# PRIVATE SECTOR PARTICIPATION IN AFRICAN INFRASTRUCTURE:

IS IT WORTH THE RISK?

Working Paper number 55

May, 2009

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The International Policy Centre for Inclusive Growth is jointly supported by the Poverty Practice, Bureau for Development Policy, UNDP and the Government of Brazil.

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Print ISSN: 1812-108X

# PRIVATE SECTOR PARTICIPATION IN AFRICAN INFRASTRUCTURE: IS IT WORTH THE RISK?

Kate Bayliss\*

#### **ABSTRACT**

Policies to promote privatisation in developing-country infrastructure gained momentum in the early 1990s as donors grew increasingly frustrated with efforts to strengthen public sector services that continued to fail. The strategy was intended to bring both finance and efficiency to ailing infrastructure throughout the developing world. Nearly two decades later the results have been disappointing, particularly in the areas of greatest need. The extent of investor interest in water and electricity in Sub-Saharan Africa (SSA) was massively overestimated and the hoped-for private investment failed to materialise. Rates of access to electricity and water remain far below those of other developing regions. In response to the failings of privatisation there has been a redoubling of efforts to attract investors, albeit with the recognition that this might take longer than originally thought. Privatisation in various guises is still prominent on the policy agenda.

This paper critically assesses the motives behind the drive for private sector participation (PSP) in water and electricity in SSA, and reviews measures adopted by governments and donors to entice investors. In terms of restructuring and pricing, sector policies have the underlying objective of facilitating private investment and reducing the risk exposure for potential investors. In addition, a plethora of donor initiatives have emerged with the aim of bringing private investment into the region, and these too focus on reducing risk for the private sector. As a result, on offer to the private sector are the least challenging and most lucrative aspects of delivery, which are tightly ring-fenced and bound by guarantees. In industrialised economies, discussions of the merits of PSP highlight the importance of transferring risk to the private sector in order to generate efficiency gains. In contrast, as regards attracting PSP into utilities in SSA, the focus is on reducing the risk to which the private sector is exposed. But this risk is not reduced, it is transferred. As a result, African governments, taxpayers and end-users bear high levels of risk in order to accommodate the priorities of investors.

# 1 INTRODUCTION

Lives and livelihoods are suffering from the fragile state of infrastructure in Sub-Saharan Africa (SSA). The lack of transport, power, communication networks, water, sanitation and other infrastructure puts severe constraints on economic growth and poverty reduction across the region. Table 1 shows that SSA is behind the rest of the developing world in access to water and sanitation, as well as electricity. Progress on raising access rates has lagged other developing countries.

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TABLE 1
Water and Electricity Access Rates

	Population using improved sanitation %		Population using an improved water source		Electricity consumption per capita Kilowatt hours	Electrification rate %	Population without electricity (millions)	
	1990	2004	1990	2004	2004	2005	2005	
SSA	32	37	48	55	478	26	547	
All DCs <sup>1</sup>	33	49	71	79	1221	68	1569	
OECD	94	96	97	99	8795	100	-	
World	49	59	78	83	2701	76	1577	

Note: 1. DCs = developing countries.

Sources: Human Development Report 2007 data (www.hdrstats.undp.org); International Energy Agency (2006).

The impact of these shortages is devastating. Lack of electricity is a major deterrent to economic development. The entire generating capacity of the 48 countries of SSA, at 63 gigawatts, is comparable to that of Spain. Thirty-five countries in Africa are now experiencing a power crisis, and the supply is regularly interrupted. Only one in four Africans has access to electricity, and in rural areas the figure is below one in ten (MDG Africa Steering Group, 2008). In some countries, such as Burkina Faso, Malawi and Mozambique, access rates are as low as 7 per cent (International Energy Agency, 2006). Electricity consumption is a fraction of that in other regions. Not only are access rates low, but the electricity supply is costly and unreliable.

