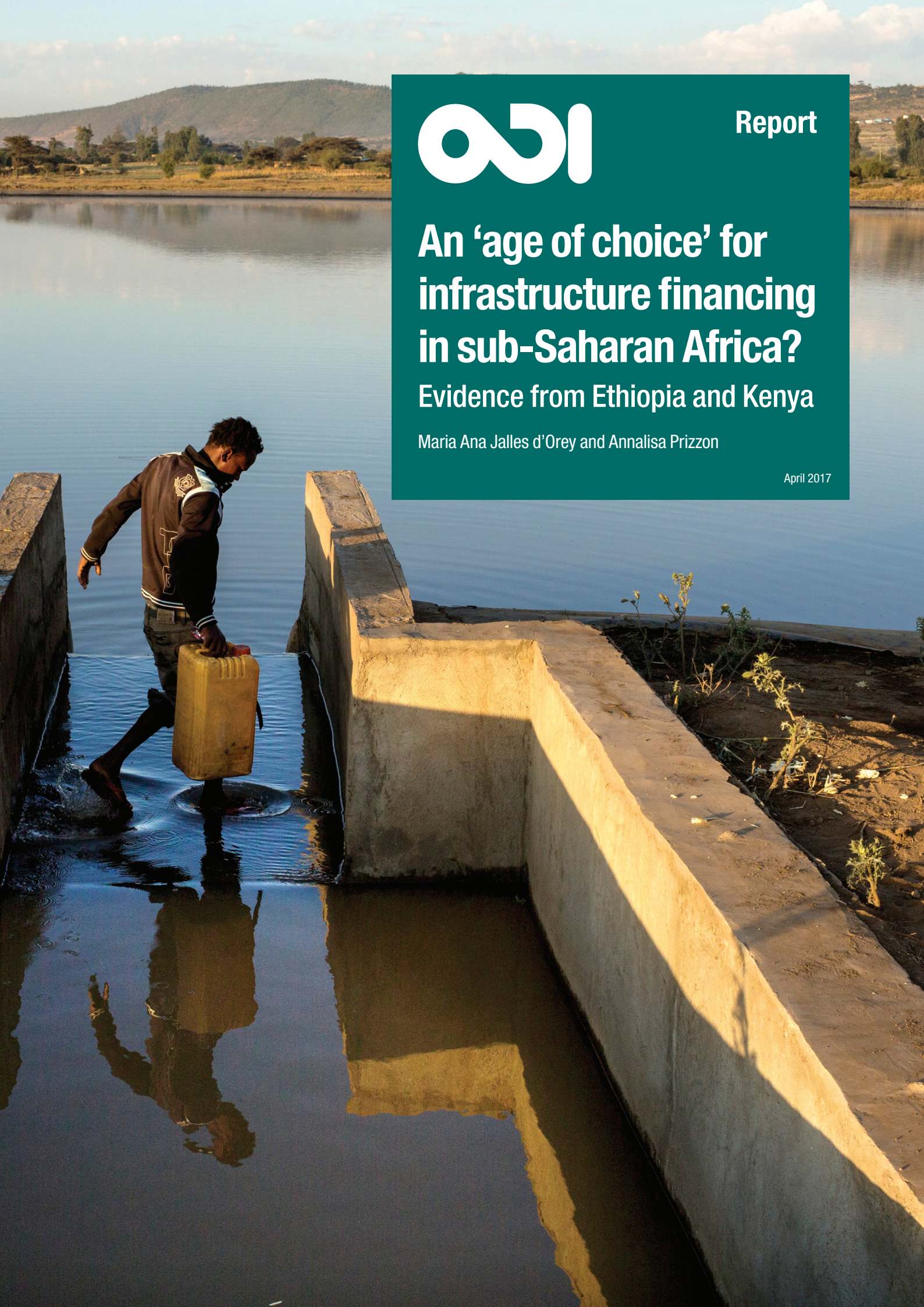

Report

An ‘age of choice’ for infrastructure financing in sub-Saharan Africa?

Evidence from Ethiopia and Kenya

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Cover photo: Young men collect water from a new canal, currently under construction, that is fed from the Awash River and will irrigate a new state owned sugar cane plantation near the town of Nasareth, Ethiopia. Robert Hammond/Panos

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Contents

List of figures

Abbreviations

ADF	African Development Fund
AfDB	African Development Bank
AFESD	Arab Fund for Economic and Social Development
DAC	Development Assistance Committee
EU	European Union
GDP	gross domestic product
GNI	gross national income
GTP	Growth and Transformation Plan
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
MDB	multilateral development bank
ODA	official development assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OOF	other official flow
PPI	private participation in infrastructure
PPP	public–private partnership
SOE	state-owned enterprise
SSA	sub-Saharan Africa

Executive summary

Infrastructure development is now an integral part of the global sustainable development agenda and is a priority for the national strategies of most developing countries (Prizzon et al., 2016). While Africa's infrastructure gap is still large, the good news is that its governments have a far wider range of financing options available to support their national strategies than they had 10 years ago. These options include financial resources from emerging donors, sovereign bonds in international financial markets (often floated for the first time ever) and public–private partnership (PPP) arrangements.

This report analyses how infrastructure finance from external sources has evolved over the past decade in Ethiopia and Kenya. It investigates whether the governments of Ethiopia and Kenya have welcomed a broader set of financing options to the infrastructure sector and managed them effectively, or whether greater fragmentation of external assistance has put pressure on government systems. The analysis focuses on three areas of infrastructure development: road, railway and energy. These are among the priority sub-sectors for most countries in sub-Saharan Africa (SSA) and involve the largest number of financiers in the infrastructure sector (see Gutman et al., 2015).

The report highlights five key findings.

Key findings

1. China is now the largest financier in the infrastructure sector in Ethiopia and Kenya.

In Ethiopia, China is the main financier of the energy sector, committing $2.2 billion between 2007 and 2013, and the railway sector, where the China Exim Bank pledged loans totalling $4.1 billion over the same time period (SAIS-CARI, 2016). China is also a major financier in the road sector; its engagement is largely quasi-commercial, based on loans from the China Exim Bank.

In Kenya's energy sector, China is the largest bilateral donor and the second largest donor after the World Bank's International Development Association (IDA). China's total contribution to energy projects more than doubled between 2010/11 and 2014/15, from $74 million to $157 million (National Treasury, 2016a). China is also the largest provider in the railway sector for both Ethiopia and Kenya.

2. Bilateral donors are almost entirely absent in the infrastructure sector.

Official development finance from traditional donors is rare or non-existent in some infrastructure sub-sectors in SSA even though these are seen as government priorities. The number of donors in the infrastructure sector, particularly railways, is small in both countries. The major partners are multilaterals, such as the World Bank, the African Development Bank (AfDB) and the European Union (EU), or emerging donors such as China and bilateral OECD Development Assistance Committee (DAC) donors, including Japan and South Korea.

3. Insufficient and inadequate financing from multilateral development banks (MDBs) is pushing Ethiopia and Kenya towards more costly private borrowing.

Financing from MDBs appealed to our interviewees, given its favourable terms and conditions on interest rates, maturity and grace periods. However, in the absence of sufficient MDB financing, governments have turned to other more expensive options, such as international sovereign bonds, to fund infrastructure development.

4. There is no formal development policy coordination at the national level: to reduce administration costs the Government of Ethiopia would rather work with one large financier or with a pool of donors.

Both governments seem to prefer bilateral dialogue with donors, despite the pressure on government systems, with a general fatigue perceived in relation to country coordination mechanisms. Such findings resonate with the analysis in Prizzon et al. (2016) across sectors. There is no coordination mechanism in the railway sector in either Ethiopia or Kenya and no government–donor forum in the energy sector in Ethiopia. This is leading to fragmentation and duplication of projects, for example the building of the Standard Gauge Railway, which in some places runs parallel to the existing Rift Valley Railway – literally.

Government officials interviewed in Ethiopia often mentioned low administrative costs as a key preference for the terms and conditions of development finance (officials in Kenya did not express concerns on this issue). This entails either working with one large financier or having donors work together in pooled funding arrangements so that the Ethiopian government does not have to comply with the policies of each financier separately.

While coordination might not matter at the policy level, interviewees from the Ethiopian government and state-owned enterprises (SOEs) expressed very different views at project level. The division of labour in the road sector, for example, is often based on splitting the main project

into smaller ones, with the government allocating a specific section of the road to each development partner through parallel arrangements. Not surprisingly, the use of more than one donor procurement and reporting system represents a key challenge for the government.

5. Debt levels are mounting in Ethiopia and Kenya, limiting the space for future borrowing.

The large size of infrastructure projects and the potential for contingent liabilities to materialise, given the leading role played by SOEs, is leading to increasing levels of debt. In Ethiopia, the country's risk of debt distress has already been reclassified from low to moderate because of lower than expected export performance. In Kenya, debt levels are rising rapidly and are close to hitting the debt ceiling (50% of gross domestic product (GDP)) and it is not clear that existing debt management systems are capturing all contingent liabilities in full. This is a particular concern, as 50% of Kenya's external development finance is now held on non-concessional terms.

The experiences of Ethiopia and Kenya are relevant for other countries that are formulating their infrastructure development plans and approaches, and for donors that are reviewing their country strategies. A number of lessons have emerged from our research that could be considered by partner country governments and by donors.

Lessons from the research

Considerations for partner country governments

1. Consider diversifying the funding base by looking into alternative funding options, such as other official donors.

As we have seen in the cases of Ethiopia and Kenya, the number of donors operating in the infrastructure sector is relatively small – just two emerging donors in the railway sector, for example. The volume of finance raised via international sovereign bonds in both Ethiopia and Kenya is still small compared with the funding needs, and the price of bonds is far higher than for other sources of finance, putting pressure on debt management.

2. Consider increasing efforts to foster more inclusive coordination among donors, such as co-financing arrangements, if the priority is to cut administration costs and prevent duplication.

Coordination mechanisms for infrastructure finance are either not operational (in the road sectors in both countries) or totally absent (the energy sector in Ethiopia and railway in both countries). As noted, in Kenya the Rift Valley Railway, which has received some financing from development finance institutions in traditional donor countries, in some cases runs on parallel tacks to the Chinese-funded Standard Gauge Railway. Establishing and managing coordination mechanisms would help to reduce administration costs; one approach would be to promote co-financing arrangements to reduce both the administrative burden on government officials and duplications.

