling domestic credit to infrastructure projects?

It is evident from the country case studies presented at the conference that there is substantial experience at the country level in grappling with these issues. Amadou Hott set out Senegal’s experience in leveraging government assets to crowd in more investment. In Peru, firms can offset their tax liabilities through undertaking infrastructure development. Synthesising knowledge on how private capital can be crowded in for investment would be a valuable public good.

8. Establish mechanisms to measure the effectiveness of project-preparation facilities

A number of conference speakers reiterated the assertion that the key constraint to attracting private investment to finance infrastructure is not a lack of capital but rather a shortage of ‘bankable projects’ to finance. In the past decade there has been a sharp rise in the number of project-preparation facilities set up to address limitations

in the availability of finance and technical know-how for preparing projects.

As these facilities are relatively young, there is currently limited evidence on whether they are working. A common strategy should be developed now to ensure that such facilities are effective in supporting projects through to financial close, and to measure implementation on a comparable basis across the different facilities in order to promote learning. They must not just be judged on their ability to create a pipeline of ‘bankable projects’ but on whether these projects are going to be delivered more effectively through a PPP modality than through more conventional government contracting.

9. Investigate innovative models of providing infrastructure that mitigate institutional weaknesses

Large-scale institutional reform takes decades rather than years. Achievement of the targets set out in often ambitious infrastructure plans cannot wait until countries have adopted OECD-level institutional frameworks. A growing number of innovative contractual forms exist to promote infrastructure, even where national governance frameworks are likely to remain weak. These are potentially of particular value in developing basic

infrastructure networks in post-conflict contexts. Robert Hunja provided examples of contracts that tie contractors to maintaining assets as well as constructing them, in recognition of the political and institutional failings that often see new building prioritised over maintaining what is in place. There is scope to synthesise existing knowledge and also to draw from insights of the private sector to broaden the use of innovative models of delivery.

10. Make the most of the multilateral development bank reform window

Discussions on the procurement regulations of the World Bank and other multilateral development banks are always animated. This was no different at the CAPE Conference. Recipient government officials bemoan tortuous regulations, while rich country governments point to the need to eradicate corruption.

Recent revisions to World Bank procurement regulations offer a window of opportunity to substantively change how goods and services are procured in the infrastructure projects they finance. The launch of the Asian Infrastructure Investment Bank has focused attention on the performance of the older development banks. In order to make the most of these reforms, governments need to understand how they can use the new regulations to accelerate project implementation and achieve results.

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