In an extensive survey of enterprises in the region, almost 60 per cent indicated that lack of electricity is their leading constraint (Africa Progress Panel, 2008). Unreliable electricity supply adds to the cost of manufacturing, and outages are reported an average of 56 days a year. The cost of this for firms is about 5–6 per cent of revenues. Many have their own expensive diesel generators. In the informal sector, where firms do not have back-up for power outages, the resulting loss in revenues can be as high as 20 per cent. A number of countries have brought in high-cost, short-term, emergency private power generators to deal with the current crisis (IMF, 2008a).

More than 42 per cent of all Africans, some 300 million people, lack access to an improved water supply, and 64 per cent (477 million) lack access to adequate sanitation. Aside from the extensive human cost incurred by lack of access to water and sanitation, the economic costs in terms of health spending, productivity losses and labour diversions are also high, and are highest in the poorest countries. Research for the 2006 Human Development Report puts this economic cost at around 5 per cent of GDP or about US\$ 28.4 billion a year, a figure higher than total aid flows and debt relief to the region in 2003 (UNDP, 2006).

Table 2 shows how capital expenditure for infrastructure is financed in SSA. Overall, the public sector accounts for just under 48 per cent of such capital expenditure; official development assistance (ODA) accounts for a little more than 15 per cent. The table shows that the private sector contributes the highest proportion (more than 50 per cent) of infrastructure finance to information and communication technologies (ICT) and virtually nothing to the water sector. In the energy sector, finance for capital investment comes from the public sector (40 per cent), ODA (12 per cent), non-members of the Organisation for Economic Cooperation and Development (OECD) (32 per cent), and the private sector (17 per cent). In water supply

and sanitation (WSS), 48 per cent of capital expenditure comes from the public sector, 38 per cent from ODA, and 14 per cent from non-OECD. The extent of private sector finance for capital expenditure in WSS is negligible.

TABLE 2

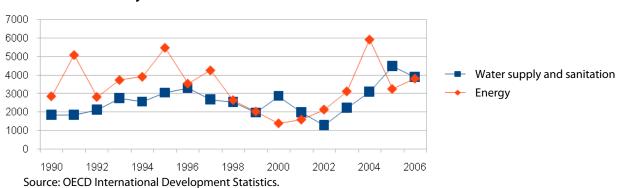
Capital Expenditure infrastructure spending in sub-Saharan Africa (US\$ billion per year)

	Capital Expenditure								
	Public sector	% total	ODA	% total	Non-OECD	% total	PPI <sup>1</sup>	% total	Total
ICT <sup>2</sup>	1.70	31.48	0.10	1.85	0.50	9.26	3.10	57.41	5.40
Power	2.70	39.71	0.80	11.76	2.20	32.35	1.10	16.18	6.80
Transport	5.50	62.50	1.70	19.32	1.10	12.50	0.50	5.68	8.80
WSS	1.40	48.28	1.10	37.93	0.40	13.79	0.00	0.00	2.90
Total	11.30	47.28	3.70	15.48	4.20	17.57	4.70	19.67	23.90

Note: 1. PPI = private participation in infrastructure; 2. ICT = information and communication technologies. Source: Briceno-Garmendia et al. (2008), cited in Foster (2008).

Public investment is largely financed by tax and carried out through central government budgets, while operation and maintenance are financed largely by user charges through state utilities (Foster, 2008). In the 1990s, there was a drive to increase the proportion of private sector finance for infrastructure with the launch of privatisation initiatives across the region, and the proportion of aid going to infrastructure declined. Figure 1 shows that donor support for water and electricity declined in the late 1990s but has since increased.

FIGURE 1
International Aid by Sector



The reduction in donor funds was due in part to the anticipated inflow of private investment which failed to materialise. This overestimation of the private sector's enthusiasm to invest in infrastructure was a major error on the part of donors and one with far-reaching consequences, as the current weakness of infrastructure, described above, demonstrates. Politicians, however, see it as a passing trend:

"We went through a period in the Eighties and Nineties where it was rather fashionable to think the private sector will look after all investment in infrastructure, but it could not be more wrong."

Hilary Benn, then Secretary of State for International Development (UK) (HoC, 2006a: 23).