3. Develop a fully-fledged debt management and financing strategy.

A structured debt management strategy should identify the sectors, projects and activities that should be funded by each source. It should also set out the conditions for a project to generate sufficient returns to cover loan repayments, considering all flows, concessional and non-concessional, and including contingent liabilities. Projects with high social returns but low economic returns should be funded by public taxation (see Prizzon et al., 2016, on this point). Despite the fact that only SOEs can take up non-concessional loans, these are guaranteed by government, so such loans should feature clearly among contingent liabilities.

Considerations for donors

1. MDBs should consider reviewing their lending capacity, especially on concessional terms, and scaling it up.

For example, the governments of Ethiopia and Kenya both expressed a strong preference for maximising concessional resources. They also expressed strong demand for MDB financing because the terms and conditions are far more favourable than those offered by international financial markets at present (especially at concessional terms) and because MDB-backed projects embed highly valued knowledge transfer and capacity-building. Some MDBs are heading precisely in this direction. For example, following the Aaa/AAA credit ratings issued by Moody's and Standard & Poor's to the IDA in 2017, the IDA will be in a position to raise resources on international capital markets, leveraging its equity.

2. Donors should consider collaborating and working together, especially on pooled funds, to reduce administrative costs and duplication – if the reduction of administrative costs and prevention of duplication are among governments' priorities (as seen in the preferences of Ethiopian officials).

Donors should consider reviewing the conditions and constraints in relation to running projects using pooled rather than parallel arrangements and exploit formal country donor–government coordination mechanisms. Such an approach would apply to both traditional and less-traditional donors.

3. Every donor (DAC and non-DAC) should take into account the consequences for debt sustainability of external development finance at non-concessional terms (and contingent liabilities in particular) and support governments in strengthening their debt management capacity.

Ethiopia and Kenya have expanded their borrowing at less-than-concessional terms to support infrastructure development, whether from international capital markets, emerging donors or, to a certain extent, the private sector. This is putting pressure on the future ability of these countries to service their loans, especially if the returns estimated at the time of project preparation do not materialise. Donors should continue to assess both the ability of a borrowing country to afford its external liabilities and the likelihood of the project delivering the expected returns, and should support these governments and others with a similar macroeconomic outlook in strengthening their debt management capacity.

1. Introduction

1.1. Why this analysis?

Most partner country governments prioritise infrastructure development in their national strategies (Prizzon et al., 2016).[1] Infrastructure development is now an integral part of the global sustainable development agenda; a step-change from the Millennium Development Goals, which focused largely on the social sectors.

While Africa's infrastructure financing gap is sizeable – estimated at an annual $31 billion (Foster and Briceño-Garmendia, 2010; Hart et al., 2015) and equivalent to nearly 2% of GDP at current values in sub-Saharan Africa (SSA) – partner country governments have many more complementary financing options from which they can select support for their national strategies than they did a decade ago – in other words, they are in what Prizzon et al. (2016) have defined as an 'age of choice' for development finance. First, new donors have emerged in the financing landscape, such as China and India, whose transfers to the African continent have grown over the past decade, albeit at different speeds. Second, over the past five years, several SSA countries have floated sovereign bonds on international financial markets for the first time. Third, the use of public–private partnerships (PPPs) – a form of arrangement widely adopted in advanced economies – to fund projects has mushroomed in several SSA countries.

But do partner country governments welcome the broader set of financing options and manage them effectively, or does a larger number of financiers increase fragmentation of external assistance, putting pressure on government systems? There is limited evidence on how financiers[2] in the infrastructure sector coordinate at country level (Gutman et al., 2015) and on how governments can manage different financing options and providers to maximise their public investment programmes, reduce the burden of managing development finance flows and borrow externally while keeping public debt at a sustainable level.

This report aims to provide some evidence on these issues based on the experiences of two pilot case studies – Ethiopia and Kenya. It is intended for practitioners managing infrastructure projects – whether as government officials or external financiers – and for those involved in advancing the development effectiveness agenda in global fora and at the country level.

Building on the descriptive analysis of infrastructure financing for SSA in Gutman et al. (2015), the report has two main objectives. First, it seeks to raise awareness of who finances infrastructure development in Ethiopia and Kenya, how financing sources have evolved over time, governments' priorities for the terms and conditions of development finance to the infrastructure sector and how different financiers work together in these countries. Second, the report outlines a set of considerations that have emerged from the two countries for other partner country governments. Ethiopia and Kenya provide useful examples for other SSA countries facing similar obstacles in infrastructure development. Such countries may want to consider and learn from the experiences of Ethiopia and Kenya while expanding their project pipelines and project implementation in the medium term and improving both their access to financial resources and their management.

This report focuses on three areas of infrastructure development: roads, railways and energy. These are among the priority areas for most SSA countries and involve the largest number of financiers in the infrastructure sector (see Gutman et al., 2015). They are also selected for pragmatic reasons, given that background information had already been gathered for previous research by the Overseas Development Institute (ODI) (Prizzon and Rogerson, 2013; Hart and Prizzon, 2016; on Ethiopia and Kenya, respectively).

1.2. External development finance flows reviewed and methodology

This report considers all external development finance to the infrastructure sector that is, potentially: (1) under the direct influence, if not control, of the government; (2) accounted for, in principle, in government budgets, independently of its level of concessionality; and (3) able to have an impact on government budgets (such as contingent liabilities).

Applying these criteria, the financial flows we analyse include: bilateral and multilateral official development

1 At the UN General Assembly in September 2015, developed and developing countries alike committed to 'Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all' (Sustainable Development Goals, target 9.1).

2 By financiers, we refer to donors, capital markets and the private sector more generally.

assistance (ODA), other official flows (OOFs[3]) from the Development Assistance Committee (DAC)/multilateral donors, non-DAC sovereign donors (both ODA and OOF equivalent), international sovereign bonds issuances and PPPs.[4] PPPs are an exception – being an instrument not a source. However, they illustrate how donors, the private sector and partner country governments can work together. We do not map PPPs in Section 2 (which focuses on official external development finance for infrastructure more generally in SSA), but in Section 3 we do discuss the extent to which they have been considered in the two case study countries and the effectiveness of frameworks that are currently in place. In this report the term less-traditional donors refers to those donors that are not DAC members.

The methodology for this report is a revised version of the political economy framework developed in Greenhill et al. (2013), taking sectoral lenses as outlined in Moncrieffe and Luttrell (2005) (see Annex 1). It consists of desk-based reviews and semi-structured interviews with senior government officials in central and line agencies and senior staff in SOEs, triangulated with interviews with donors and civil society organisation. The methodology includes a review of the characteristics of each sector under investigation and the relationships across central agencies, relevant line ministries and SOEs. It examines their different roles, mandates and responsibilities – as well as their relationships with different financiers – and the composition of financing in terms of external and domestic resources when data are available. More information can be found in Annex 1, while details of the specific analyses, together with full details of the methodology, are included in the individual case study reports (Jalles d'Orey and Prizzon, 2017 on Ethiopia; Greenhill and Mustapha, 2017 on Kenya).

This report is part of the ODI project 'An age of choice for development finance: evidence from country case studies', which focuses on the perspective of partner country governments when it comes to negotiation, access and management of development finance. The viewpoint in this report is, therefore, very much from the demand side, rather than from the perspective of donors, which affects the type of information and analyses illustrated in this report.

1.3. Structure of the report

This report distils the findings of two country case studies on Ethiopia and Kenya, structured as follows. Section 2 outlines the main financiers to the infrastructure sector in SSA, the extent to which new financiers have emerged over the past decade and how the road, railway and energy sectors are primarily funded. Building on this analysis, Section 3 compares the experiences of Ethiopia and Kenya. First, it analyses the key elements of the economic, political, governance and sectoral contexts in the two countries that shape the negotiating positions of the two governments with donors and affect their ability to secure external funding. Second, it reviews the external resources that were used to fund infrastructure development in the two countries and how their use evolved over time, the governments' priorities for the terms and conditions of development finance to the infrastructure sectors and how the different financiers work with each other and with the governments.
Section 4 offers considerations emerging from the two case studies on Ethiopia and Kenya that other partner country governments could take into account while expanding infrastructure, as well as for donors that are reviewing their country engagement strategies.

3 We use the OECD definition of OOFs current at the time of writing: 'Official sector transactions which do not meet the ODA criteria. OOFs comprise: i) Grants to developing countries for representational or essentially commercial purposes; ii) Official bilateral transactions intended to promote development but having a grant element of less than 25 per cent; iii) Official bilateral transactions, whatever their grant element, that are primarily export-facilitating in purpose' (see OECD, 2013). (The definition is to change soon.)

4 We exclude foreign direct investment and personal remittances from this analysis. Governments have only indirect responsibility for these flows (influenced by tax incentives or better macroeconomic conditions) and they are mainly for private/for-profit purposes.

2. Official external development finance for infrastructure (roads, railways and energy) in sub-Saharan Africa: key facts

This section first reviews how the landscape of external development finance to the infrastructure sector in SSA has evolved over the past 10 years, building on data collected in Gutman et al. (2015).[5] It then focuses on three specific sub-sectors (road, railway, energy), again across SSA countries, as these are the three main areas investigated in the case studies on Ethiopia and Kenya (see Section 3). In this report, development finance is defined as comprising both domestic (government and private) and external resources (private and official) channelled to the infrastructure sector. Official external development finance is defined as financial and technical resources from DAC bilateral donors, multilateral donors and MDBs as well as from emerging country governments.

It is worth noting that infrastructure projects are usually multi-year and of high value – as a result, the figures analysed below might look 'lumpy' as the financial contribution for a single project might only be accounted for in the year in which the commitment was made. Annex 2 provides a more detailed analysis of the external development finance received for infrastructure development by sub-sector.

It is not new or unusual for public sector budgets to be the primary funding source for infrastructure development[6] (see also Miyamoto and Chiofalo, 2016).[7] Less is known, however, about the changing composition of external development finance. Private participation in infrastructure (PPI)[8] has been the largest source of external development finance since 2001,[9] accounting for an average of more than 50% of external development finance each year until 2012.

This report analyses, primarily, the case of official external development finance. This focus is justified by the scarcity of data, at least systematic data at the country level, on private investment in infrastructure development. As noted, however, we review the governments' priorities for PPPs and their effectiveness in Section 3. All figures analysed are based on commitments, unless otherwise specified.

Our analysis reveals two main facts. First, **official external development finance from bilateral donors and multilateral organisations (including concessional and non-concessional flows)** is the second largest source of external development finance for infrastructure in SSA. However, while official external finance was the dominant external development

5 For reasons of data compatibility, the analysis on SSA uses data from the 2002–2012/13 period. Data outside this time frame are only considered when analysing finance flows in isolation. In Gutman et al. (2015) infrastructure includes the telecommunications, transport (airports, railways, roads and seaports) and water sub-sectors.

6 In 2012, countries in SSA financed about 65% of their infrastructure expenditures – almost $60 billion (about 4% of SSA's GDP) – from their public sector budgets (this excludes financing from multilateral institutions) according to data from the International Monetary Fund's (2014) estimates in Gutman et al., 2015).

7 External development finance to the infrastructure sector in SSA rose nearly six-fold between 2003 and 2012, from $5 billion in 2003 to almost $30 billion in 2012 (Gutman et al., 2015).

8 PPI data come from the World Bank PPI database. In their paper, Gutman et al. (2015) refer to PPI as projects in infrastructure that are concessions or greenfield projects involving actual investment funding and, therefore, exclude projects that are management and lease contracts and divestitures.

9 With the exception of 2010.

finance source to the infrastructure sector in the 1990s, its importance has declined over time as the result of an expansion of private finance to the infrastructure sector.

The composition of official external development finance from bilateral and multilateral donors has also changed, shifting from bilateral to multilateral sources. In the early 2000s, bilateral assistance was more important than multilateral assistance.[10] By 2012, however, 70% of official external development finance came from multilateral sources (with the World Bank disbursing $4.3 billion, and the AfDB $2.6 billion) and DAC commitments (including from the European Commission) of about $4 billion. There are two main reasons for this change. First, commitments by the World Bank and AfDB to the SSA region have increased over time since 2000 (see OECD-DAC, 2016). Second, bilateral donors tended to shift their support towards the social sectors in the 2000s because of commitments towards the implementation of the Millennium Development Goals (Greenhill and Prizzon, 2012). According to Gutman et al. (2015), the distribution of official external development finance across SSA countries has been relatively even, although Kenya and South Africa have received the largest shares.

Second, **Chinese development finance is the now third largest source of external development finance to the infrastructure sector in SSA, following multilateral and DAC donors**. It has increased finance from what was a virtually insignificant amount before 2000 to an average of around $3 billion a year (Gutman et al., 2015). This trend reflects the increase in financial commitments from the Chinese Ministry of Commerce, the China Exim Bank and the China Development Bank, marking a shift away from a programme of cooperation that was focused mainly on technical assistance (see Greenhill and Prizzon, 2012; Prizzon et al., 2016).

While there is no debate, however, over whether China is a major source of external development finance to the infrastructure sector in SSA, it is important to recognise the wide variation in the estimates of Chinese financing and the challenges of tracing the data, as – unlike other sources – there is no centralised database that records Chinese flows.[11] Again according to Gutman et al. (2015), Ghana and Ethiopia have been the largest recipients of Chinese infrastructure financing over 2009 to 2012.

Against this backdrop, how has the financing landscape of three sub-sectors (road, railway and energy) evolved in the region? This analysis will serve as a comparator for the cases of Ethiopia and Kenya, showing how their experiences sit within the SSA context. In particular, we note five key facts and trends.

1. **Chinese development finance has, consistently, been the largest source of external development finance in the energy and railway sub-sectors and has been jostling for first place as the largest source of finance in the road sub-sector**. Chinese finance to the energy sector grew five-fold between 2002 and 2012, from $618 million to $3 billion, accounting for an average of 65% of total official external development finance over the period. In the railway sector, Chinese development finance dominates the external development finance landscape; however, the pattern is less constant, given the multi-year, large-scale nature of projects in this sector.[12] Chinese development finance has also been substantial in the road sector, especially since 2007, when its contribution reached $1.6 billion (rising from less than $400 million per year from 2002); it accounted on average for 40% of total official external development finance to the sector between 2002 and 2013, reaching $2.6 billion in 2013.
2. **Multilateral organisations have been key financial contributors to the road and energy sectors, particularly in concessional terms (ODA), as most countries in the region are only eligible for resources from the International Development Association (IDA) or African Development Fund (ADF)** (Figures 1 and 2). In the road sector, multilateral organisations were the main source of external development finance until 2006 (accounting for more than 70% of total official external development finance between 2002 and 2006), when China started to compete with them to be the largest financier. Multilaterals contributed $1.8 billion in 2012, compared with $1 billion in 2006.[13] **Multilateral assistance in the railway sector is, however, quite small** compared with Chinese development finance to the sector (an average of $49 million per year between 2002 and 2013) (see Annex 2).
3. **Official external development finance in the form of ODA from bilateral DAC donors is the third most significant source of external development finance in the road and energy sectors, but its contribution is small compared with other sources** (Figures 1 and 2). This contrasts with the

10 At that time, the World Bank and the AfDB contributed $1 billion and less than $500 million, respectively, while DAC commitments were on average $2 billion (Gutman et al., 2015).

11 For more details see Gutman et al. (2015): 27–28. According to Miyamoto and Chiofalo (2016), India disbursed $1.7 billion of official support for development cooperation in infrastructure to all developing countries, only $0.5 billion less than China. However, India's development cooperation in SSA's infrastructure sector is not well captured, as India tends to focus predominantly on South Asian countries, such as Bangladesh, Bhutan and Nepal.

12 Between 2006 and 2011, the four largest contributions of Chinese official finance for railway projects in SSA included a $2 billion loan from the China Exim Bank to fund the Chad–Sudan Railway in 2011, two loans each of $765 million to modernise the Nigerian railway system in 2006, and $447 million to build the railway line from Addis Ababa to Djibouti in 2011. Between 2012 and 2013, the biggest Chinese loan was provided by the China Development Bank to the value of $5 billion for railway and port infrastructure, followed by a loan of $3.75 billion for Kenya's Standard Gauge Railway (AidData, 2016).

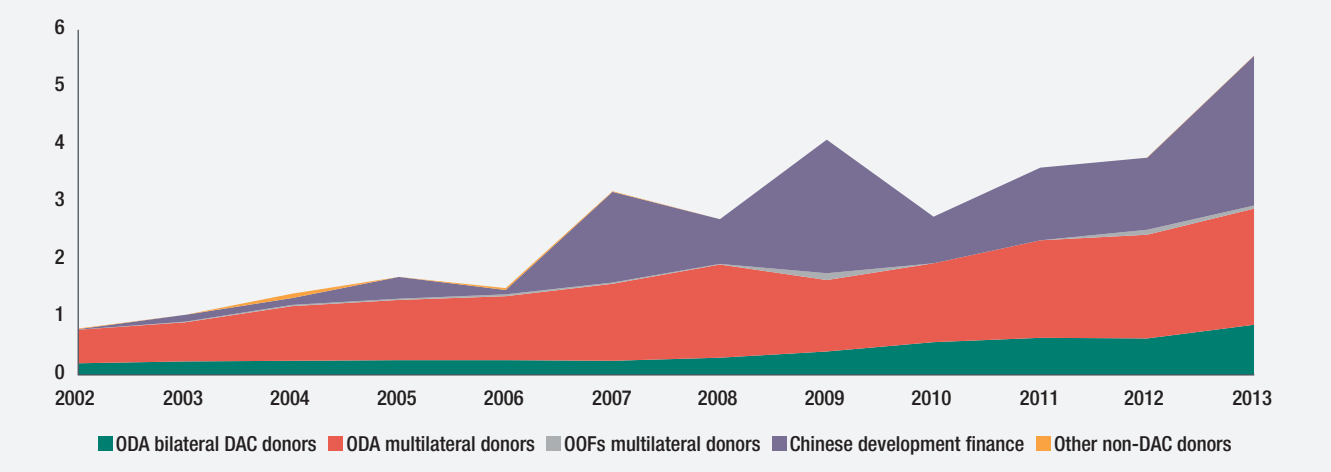
13 In the road sector, the EU was the largest multilateral financier (43% of total multilateral finance) between 2002 and 2013, followed by the World Bank IDA (34%). In 2013, the IDA became the largest multilateral source. In the energy sector, the IDA has been the largest contributor since 2002, providing $760 million in 2013, followed by the AfDB and the EU.

analysis across sectors, where DAC donors are the second largest source. Assistance from bilateral DAC donors has increased since 2002 ($197 million in 2002, rising to $872 million in 2013, in the road sector and $101 million in 2002, rising to $1.1 billion in 2013, in the energy sector). Furthermore, bilateral assistance is fairly concentrated among a few donors: more than 60% of total bilateral ODA to the road and energy sectors between 2002 and 2013 was provided by three countries (France, Japan, United States) and five countries (France, Germany, Japan, Norway and United Kingdom), respectively. DAC donor support to the railway sector in SSA is almost non-existent.

4. **OOFs to the road and railway sectors are quite low, but have been more pronounced in the energy sector**. This comes as no surprise, given that very few SSA countries are eligible for International Bank for Reconstruction and Development (IBRD) and AfDB terms (and the AfDB credit policy allowing for non-concessional lending under certain circumstances has only been in place since 2014). In the road sector, annual OOFs averaged $33 million per year between 2002 and 2013; in the railway sector, only two projects funded by the AfDB appear to have been recorded ($129 million in 2012 and $190 million in 2013). **In the energy sector, OOFs from multilateral banks have been more substantial**, particularly since 2007, rising from $36 million then to $1.7 billion in 2013.
5. **Non-DAC donors other than China are only marginally active in these sectors**, as can be seen from Figures 1 and 2, with contributions mainly in the energy and road sectors, particularly from the Arab Fund for Economic and Social Development (AFESD) and Kuwait.