The disappointing outcomes of privatisation initiatives in the 1990s have led, first, to an increase in donor support for infrastructure (as Figure 1 shows); and second, to a shift in the approach to (PSP).¹ Privatisation is clearly more difficult than was anticipated, and hence donors and governments have stepped up their efforts to make infrastructure a more attractive and less risky investment prospect.

This paper critically examines recent efforts to increase PSP in the delivery of water and electricity in SSA. It shows that governments and donors have made considerable efforts to attract investment into the water and electricity sectors in SSA. Sector restructuring and pricing have been directed by the underlying aim of accommodating the needs of potential investors, and this kind of institutional approach has been supported by loans from the World Bank. Donors have also developed other facilities to encourage investors by means of financial support and insurance against risk. The outcomes, however, have been disappointing. There has been very little investment in the water sector, and though donor support has been instrumental in leveraging some private sector finance in the electricity sector, this has only been on a significant scale when it has been tightly ring-fenced and secured.

Facilities established by donors to encourage PSP in infrastructure can have a strong impact on firms' investment decisions because an affiliation to a donor organisation can give an investor preference over other developing-country creditors. Hence PSP is not shaped by entrepreneurial dynamism and market-led responses but by donor policy. SSA is perceived as a risky destination for private funds. Countries are competing with other regions that are perceived as far less risky, and while such competition continues, attempts by donors and governments to manipulate the risk profile of investments will have little impact.

In SSA the combination of weak state capacity, high levels of poverty and strong donor involvement has given a different slant to policy initiatives. In an industrialised context, the transfer of risk to the private sector is considered essential to derive efficiency gains from public-private partnerships (PPPs). In SSA, by contrast, weak investor interest has meant that policy efforts focus on reducing the risk exposure of the private sector, and thus risk may be borne by the state, taxpayers and end-users. Because policy has been and continues to be shaped by an emphasis on attracting the private sector, reform initiatives are framed by the needs of investors rather than domestic social and economic priorities. This paper shows that the drive for PSP may lead to the accumulation of public sector liabilities and sector fragmentation. Continuing to focus on the needs of investors distracts attention from the needs of the poor.

The paper starts in the next section with an assessment of the main reasons for the drive for PSP in SSA, focusing on finance, efficiency and private sector development. Section 3 looks at the policies that have been adopted by developing-country governments and the specific facilities established by donors to attract private investment to infrastructure. Section 4 considers the outcomes of such measures, while the final section draws some conclusions and considers alternative approaches.

### 2 WHY ENCOURAGE PSP IN SSA?

Disappointing results from privatisation initiatives in the 1990s, particularly in SSA and especially in water and sanitation and energy (see Bayliss and Fine, 2008), have led to a redoubling of efforts to encourage PSP. Appendix 1 lists some of the main initiatives that have emerged in connection with promoting the role of the private sector in infrastructure. This section critically analyses some of the key reasons why policymakers have gone to such lengths to promote PSP.

#### 2.1 FINANCE

Huge amounts of finance are needed to get infrastructure in SSA on track. According to preliminary results from the Africa Infrastructure Country Diagnostic (see Appendix 1), annual investment needs in Africa's infrastructure stand at about US\$ 38 billion a year over the next 10 years—equivalent to 5.3 per cent of GDP. Nearly two-thirds of investment needs are required for the energy sector (ICA, 2008). The MDG Africa Steering Group estimates that US\$ 52.2 billion a year will be required in public and private investment to resolve the critical bottlenecks, and about half of this will have to go to the energy sector. To meet the additional costs, it was estimated in 2008 that ODA for infrastructure must at least double by 2010, but even this will not be enough. According to the 2008 progress evaluation, the shortfall from donors will have to be met by South-South cooperation, private philanthropy and PPPs (MDG Africa Steering Group, 2008). More recent figures from the Africa Infrastructure Country Diagnostic put the figures even higher. They indicate that US\$ 10 billion a year is required over the next 10 years in the water sector, and about US\$ 42.6 billion in energy (Ouayoro, 2008).

A number of donor reports have highlighted the role that the private sector can play in filling the "financing gap" (OECD, 2007).