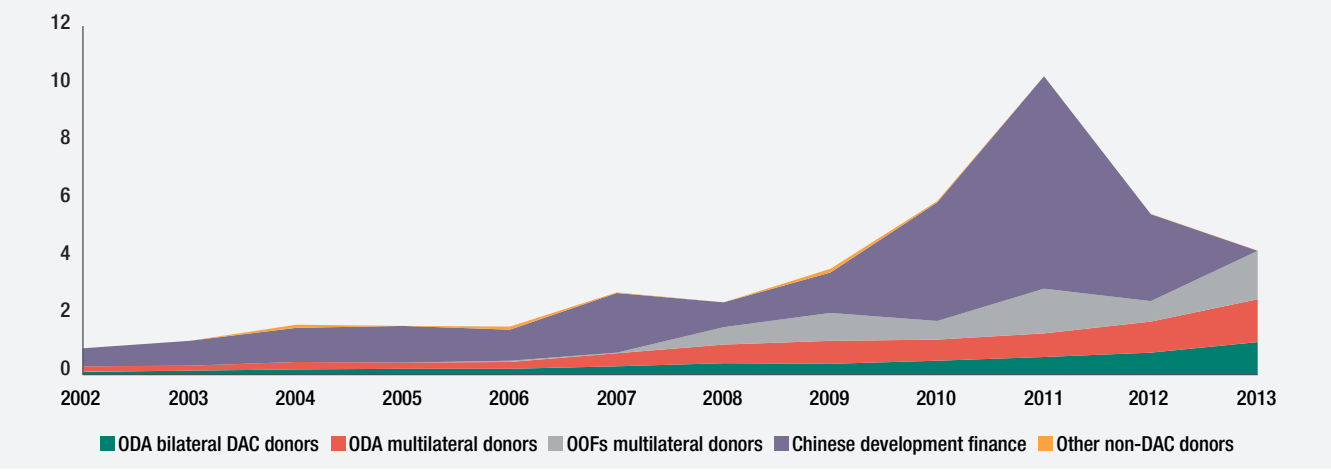
As mentioned above, for a more detailed picture of the sources of finance in each sector and their evolution and composition over time, please see Annex 2.

Figure 1: Total official external finance in the road sector, 2002-2013, $ billions



Source: Authors' elaboration. ODA and OOFs from OECD–DAC (2016), current prices. Chinese and non-DAC members' data from AidData (2016). Data reflect commitments.

Figure 2: Total official external finance in the energy sector, 2002-2013, $ billions, three-year moving average



Source: Authors' elaboration. ODA and OOFs from OECD–DAC (2016), current prices. Chinese and non-DAC members' data from AidData (2016). Notes: the peak value in 2010 in Chinese finance in the original data series was smoothed to the average between 2009 and 2011. There are no data for Chinese investments in 2013. Data reflect commitments.

3. Official external development finance for infrastructure (roads, railways and energy) in Ethiopia and Kenya

In this section we move from the regional analysis of external development finance for the infrastructure sector in SSA to the specific cases of roads, railways and energy in Ethiopia and Kenya.

The case studies on Ethiopia and Kenya were conducted between March and June 2016 (see Jalles d'Orey and Prizzon, 2017; Greenhill and Mustapha, 2017). They included desk-based reviews and semi-structured interviews with senior government officials triangulated with interviews with donors, civil society organisations and experts. The findings for two countries alone cannot be generalised to other SSA partner country governments. However, these two case studies are illustrative, and could be taken into account by other partner country governments analysing the types of resources secured for infrastructure development, their terms and conditions, and the ways in which financiers work together and with government.

Ethiopia and Kenya were chosen for five reasons. First, the high priority attributed to public infrastructure development in Ethiopia's national strategy, the Growth and Transformation Plan (2016-2020) (GTP II), especially for roads, railways and energy, and in Kenya's national strategy 'Vision 2030'. Second, both Ethiopia and Kenya are among the largest recipients of external development finance to the infrastructure sector in SSA, with Ethiopia being one of the largest recipients of Chinese development finance, and have a variety of actors involved (Gutman et al., 2015), as noted in the previous sections. Third, both countries are among those SSA economies that have issued international sovereign bonds to finance infrastructure development. Fourth, Kenya is the third ranked country in SSA when it comes to private participation in infrastructure (Gutman et al., 2015). Finally, we considered countries that had already been investigated for a similar project (see Prizzon et al., 2016; Hart and Prizzon, 2016; Greenhill et al., 2013; Prizzon and Rogerson, 2013) so that priorities emerging at the sector level could be compared with those identified in the first case studies, both for Ethiopia and Kenya and more widely.

3.1. The economic, political and governance contexts

A series of key elements of the economic, political and governance contexts influence the negotiating capital of the governments of Ethiopia and Kenya in relations with their financiers. The two case study reports offer more detailed analysis of the impacts of the respective contexts that shape negotiation positions and outcomes. Given such a small sample, the reports provide overviews for the two countries, rather than a comparative assessment.

Both countries experienced strong and sustained growth over the last decade, with infrastructure development one of the main drivers of economic growth and prioritised in national development plans. Ethiopia achieved economic growth of, on average, nearly 11% per year between 2003/04 and 2013/14, compared with the regional average of 5% (World Bank, 2016). Kenya has maintained macroeconomic stability and has also achieved a high growth rate in recent years. Its growth has averaged 6% since 2010, making it the largest and most diversified economy within the East African Community. Both countries have national plans that strongly support infrastructure development, especially in roads, railways and energy. Ethiopia's GTP II (2016-2020) sets ambitious plans to (1) nearly double the length of roads in the country (to 220,000 km, from 120,000 km as stated in GTP I), (2) increase electricity service coverage from 60%

in 2014/15 to 90% in 2019/20, boosting hydroelectric and geothermal power generation, and (3) build railway links from Ethiopia to other countries. Infrastructure is one of the key priorities for the Kenyan government in its long-term development strategy (Vision 2030), with both energy and transport viewed as key pillars.

SOEs manage infrastructure development in both countries, with line agencies having a marginal role. The Ethiopian government, for example, has a monopoly over the energy sector, with the main SOEs being Ethiopian Power Generation and Ethiopian Power Utility. The Ministry of Transport and the Ministry of Water, Irrigation and Electricity are responsible for overseeing these agencies, but, according to several interviewees, their roles are rather limited.

Ethiopia and Kenya are both classified as IDA and AFD countries, meaning they can access concessional resources only from both the World Bank and the AfDB. Ethiopia and Kenya are, however, eligible to access AfDB non-concessional resources under exceptional circumstances (see AfDB, 2014). Ethiopia is classed as a low-income country while Kenya is classed as a lower-middle-income country.

Both countries issued sovereign bonds on the international financial markets for the first time in 2014, partly to finance infrastructure development. Ethiopia issued its first international sovereign bond of $1 billion in 2014, with a 10-year maturity and 6.625% yield (far more expensive than IDA loans), to finance industrial parks, the sugar industry and power transmission infrastructure (IMF, 2015). The Government of Kenya raised $2 billion in June and a further $750 million in December 2014, at 5-year and 10-year maturities, for general budget support, including funding of infrastructure and the repayment of a syndicated bridging loan.

Public debt is on the rise in both countries. In Ethiopia, the risk of external debt distress has increased from 'low' to 'moderate', driven by the surge in public-enterprise borrowing in the energy and railway sectors (by SOEs) (see IMF, 2015).[14] The debt-to-GDP ratio has more than doubled over the past decade, since the receipt of debt relief, reaching 30% in 2014. Public debt has also been rising in Kenya, particularly over the last two fiscal years, partly because of debt-financed government investments in large-scale infrastructure. The debt-to-GDP ratio is close to the 50% limit set by the fiscal convergence targets of the East African Monetary Union Protocol, which forms Kenya's policy target.

Dependency on aid is falling, but Ethiopia remains a donor darling. Concessionality has been declining in Kenya. In Ethiopia, the ODA-to-gross national income (GNI) ratio has fallen steadily since 2007, but only because GNI has more than doubled over the same period; ODA gross disbursements to Ethiopia in constant terms actually rose by nearly 50%.[15] Similarly, Kenya has seen a rise in ODA over the past decade, while also reducing aid dependency through its high GDP growth. Donors are reducing the level of concessionality of financing in light of Kenya's rising income. Loans increased from 30% of annual ODA to 41% between 2004 and 2013.

Both Ethiopia and Kenya are geopolitically strategic countries for donors. Ethiopia is conscious of its geopolitical position in the Horn of Africa, its proximity to the Middle East and the role of Addis Ababa as a regional diplomatic hub. Kenya and Nairobi share a similar positioning. Kenya is seen as a key partner for the West because of its role as a regional facilitator of peace, with the government committed to championing a peace initiative in Somalia and South Sudan.

3.2. Five key trends in the evolution of official external development finance for infrastructure in Ethiopia and Kenya

We present five key findings on the evolution of the landscape of official external development finance for the infrastructure sector in Ethiopia and Kenya, based on data analysis and interviews with senior government officials and donors in both countries.[16] The two respective case studies (Jalles d'Orey and Prizzon, 2017; Greenhill and Mustapha, 2017) elaborate on the following points and more, and provide further details at the project level. In general, the evolution of the external infrastructure financing landscape in Ethiopia and Kenya is representative of the overall trends in the SSA region.

1. China became the largest financier in the general infrastructure sector in Kenya and Ethiopia, and the largest (or one of the most dominant) in some infrastructure sub-sectors.

Ethiopia is one of the largest recipients of Chinese development finance in the region (see Gutman et al., 2015), and – as noted in Section 2 – China is one of the largest financiers of the infrastructure sector. China is also the

14 However, the Ethiopian government disputes the IMF evaluation of moderate risk of debt distress (the only indicator that increased in its simulations was the debt/export ratio). It also disputes the IMF's measurement of public debt, as the government excludes liabilities owned by SOEs, despite the guarantees the government provides.