"In many countries such levels of investment cannot be financed by the public purse alone. To meet the needs, encouraging private investment in infrastructure is an option that governments cannot afford to ignore."

OECD, 2007: 9

"The infrastructure requirements of poor countries grossly outweigh the investment capacity of governments and donors. Leveraging private investment and technical management 'know-how' can be critical to improving and expanding service provision."

DFID, 2005: 18

"Governments in many developing countries invest far less than they need to in infrastructure, education, and health care, while private investors could do more to help fill the gap."

IFC Annual Report, 2008: 21

"ICA members will continue to advocate at the highest levels in African governments for increased private sector participation ... Individuals are willing to pay for quality infrastructure services. Ensuring self-financing solutions by setting fair tariffs and ensuring they are collected is crucial."

ICA, 2008: 5

"African governments must also make every effort to develop Public-Private Partnerships (PPPs) to attract capital for the funding of infrastructure projects."

Africa Progress Panel, 2008: 13.

This last quotation is from a report by the Africa Progress Panel, a group of high-ranking international leaders whose goal is to ensure the fulfilment of commitments to achieve the Millennium Development Goals (MDGs). The report later states that governments cannot expect PPPs to be a "magic bullet". Governments must avoid corruption and ensure that tariffs, project terms and regulatory conditions are appropriate. According to the report, however, doing this is "as essential as it is complex".

The private sector can and does provide finance for infrastructure, but what the above quotations often neglect to mention is that money from the private sector has to be repaid by governments, users or donors. PPPs typically change the way in which the government (or users) pay for infrastructure but, while they may provide alternative financing mechanisms, private sector finance comes at a typically higher cost than that from the public sector. What is different about funding infrastructure through the private sector is the timing of payments, the accounting process and, usually, the cost.

With public sector financing, the cost usually takes the form of a debt incurred by the government. With a PPP, the debt is incurred by the private sector but the government is meanwhile accruing liabilities. It might be true in some cases that the investment is paid for directly by the user, but in most cases the government has some kind of payment commitment. PPPs, then, allow governments to obtain infrastructure while deferring infrastructure spending, which can be an attractive option in a weak revenue position.

PPPs can shift the financing off the government's immediate budget, which reduces the apparent immediate fiscal cost of service delivery. PPPs can make the government's finances appear better than they are, thereby undervaluing the cost of PPP-financed infrastructure and biasing decisions towards PPP over more traditional procurement methods. Their extended use might be driven by a desire to avoid controls on expenditure and to transfer public debt from the government balance sheet (IMF, 2006: 2).

PPPs will create future liabilities as the government's capital outlay is replaced with a stream of fees payable over the years covered by the contract. The contract is effectively a redistribution of resources from the future to the present. PPPs carry costs from current to future generations (lossa and Martimort, 2008). Potentially, PPPs can create substantial future liabilities and the future fiscal position will deteriorate further because the private sector will cherry-pick the most lucrative aspects of service delivery, leaving the state with the more challenging areas that have less scope for raising revenue. In Table 2 above, the finance that comes under the PPI heading for the power sector will be creating a future public sector liability, which will mostly have to be re-paid by the state and possibly at high cost. Furthermore, private sector finance in the power sector in SSA is heavily ring-fenced and supported by sovereign guarantees. This is discussed further in Section 4.

In order to secure PPP contracts, governments offer guarantees to investors; where this is the case, the future financial liabilities can be extensive. Guarantees are common in PPP contracts where the government has a legal obligation to pay a known or unknown amount in the case of a specific event. For example, the government may guarantee a proportion of the

debt of the private partner, and may have to step in and pay if the private partner cannot do so. Alternatively, a government may guarantee a minimum revenue flow to a private firm. Often, government guarantees are not subject to the same amount of scrutiny as regular spending. They may give rise to contingent liabilities for governments, liabilities that may be payable in the future. The use of guarantees to secure private financing can expose the government to hidden and higher costs than traditional public finance (Akitoby et al., 2007).