15 From $2.5 billion in 2007 to $3.9 billion in 2013.

16 It is worth noting that the allocation by sector was difficult, if not impossible, when it comes to international sovereign bonds, often floated to finance some infrastructure projects, because of the fungibility of resources in government budgets. In Kenya, the prospectus for the sovereign bonds stated that the purpose of the bond issuance was for general budget support, including funding for infrastructure and a loan repayment. In Ethiopia, bonds were intended for on-lending to SOEs, the sugar industry, industrial parks and the Great Ethiopian Renaissance Dam (IMF, 2015: Article IV).

largest provider in the railway sector in both Ethiopia and Kenya.

In Ethiopia, China is the main provider of official external development finance to the energy sector, committing $2.2 billion between 2007 and 2013, and to the railway sector, where the China Exim Bank pledged loans totalling $4.1 billion. China is also a major financier of the road sector; its engagement is largely quasi-commercial, through loans from the China Exim Bank. In 2011 the China Exim Bank committed $68 million to the Meskere Sq–Bole Road and in 2014 it invested $187 million in the Dire Dawa–Dewalle Road (SAIS-CARI, 2016).

In Kenya's energy sector, China is the largest bilateral donor. It is also the second largest donor after the World Bank (IDA), but by only a small amount; between 2012/13 and 2014/15, China's total commitments to energy were $432 million, while those from IDA were $442 million. China's total contribution to Kenya's energy projects more than doubled between 2010/11 and 2014/15, from $74 million to $157 million (National Treasury, 2016a). However, the World Bank (through IDA) and the AfDB remain the largest donors in the energy and road sectors (SAIS-CARI, 2016).

Bilateral donor members of the DAC, with the exception of Japan and South Korea, are relatively small contributors to the three infrastructure sub-sectors (and were hardly mentioned in the interviews). This contrasts with the picture at the regional level, where DAC bilateral donors make up the second largest provider of official external development finance to infrastructure. With the dominance of Chinese development finance and MDBs supporting the infrastructure sector, this means that a few donors are actively involved in the sector, fewer than those identified in Prizzon et al. (2016).

2. In Ethiopia and Kenya (and again in line with regional trends), some traditional donors do not operate in certain sub-sectors, such as railway.

Official development finance from traditional donors is rare or non-existent in some sub-sectors in SSA, even though the sub-sectors in question are among those identified as government priorities. In the Kenya and Ethiopia case studies, this was found to apply to the railway sub-sector in particular. In Ethiopia, traditional donors are not involved in the railway sector because project costs are high, risks are high and rates of return are low. In Kenya, it was reported that traditional donors are not involved in the railway sector because they tend to invest in projects that can bring them visibility; they cannot raise sufficient funds to secure that visibility in the railway sector (meaning they tend to invest in smaller areas).[17]

3. OOFs and flows from non-DAC donors other than China are small but growing, especially in Ethiopia.

Like most countries in the region, Ethiopia and Kenya still do not access non-concessional flows from the IBRD or the AfDB for infrastructure on a regular basis. Under the 2014 AfDB credit policy, and for small amounts at the time of the case study, only one road project in Kenya has been approved for a loan from the AfDB: the Isebania–Kisii–Ahero road rehabilitation. Ethiopia negotiated a non-concessional loan with the AfDB for the water sector, but this was the only one and was for a small amount at the time of the case study analysis.

Regarding non-DAC donors other than China, Arab donors to Kenya financed roads ($33 million between 2012/13 and 2014/15) and energy projects ($12 million between 2012/13 and 2014/15), while India only financed energy projects in the form of non-concessional loans ($101 million between 2012/13 and 2014/15) (National Treasury, 2016b). Albeit from a low base, their contribution has been increasing over the past five years.

In Ethiopia, even though Arab donors have been increasing their presence, particularly in the road sector, this has again been from a low base (their aggregate contributions totalled $136 million between 2010 and 2014) (AidData, 2016). In the railway sector, finance from non-DAC countries other than China is expanding. The Indian Exim Bank, for example, opened a credit line worth $300 million to finance a link from Asaita to Djibouti (Minney, 2014).

Turkey is another key player in Ethiopia, on a mostly quasi-commercial basis. Yapi Merkezi, a Turkish contractor, has been appointed the sole contractor for the Awash–Weldia/Hara Gebeya Railway Project, constructing the 389 km of railway line under a three-year $1.7 billion contract. In addition, the Türk Exim Bank provided parallel financing of $300 million (Minney, 2014). India provided its first line of credit to Ethiopia, of $65 million, for energy transmission and distribution programmes (India Exim Bank, 2016). Such trends are justified by Ethiopia being one of the largest recipients of Indian development cooperation in SSA and relatively long-standing Turkish development cooperation programmes (albeit not on commercial terms) in the country (Prizzon and Rogerson, 2013).

4. Kenya has a PPP framework in place and PPP arrangements have been used successfully in the energy sector.

As a result of the limited availability of data on PPP projects, we did not manage to consistently map and compare projects involving private sector participation in the two countries. In the case study reports, however, we analysed this type of instrument in terms of trends

17 Only the EU has been involved in rehabilitation projects in the railway sector (grant-based) following requests from the governments concerned.

in PPP-funded projects and the effectiveness of such arrangements. For example, the expansion of PPPs is a priority for the Government of Kenya, which believes such arrangements could help to address the country's major infrastructure gaps.

Of the three infrastructure sub-sectors in this study, both the energy sector and the railway sector in Kenya have adopted PPP-like arrangements (National Treasury, 2016b).[18] While there is only one PPP arrangement in the railway sector (the Rift Valley Railway concession), there are several PPPs in the energy generation sector, which benefits from both a history of privately financed transactions and a strong pipeline of projects going ahead. These are all build-own-operate[19] power generation plants with long-term (typically 20 years) power purchase agreements between independent power producers and Kenya Power. The private sector usually focuses on power generation rather than transmission and distribution. In general, the Government of Kenya must pay annual fixed capacity payments and is liable for a termination/default payment. In fact, to increase investor confidence and accelerate the financial closure of these private sector investment deals, Kenya has, in the past, used multiple support instruments, especially binding letters of support. The Feed-in-Tariffs Policy, in particular, has facilitated resource mobilisation.

In Ethiopia, there are no PPP projects in the infrastructure sector at present, but a PPP framework is being developed (at the time of the case study analysis). The AfDB is working with the Ministry of Finance and Economic Cooperation (formerly the Ministry of Finance and Economic Development) to support this framework and, according to the interviewees, the energy sector is the best candidate for PPP arrangements.

5. In both countries, donors tend to support development rather than recurrent expenditure, and most financing to the sector is in the form of loans.[20]

In Ethiopia, donors usually fund capital expenditure only, and not recurrent spending. In Kenya, donor borrowing cannot be used to fund recurrent spending and so the government is seeking alternative financing sources for recurrent costs, particularly for road maintenance. A similar arrangement applies to government deficit spending, as funds from China and the MDBs tend to be tied to specific projects rather than used to fund the deficit overall.

3.3. Six priorities for external development finance for infrastructure and arenas of negotiation for the governments of Ethiopia and Kenya

This section summarises six key points that emerged from the analysis of Ethiopia and Kenya. These concern government priorities for external development finance to the infrastructure sector, the implications of a changing development finance landscape for the two countries and the arenas where development finance for infrastructure development is negotiated and managed.

1. Both governments have high demand for MDB financing, especially at concessional terms, but MDBs are supply-constrained.

Most government interviewees in both Ethiopia and Kenya expressed a clear priority for maximising concessional financing for infrastructure development, as highlighted in their debt management strategies (National Treasury, 2016c: xi; GoE, 2012: 50). Such a preference will become even more important for countries like Kenya, which are expected to move towards sources of finance in the medium term that are less concessional than the resources they currently receive. Kenya is now a lower-middle-income country and so its graduation from IDA and ADF eligibility is potentially on the horizon.

Against this backdrop, with infrastructure development high on the list of priorities in national development strategies and with financing gaps to be addressed, some government interviewees mentioned that they would be willing to borrow more from the MDBs, given their favourable terms and conditions on interest rates, maturity and grace periods in comparison with other more expensive options, such as international sovereign bonds. Interviewees in Kenya emphasised the importance of a grace period and a low interest rate when financing infrastructure projects such as power sub-stations, which, though profitable, may take some time to start generating revenues.

Both governments looked to the international capital markets (and domestic bond markets in the case of Kenya) to fund infrastructure – often at much higher rates than offered by the IDA and ADF. In addition, both countries managed to secure non-concessional financing from the AfDB for the water and road sectors (the pricing of these projects is still more favourable than other commercial sources), which would suggest that both governments face constraints from the supply side when it comes to these forms of external financing.

18 No PPP arrangements have been pursued in the road sector, and the case studies recorded a mixed response from interviewees regarding their feasibility in this sector.

19 Build-own-operate (BOO) is a form of project financing where a private entity receives a concession from the private or public sector to finance, design, construct and operate a facility.

20 There are a few exceptions of grants, notably from the EU and for feasibility studies.

Government officials in Ethiopia also mentioned that the MDBs are highly valued because of the capacity-building/knowledge transfer embedded in their projects: one of the criteria considered when selecting financiers with which to work. Policy conditionality remains an issue, however, at least for the Ethiopian government, which is less willing to compromise on this matter and is prepared to turn down a project if necessary. The amount of resources that MDBs can mobilise is, however, constrained by their country allocation.

2. Formal policy coordination between donors matters less in infrastructure than in other sectors (or across sectors). At the project level, however, reducing administrative costs is such a priority for the Ethiopian government that it would prefer to work either with a large single financier or with donors in a pooled arrangement.

In the interviews with government officials it emerged that both the Kenyan and Ethiopian governments seem to prefer bilateral dialogue, despite the pressure on government systems. No officials in either country expressed a strong interest in leading a national coordination mechanism, with such mechanisms viewed with general fatigue (as seen in the analysis by Prizzon et al., 2016). There is no coordination mechanism in the railway sector in either Ethiopia or Kenya and no government–donor forum in the energy sector in Ethiopia. A coordination mechanism exists in Ethiopia for the road sector (under the Transport Sector Working Group), but it does not really meet at the moment; more regular meetings occur in the corresponding technical working group in Kenya, but again most negotiations are bilateral.

Incentives for country coordination mechanisms in the infrastructure sector differ strongly from those in other sectors, for four main reasons. First, as we have seen in the previous section, only a few donors are involved in infrastructure development – mainly China, the MDBs and the EU. Furthermore, some donors – such as the World Bank and the AfDB – do not invest in railway development.

Second, most of these financiers lend at (or close to) commercial terms or are private sector investors – in Ethiopia, for example, these are the China Exim Bank, Turkish/European exim banks and Credit Suisse in the railway sector – so have little incentive to coordinate with donors. Third, we understand from the interviews with government officials that both the Ethiopian and Kenyan governments have a very clear division of labour for donors operating in the infrastructure sector (although this is implicit rather than explicit in the case of Ethiopia). They understand the comparative advantages of each financier and so can match them against the various projects in the pipeline.

Fourth, SOEs are the main negotiators (and implementers) vis-à-vis donors, rather than line agencies (and tend to have a stronger position than line agencies – see below). Line agencies usually have the mandate to lead the relevant sector/technical working groups.

In the series of interviews with government officials in Ethiopia, low administrative costs were often mentioned as a key preference for the terms and conditions of development finance (although officials from the Kenyan government did not express any concerns on this issue). This entails either working with one large financier or having donors work together in pooled funding arrangements, so that the Ethiopian government does not have to comply with the diverse policies of each financier separately.

While coordination might not matter at the policy level, the Ethiopian government and SOE interviewees expressed very different views at the project level. The division of labour in the road sector is often based on splitting one main project into a number of smaller ones, with government allocation of a specific section of the road to each donor through parallel arrangements. Not surprisingly, the use of more than one donor procurement and reporting system represents a key challenge for the Ethiopian government. Coordination between donors and the government could address some of these challenges (for instance, the Ethiopian government encourages small Arab donors to coordinate and work together).

The current lack of such coordination is also having an impact in the railway sector in Kenya. The Rift Valley Railway, which has received some financing from development finance institutions in traditional donor countries, in some cases runs (literally) on parallel tracks to the Chinese-funded Standard Gauge Railway. In general, government interviewees were circumspect when asked for precise reasons for this division of labour, but various stakeholders offered two potential explanations. First, for reasons of speed, Chinese financing of the Standard Gauge Railway was more attractive than traditional donor financing, with the latter highly unlikely to complete this project as quickly as China because of their social and environmental safeguards. Second, DAC donors may have wanted to focus on rehabilitating the existing railway because of the investments they made in the past.

3. SOEs usually play a bigger role in negotiations with financiers compared with line agencies, with implications for the effectiveness of coordination mechanisms and debt management.

SOEs are very involved in negotiations with donors and financiers in both countries, as their greater degree of autonomy often makes them more powerful than the relevant line agencies. This finding contrasts with the analysis in Prizzon et al. (2016), which found that most loan negotiations across sectors were led by central agencies, notably finance or planning ministries.[21] With SOEs leading on infrastructure development projects in both countries,

21 In Kenya, county governments also have responsibility for developing county roads, leading to a lack of clarity around their responsibilities in relation to those of central ministries and agencies.

they have fewer incentives than line agencies to be heavily involved in country coordination mechanisms. At the same time, as in the case of Ethiopia, on-lending to SOEs is not counted as central government debt. This means that, should the SOE be unable to service its future obligations, there would be a (currently underestimated) impact on the public sector, given the implications for public debt sustainability and effects on the national budget.

4. Speed of delivery is one of the governments' priorities for development finance, but other criteria and obstacles come into play.

Speed of delivery – meaning short contract negotiations and rapid project implementation – is a priority for both governments, but is no longer at the top of the priority list as noted in previous studies for this project (Prizzon and Rogerson, 2013; Hart and Prizzon, 2016). In the case of Ethiopia, other criteria come into play, notably the assessment of concessionality and knowledge transfer, as mentioned earlier in this report. In Kenya, underperformance in development expenditure reflects low absorption of domestically financed development by ministries, departments and agencies, delay in procurement and low absorption of external funds from donors (in other words, slow project implementation).

5. Ownership of development programmes and alignment with national priorities are strong preferences in the infrastructure sector, while other preferences – such as untied aid, transparency and mutual accountability – have fallen off the radar.

Ownership of development programmes and alignment with national priorities in the infrastructure sector emerged strongly as key preferences for partner country governments in terms of the modality by which development finance should be delivered. The Ethiopian government has certainly showed strong leadership, driving its development strategies and being the 'initiator' of development programmes. In the interviews with both government officials and donors it was clear that the government negotiates projects that fit with its national strategy, so supporting the main pillars of the GTP II. We were told of instances when the government had rejected projects that were not aligned with national priorities. In the energy sector in Kenya, interviewees confirmed that there are no projects being implemented that are not in the sector plan, including investments that have been initiated privately.

Some key principles of the development effectiveness agenda – untied aid, transparency, mutual accountability – were not mentioned in the interviews with government officials, however. There may be several reasons for this, including that they were simply too difficult to achieve or that other aspects of the development effectiveness agenda were more important. In particular, interviewees rarely shared their views on *untied aid* unless prompted and, when their views were offered, they were mixed; there were concerns about the lack of knowledge-sharing and capacity-building, but tied aid was seen as a way to reduce administrative costs and have projects delivered faster.

6. Kenya is hitting its debt ceilings and Ethiopia's debt position is worsening, limiting space for future borrowing.

Debt management strategies in both countries have not fully reflected the complexity and challenges of managing and servicing rising financing sources. This is relevant in the road, railway and energy sectors because of the large size of infrastructure projects under way and the potential for contingent liabilities to materialise, given the leading role of SOEs in infrastructure development.

In Ethiopia, for example, the country's risk of debt distress has already been reclassified from low to moderate because of lower than expected export performance. As mentioned earlier, even though only SOEs can take up non-concessional loans, these loans are guaranteed by the Ethiopian government and so should feature clearly among contingent liabilities. If SOEs do not meet their obligations, the government would ultimately be responsible for their repayment, putting pressure on an already rising public debt burden. A now outdated Medium-Term Debt Management Strategy 2013-2017, published in 2012, lacks a clear framework on how best to employ financing sources with different financial terms and conditions (grant component, interest rate, maturity), such as matching them with projects of similar length to generate sufficient returns to service the debt obligations.

In Kenya, debt levels are rising rapidly and the country has to comply with a maximum 50% debt-to-GDP ratio, as determined by the Public Finance Management Act 2012 (following commitments within the East Africa community). It is not clear that existing debt management systems are fully capturing all contingent liabilities. This is a particular concern, given that 50% of Kenya's external development finance is now on non-concessional terms and borrowing terms from key multilaterals are likely to continue to harden as Kenya's income continues to grow. It is likely that Kenya will either have to curtail its ambitious investment plans or risk debt distress, unless further concessional sources of financing are forthcoming.

In addition, the demand for international sovereign bonds – which both countries have issued to fund implementation of their pipeline of infrastructure projects – might decline because of higher interest rates in developed economies and higher risk profiles in both countries (reducing the appetite for riskier products). In the medium term, such a scenario could mean that the refinancing of international sovereign bonds becomes more expensive or not financially viable.

4. Considerations emerging from Ethiopia and Kenya

This report has examined the evolution of the development finance landscape in SSA and compared it with the experiences of two East African countries, Ethiopia and Kenya. The experiences of these countries could be considered by other countries while formulating their infrastructure development plans and approaches, and by donors reviewing their funding strategies.

For partner country governments

1. Consider diversifying the funding base by looking into alternative funding options, such as other official donors, and expanding financial resources.

We have seen that in the cases of Ethiopia and Kenya, the number of donors operating in the infrastructure sector is relatively small. The volume of finance raised via international sovereign bonds in both Ethiopia and Kenya is still small compared with funding needs, and their pricing is far higher than other sources of finance, putting pressure on debt management.

2. Consider increasing efforts to foster more inclusive coordination among donors, such as co-financing arrangements, if the reduction of administration costs and prevention of duplication are seen as priorities.

Coordination mechanisms for infrastructure finance are either not operational (in the case of roads in both countries) or are totally absent (in the case of energy in Ethiopia and railway in both countries). We have illustrated the consequences of lack of coordination in the railway sector in Kenya, for example, which is caused, in part, by the small number of financiers involved, but also by the parallel arrangements applied at the project level between the government and donors. Establishing and managing coordination mechanisms would help to reduce administration costs; one approach would be to promote co-financing arrangements to reduce the administrative burden on government officials and avoid duplications.

3. Develop a fully-fledged debt management and financing strategy.

A structured debt management strategy should identify the sectors, projects and activities to be funded by each source, and set out the conditions for a project to generate sufficient returns to cover loan repayments (if these apply), encompassing all flows, concessional and non-concessional and including contingent liabilities. Projects with high social returns but low economic returns should be funded by public taxation (see Prizzon et al., 2016, on this point). While only SOEs can take up non-concessional loans, these are guaranteed by government, so such loans should feature clearly among contingent liabilities.

4. Increase transparency and the level of detail in information shared on public and external development finance in support of infrastructure projects.

One challenge we faced in both of the case studies was the lack of publicly available information on budget data, SOEs' consolidated budgets and resources from some donors. We recommend that the Ethiopian Aid Management Platform and the Kenyan E-ProMIS be externally available and accessible. Such an approach would offer an important tool and starting point for policy dialogue between donors and governments. Given the large scale of infrastructure projects and the implications for future debt sustainability (and intergenerational equity), parliaments should be heavily involved in scrutinising the merits and financial viability of large loan-funded infrastructure projects. The dominance of Chinese official finance in the infrastructure sector calls for greater effort to share information about these projects and their execution, as well as on the implications for future debt sustainability and greater participation in country coordination mechanisms (see further below in the 'For donors' section).

5. Develop a PPP framework if these arrangements are considered a viable financing option for each specific project.

In Section 3.2, we discussed how PPPs in the energy sector have been seen as successful in Kenya. That experience would suggest that a policy and legislative framework is a necessary, albeit insufficient, condition for the creation (and effectiveness) of PPP projects.

6. Create sufficient fiscal space and introduce fiscal and institutional discipline to afford recurrent costs for maintaining infrastructure projects in the medium term.