These financing mechanisms are particularly attractive to governments facing severe fiscal constraints, which are likely to be the most vulnerable. Research into the drivers for PPP contracts finds that the level of government indebtedness is a significant variable in achieving PPP in the water and sanitation sectors. Such research attributes this to the fact that the governments of more highly indebted countries find it more difficult to access credit and thus turn to project finance in order to offset declining government expenditure, though it may also be that those countries are under more pressure from donors to implement PPPs (Jensen and Blanc Brude, 2006).

In evaluating the impact of a PPP, the question is: what would have happened otherwise? In developed countries, the provision of infrastructure via a PPP is arguably more expensive because government borrowing is generally cheaper than private sector finance. Hence the PPP, in order to be beneficial, must bring efficiency gains. The choices are not so straightforward in SSA because governments often have little fiscal space for investment in infrastructure and donors play a major role in infrastructure finance. It might be the case that without private sector finance the investment would not happen at all, but it might also be true that governments go to such lengths to attract private investors that they accept expensive future financial commitments. A cheaper option is to finance infrastructure with concessional funds from donors (Foster, 2008).

#### 2.2 EFFICIENCY

Although they are more expensive than state provision, PPPs are supposed to provide value for money and lead to improved service delivery because the private sector is deemed to be more efficient. According to the OECD (2008a), even if the state is effective and does what is expected, it may not be efficient in that it may not be operating at least cost. Privatisation theory, based on a neoliberal framework of individual utility maximisation, explains why private firms are considered to be more efficient than state-owned enterprises (for theory and critique, see Fine, 2008). According to privatisation theory, higher efficiency levels are expected because the private sector has an incentive to produce the required outputs at lowest cost in order to maximise returns. For these benefits to reach beyond the firm itself, however, competition and risk transfer are required (see Section 4.3).

In Europe, the PPP approach was pioneered by the Private Finance Initiative (PFI), which was launched in 1992 in the United Kingdom. The PFI differed from earlier arrangements with the private sector in that, rather than the state being involved in the details of managing a project—such as the construction of a hospital—the private sector was given certain output-based specifications and was then free to manage the project and provide appropriate inputs. The public sector was no longer involved in the minutiae of project implementation. As of December 2006, 794 PFI projects had been signed for a capital value of £ 55 billion. This growth in PPPs has been replicated across the world to different degrees (lossa and Martimort, 2008).

In developing countries, privatisation gained momentum in the 1990s as donors became increasingly frustrated with government projects and reforms that were not sustained. Efforts to improve efficiency in public enterprises through institutional reform without PSP proved difficult (DFID, 2002). PSP was expected to bring about improvements in performance that were not achievable or sustainable with policies that stopped short of private sector involvement.

Despite the growth in PPPs, the evidence on performance remains mixed. On the one hand, PFI projects in the United Kingdom seem to be delivering cost savings compared to traditional procurement methods, and there have been improvements in completion time and cost of delivery. Reports from the British Treasury show that 76 per cent of PPP projects have been completed on time, compared to 30 per cent of traditionally procured projects. Other evidence, however, indicates that schools provided under PFI contracts were less satisfactory than those provided under traditional procurement methods (lossa and Martimort, 2008). Another evaluation of PFI schools in the United Kingdom found no evidence that PFI schools were built quicker or had a difference in construction or most running costs (Audit Commission, 2003).

There is some evidence from the United Kingdom to indicate that private project financiers can bring greater scrutiny in the project preparation stage. PFI has led to greater rigour in things like risk allocation in project design. Private financiers carry out due diligence and monitor project progress carefully. But the research also finds that debt financiers make little effort to resolve difficulties if a project is failing, and quickly cut their losses (PWC, 2008).

Stepping back from PFI specifically, there is a wide body of empirical research into the impact of privatisation more generally. Mostly this relates to industrialised countries but there is some research into the impact in developing countries (for example, Shirley and Walsh, 2001; D'Souza et al., 2001). Generally, research finds in favour of privatisation and the private sector, and these findings are regularly cited in support of privatisation. For instance:

"Empirical evidence from several sectors strongly suggests that service quality, productivity and profitability rise significantly following privatisation."