In Section 3.2 we also highlighted some areas that external funding cannot support – in particular, road maintenance (a recurrent activity, which under Kenyan regulations cannot be funded by borrowing) and government deficit spending (as funds from China and the MDBs tend to be tied to specific projects so cannot be used for funding the deficit overall).

For donors

1. MDBs should consider reviewing their lending capacity, especially on concessional terms, and scaling it up.

Both the Ethiopian and Kenyan governments expressed a strong preference for maximising concessional resources. They also expressed strong demand for MDB financing as the terms and conditions are far more favourable than those offered by international financial markets at current conditions, especially at concessional terms, and because their projects embed highly valued knowledge transfer and capacity-building. Some MDBs are heading precisely in this direction. For example, following the Aaa/AAA credit ratings issued by Moody's and Standard & Poor's to the IDA in 2017, the IDA will be in a position to raise resources on international capital markets, leveraging its equity.

2. Donors should consider collaborating and working together, especially on pooled funds, if the reduction of administrative costs and prevention of duplication are among governments' priorities.

Government officials in Ethiopia expressed a strong preference for financiers to work together in pooled arrangements. Donors should consider reviewing the conditions and constraints for projects to be run using pooled rather than parallel arrangements and for the use of formal country donor–government coordination mechanisms. Such an approach would apply to both traditional and less-traditional donors.

3. Every donor (DAC and non-DAC) should take into account the consequences for debt sustainability of external development finance at non-concessional terms (and of contingent liabilities in particular) and support governments in strengthening their debt management capacity.

Ethiopia and Kenya have expanded their borrowing at less-than-concessional terms to support infrastructure development, whether from international capital markets, emerging donors or, to a certain extent, the private sector. This is putting pressure on the future ability of these countries to service their loans, especially if returns estimated at the time of project preparation do not materialise.

Donors should continue to assess both the ability of a borrowing country to afford its external liabilities and the likelihood of the project delivering the expected returns. In addition, they should support these governments and others with a similar macroeconomic outlook in strengthening their debt management capacity.

References

AfDB (2014) *Diversifying the Bank's products to provide eligible ADF-only countries access to the ADB sovereign window*. Abidjan: African Development Bank. (https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Diversifying_the_Bank%E2%80%99s_Products_to_Provide_Eligible_ADF-Only_Countries_Access_to_the_Adb_Sovereign_Window_-_Appraisal_Report.pdf) (Accessed April 2017)

AidData (2016) *Open Data for International Development*. (http://AidData.org) (Accessed May 2016)

Clist, P., Isopi, A. and Morrissey, O. (2011) 'Selectivity on aid modality: determinants of budget support from multilateral donors'. CREDIT research paper No.11/1. Nottingham: Centre for Research in Economic Development and International Trade, University of Nottingham.

Cordella, T. and Dell'Ariccia, G. (2007) 'Budget support versus project aid: a theoretical appraisal', *Economic Journal* 117(523): 1260-1279.

Foster, V. and Briceño-Garmendia, C. (eds) (2010) *Africa's infrastructure: a time for transformation*. Washington, D.C.: World Bank.

Fraser, A. and Whitfield, L. (2008) 'The politics of aid: African strategies for dealing with donors'. Working paper 2008/42. Oxford: Global Economic Governance Programme.

GoE (Government of Ethiopia) (2012) *Medium-term Debt Management Strategy 2013-2017*. Addis Ababa: Government of Ethiopia.

Greenhill, R. and Mustapha, S. (2017) *An 'age of choice' for infrastructure financing? Evidence from Kenya*. ODI report. London: Overseas Development Institute.

Greenhill, R. and Prizzon, A. (2012) 'Who foots the bill after 2015? What new trends in development finance mean for the post-MDGs'. ODI Working Paper No. 360. London: Overseas Development Institute.

Greenhill, R., Prizzon, A. and Rogerson, A. (2013) *The age of choice: developing countries in the new aid landscape: A synthesis report*. ODI report. London: Overseas Development Institute.

Gutman, J., Sy, A. and Chattopadhyay, S. (2015) *Financing African infrastructure: can the world deliver?* Washington, D.C.: Global Economy and Development at Brookings.

Hart, T. and Prizzon, A. (2016) *Age of choice: Kenya in the new development finance landscape*. ODI report. London: Overseas Development Institute.

Hart, T., Krause, P. and Miller, M. (2015) *Bricks and dollars: improving public investment in infrastructure*. ODI Report. London: Overseas Development Institute.

IMF (International Monetary Fund) (2015) 'The Federal Democratic Republic of Ethiopia'. Staff Report for the 2015 article IV consultation. Washington, D.C.: International Monetary Fund.

India Exim Bank (2016) 'Exim Bank's operative lines of credit as on June 07, 2016'. (http://www.eximbankindia.in/lines-of-credit) (Accessed June 2016)

Jalles d'Orey, M.A. and Prizzon, A. (2017) *An 'age of choice' for infrastructure financing? Evidence from Ethiopia*. ODI report. London: Overseas Development Institute.

Jelovac, I. and Vandeninden, F. (2008) 'How should donors give foreign aid? Project aid versus budget support'. Groupe d'Analyse et de Théorie Economique (GATE) Working Paper 08(13). Lyon: University of Lyon and CNRS.

Minney, T. (2014) 'Ethiopia's $865m rail finance part of $15bn rail projects'. *African Capital Markets News*. (http://www.africancapitalmarketsnews.com/2509/ethiopias-865m-rail-finance-part-of-15bn-rail-projects) (Accessed June 2016).

Miyamoto, K. and Chiofalo, E. (2016) 'Official development finance for infrastructure: With a special focus on multilateral development banks'. OECD Development Co-operation Working Paper 30. Paris: Organisation for Economic Co-operation and Development.

Moncrieffe, J. and Luttrell, C. (2005) *An analytical framework for understanding the political economy of sectors and policy arenas*. ODI report. London: Overseas Development Institute.

National Treasury (2016a) 'Summary of external funding in roads, railway and energy sector (listed by donor)'. Nairobi: National Treasury, Government of the Republic of Kenya. Unpublished data.

National Treasury (2016b) *2016 Medium-term budget policy statement*. Nairobi: Government of the Republic of Kenya.

National Treasury (2016c) *Medium-term debt management strategy, 2016*. Nairobi: Government of the Republic of Kenya.

OECD (Organisation for Economic Co-operation and Development) (2013) 'Converged statistical reporting directives for the Creditor Reporting System (CRS) and the annual DAC questionnaire, chapters 1-6, June'. Paris: Organisation for Economic Co-operation and Development. (https://www.oecd.org/dac/stats/documentupload/DCD-DAC(2013)15-FINAL-ENG.pdf)

OECD-DAC (Development Assistance Committee) (2016) 'OECD.Stat'. Paris: Organisation for Economic Co-operation and Development. (http://stats.oecd.org) (Accessed May 2016)

Ostrom, E., Gibson, C., Shivakumar, S. and Andersson, K. (2001) 'Aid, incentives and sustainability: An institutional analysis of development cooperation'. Studies in Evaluation 02/01. Stockholm: Sida.

Prizzon, A. and Rogerson, A. (2013) *The age of choice: Ethiopia in the new aid landscape*. ODI report. London: Overseas Development Institute.

Prizzon, A., Greenhill, R. and Mustapha, S. (2016) *An age of choice for development finance: evidence from country case studies*. ODI report. London: Overseas Development Institute.

SAIS-CARI (2016) 'China–Africa Research Initiative'. Baltimore: Johns Hopkins University School of Advanced International Studies, China Africa Research Initiative. (http://www.sais-cari.org/data-chinese-loans-and-aid-to-africa) (Accessed June 2016)

World Bank (2016) *Ethiopia's great run: the growth acceleration and how to pace it*. Washington, D.C.: World Bank Group.

Annex 1: A political economy approach to case study analysis

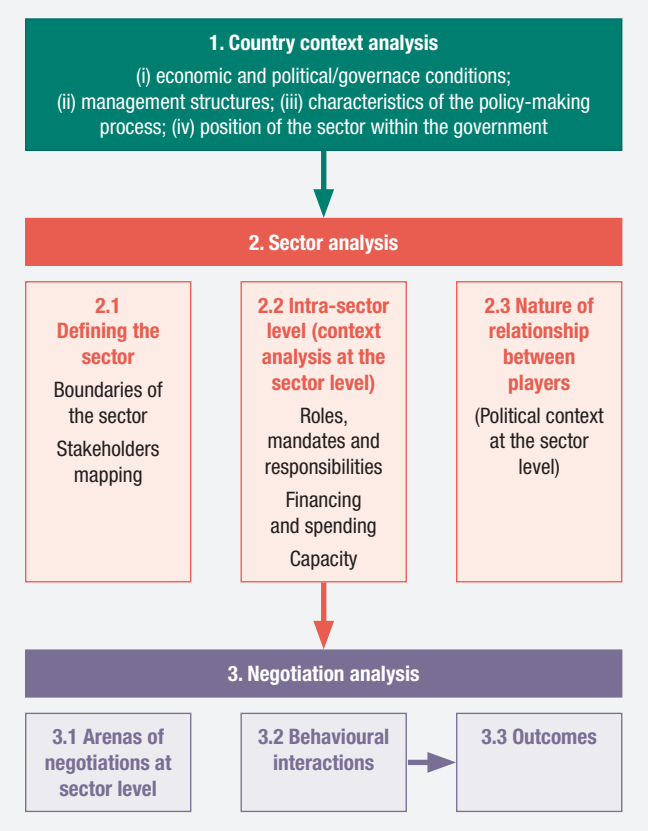
The literature on development financing options usually focuses on the supply side – that is, on how donors make choices on financing sources – and not on the demand side. Agency theory has been widely applied to the relationship between donors and government and the choice of aid instruments supplied by the donor, with some using a game theory framework (see, for example, Cordella and Dell'Ariccia, 2007; Jelovac and Vandeninden, 2008) and others using a contract theory approach to model the choice of modalities (Clist et al., 2011), taking a cross-sectoral perspective.

The main theoretical framework used in the previous studies of this project that looked across sectors (Prizzon et al., 2016) combined the elements of the framework used by Fraser and Whitfield in their 2008 study 'The politics of aid: African strategies for dealing with donors' and the Institutional Analysis and Development (IAD) framework developed by Ostrom et al. (2001). The key insight from Fraser and Whitfield (2008), in contrast to much of the literature on the political economy of aid, lies in seeing the engagement between a partner country government and a donor as a negotiation, since it is assumed that their objectives may diverge. Fraser and Whitfield also focus on the importance of both the economic and political contexts in shaping country–donor negotiations and, therefore, the outcomes of negotiations. Drawing on the IAD framework, we also emphasise the importance of the arena in which negotiation takes place, but rather than taking this as a given, we ask whether governments seek to engage with different kinds of providers of development finance in different fora.

For the case studies on the infrastructure sector, we retained several elements of this framework while introducing a different approach to address the research questions from the perspective of managing providers of development finance at the sectoral level,[22] primarily based on that of Moncrieffe and Luttrell (2005). The framework applied in this study takes into account the characteristics of the sector under investigation, the relationships between central agencies, relevant line ministries and SOEs, including different roles, mandates and responsibilities (as well as the relations with different providers of funding) and the composition of financing in terms of external and domestic resources. We focus particularly on arenas related to in-country aid coordination (such as sectoral or technical working groups and regular high-level donor–government meetings), as these are often key fora in which donors and government discuss sectoral strategies, project identification, policy dialogue and conditionalities.

Our combined methodological approach is described in Figure A1. As our analysis does not look specifically at development outcomes, the framework concentrates on the first two steps, as in Moncrieffe and Luttrell (2005), notably: *the basic country analysis* (country context analysis in Figure A1) and *understanding organisations, institutions and actors* (sector analysis in Figure A1) by defining the sector, conducting an intra-sector analysis and identifying the relationships between players.

Figure A1: Stages in political economy analysis



Source: Adapted from and based on Moncrieffe and Luttrell (2005) and Greenhill et al. (2013).

22 The framework was developed to be sufficiently generic to be applied to other sectors, not only the infrastructure sector.

Annex 2: Sub-sector analysis: road, railway and energy financing in sub-Saharan Africa

This section outlines the evolution of the composition of external development finance to the road, railway and energy sectors in SSA, providing details that add to those given in Section 2 of the main text.

Road sector

Total official external development finance to the road sector not only grew five-fold between 2002 and 2013 (from $809 million in 2002 to $5.5 billion in 2013), but its composition also changed, shifting from multilateral sources to Chinese development finance.

Chinese development finance was the largest source of finance to the sub-sector in 2007, 2009 and 2013. It was also the second largest between 2005 and 2006. Rising from less than $400 million per year in 2002, Chinese investment reached $1.6 billion in 2007 and $2.6 billion in 2013 (AidData, 2016).

Multilateral donors were the main source of external development finance to the road sector until 2006 (accounting for more than 70% of total external development finance to this sector between 2002 and 2006). Since 2006, the position of biggest financier has been alternating between the multilateral donors and China. Overall, the EU was the largest multilateral donor – through grant financing – providing 43% of total multilateral finance between 2002 and 2013, followed by the World Bank (IDA) at 34%. In 2013, the IDA became the largest financier among the multilateral donors supporting the road sector in SSA ($812 million) (OECD–DAC, 2016).

ODA from bilateral DAC donors is the third largest source of official external development finance to the road sector, but the amounts have been small compared with other sources ($250 million in 2007, rising to $872 million in 2013). It is fairly concentrated, with Japan, the United States and France accounting for more than 60% of total bilateral ODA to the road sector between 2002 and 2013 (OECD–DAC, 2016).

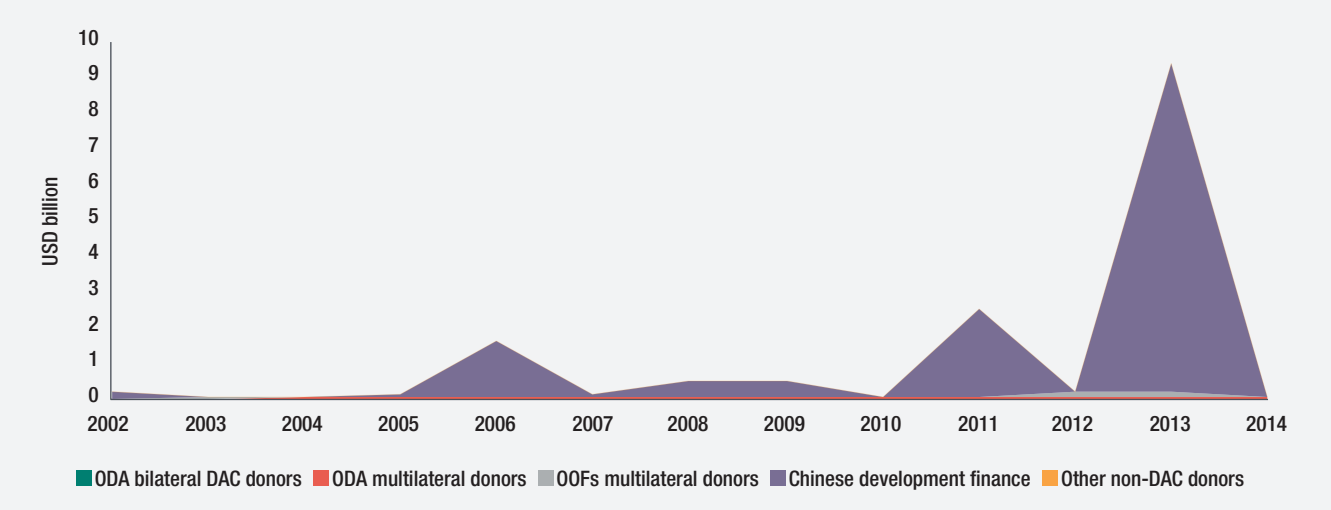
With very few SSA countries eligible for IBRD and AfDB terms (and the AfDB credit policy allowing for non-concessional lending under certain circumstances having only been in place since 2014), it is no surprise that *OOFs* to the road sector are very low (averaging $33 million between 2002 and 2013). *Non-DAC donors other than China* are marginally active (small amounts from the AFESD, Kuwait and Cyprus) (OECD–DAC, 2016).

Railway sector

The picture for official external development finance to the railway sector differs from that for the road sector as only a few donors are involved. This is not surprising, given the multi-year nature of the large projects in this sector (see Figure A2).

Chinese development finance dominates the external development finance landscape in the railway sector. Between 2006 and 2011, the four largest amounts of development finance to the sector from China were a $2 billion loan from the China Exim Bank to fund the Chad–Sudan Railway in 2011, two loans each of $765 million to modernise the Nigerian railway system in 2006, and

Figure A2: Financing railways in sub-Saharan Africa: total official external development finance, 2002-2013, $ billions



Source: Authors' elaboration. ODA and OOFs from OECD–DAC (2016), current prices. Chinese and non-DAC members' data from AidData (2016). There are no data for Chinese flows in 2014.

$447 million to build the railway line from Addis Ababa to Djibouti in 2011. Between 2012 and 2013, the biggest Chinese loan was provided by the China Development Bank to the value of $5 billion for railway and port infrastructure, followed by a loan of $3.75 billion for Kenya's Standard Gauge Railway (AidData, 2016).

Official development finance in the form of ODA from multilateral and bilateral donors to the railway sector is small and comes mainly from multilateral organisations. A peak flow of $107 million was registered in 2011 (so quite small compared with Chinese development finance), with an average of $49 million per year between 2002 and 2013. Multilateral assistance to the railway sector comes primarily from the World Bank (IDA) and the EU, accounting for 86% of (the small amount of) ODA to the railway sector.[23]

Energy sector

Total official external development finance to the energy sector in SSA grew from $901 million in 2002 to $4.3 billion in 2013, a four-fold increase. Most of this increase can be attributed to the increase in Chinese development finance.

China is the largest official external financier in the energy sector in SSA, providing an average of approximately 65% of total resources over the period 2002-2012.[24] Chinese investment in SSA's energy sector increased from around $618 million in 2002 to $3 billion in 2012. A major peak occurred in 2010, when total finance to SSA was around $34 billion, the result, in large part, of an energy infrastructure project in Nigeria valued at around $31 billion (AidData, 2016).

The second largest flow of official external development finance for the energy sector has come from multilateral organisations on concessional terms (ODA). IDA has been the largest contributor to the sector since 2002, contributing $760 million in 2013, followed by the AfDB and the EU, which provided $350 million and $267 million, respectively, in 2013. Between 2002 and 2012, an average of 60% of ODA came from multilateral organisations. When it comes to OOFs, IBRD loans to the energy sector began in 2010; in 2014, the volume of assistance was similar to that of IDA ($769 million), and no non-concessional finance from the AfDB was recorded before 2014 (OECD–DAC, 2016).

The third largest source has been bilateral donors, whose support increased from $101 million in 2002 to $1.1 billion in 2013. Bilateral assistance to the energy sector from traditional donors is highly concentrated. Five DAC donors accounted for nearly two thirds of ODA (65%) to the energy sector between 2002 and 2013: Japan ($1.6 billion), followed by France ($1.4 billion), Norway ($1.3 billion), the United Kingdom ($0.8 billion) and Germany ($0.8 billion) (OECD–DAC, 2016).

Contributions for the energy sector from non-DAC donors other than China have been very small, but larger than for the other sectors analysed. Between 2000 and 2004, the non-DAC donors other than China that supported the energy sector were the AFESD and Kuwait. India provided $55 million in 2008.[25]

23 Assistance from multilateral donors decreased to around $50 million in 2013 (OECD–DAC, 2016). In terms of OOFs, the only recorded assistance comes from the AfDB, which provided non-concessional finance to the railway sector ($129 million in 2012 and $190 million in 2013). No IBRD assistance was provided to the railway sector between 2002 and 2013 (AidData, 2016).

24 There are no data for Chinese investments in 2013.

25 Although it is a small donor, the Islamic Development Bank has also provided assistance, contributing around $11 million to the energy sector in 2007 according to AidData (2016).

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Cover photo: Young men collect water from a new canal, currently under construction, that is fed from the Awash River and will irrigate a new state owned sugar cane plantation near the town of Nasareth, Ethiopia. Robert Hammond/Panos

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