Galiani et al., 2005: 87

Much of the empirical research, however, tends to group all developing countries under one heading and typically there are few cases from SSA. The little research conducted in SSA suggests that the generalised empirical findings do not fit quite so easily.

Boubakri and Cosset (1998) look at the impact of privatisation in developing countries and include some African firms in their sample. They find that privatisation is more successful the higher a country's income level. In their later study, Boubakri et al. (2001) find that, in contrast to evidence in industrialised countries, firms in Africa and the Middle East do not record a rise in profitability and efficiency but they do record an increase in investment on privatisation. The authors account for this as follows:

"The success of privatization is further enhanced by an adequate institutional environment that insures the protection of property rights and law enforcement.

In countries where legal protection is weak, performance gains can only be modest as illustrated by the privatization experience of African countries."

Boubakri et al., 2001: 32

This suggests that efficiency gains from PSP in SSA are by no means guaranteed. Research into PSP in the region's water sector also fails to find clear advantages of PSP. A study by Kirkpatrick, Parker and Zhang (2004) examines a total of 71 water utilities in Africa, of which eight were privately owned or managed. The authors conducted a data envelopment analysis to establish the relative efficiency of firms. Their findings suggest that "private ownership leads to higher efficiency scores but also that many state-owned water firms in Africa seem to perform relatively efficiently" (p. 13). They also carried out a stochastic cost frontier, from which they conclude "overall the safest interpretation of the cost frontier result is that there are no significant differences in cost efficiency between private and state-owned water companies in Africa" (p. 16). A study by Estache and Kouassi (2002) which also looked at African water utilities does find that private sector utilities are associated with higher levels of efficiency, but that overall governance and institutional issues are just as important in determining performance.

A recent study by Gassner et al. (2009) concludes that PSP is associated with performance improvements in the distribution of water and electricity in developing countries. This is a large cross-country study using a dataset of more than 1,200 utilities in 71 developing and transition economies. The study includes 977 water utilities and 250 utilities from the electricity sector. Of these enterprises, 926 are state-owned and 301 have had some kind of PSP. The sample, however, is dominated by Latin America and the Caribbean, Europe and Central Asia. Only 11 per cent of the electricity utilities and 3 per cent of the sample of water utilities are from SSA. In the context of the above discussion it is unclear that the results will be relevant to SSA. The study is highly data-intensive and it is not plain why the findings might have occurred. Moreover, there is another limitation to this kind of empirical research comparing private with public utilities. One of the difficulties with such research is that there is a potential bias: the better performing state utilities are more likely to be privatised because they are more attractive to investors. Thus, even if private enterprises performed better than public enterprises, it cannot be inferred that this is the result of privatisation

In contrast, a US study into public and private water utilities in the American Midwest finds no clear evidence to support the claim that private or public ownership is inherently more economically efficient (Wolff and Halstein, 2005). The authors conclude that every community and private organisation has a unique set of values, experiences and assets. What works for one community or company might not work for another. They find six causes of underperformance: inefficient staffing, insufficient investment, poor asset management, ineffective performance measurement and reward, limited transparency and participation, and reform processes that make a false start by storming in with solutions without first understanding the problems. These factors, say the authors, are far more important than ownership.

There is, then, no clear empirical evidence that privatisation brings about improvements in efficiency in the delivery of water and electricity, and the empirical evidence is particularly weak in SSA. Many water and electricity utilities in the region operate at low levels of efficiency, and improvements in performance could generate substantial financial savings and go some considerable distance to reducing the financing gap. Privatisation policies, however, do not necessarily achieve efficiency improvements, and the utilities that have the greatest need for

improvements are those in which private firms are least interested. Some utilities in SSA are more efficient than others. These differences cannot be attributed to PSP but relate to the wider context. The problems of poor institutions and weak governance that are common in many utilities are national issues that will not necessarily be resolved at the sector level (Estache and Kouassi, 2002). The performance difference between all enterprises in one country relative to another is arguably more important that the impact of different degrees of PSP within countries (Bayliss and Fine, 2008).

#### 2.3 PRIVATE SECTOR DEVELOPMENT

Infrastructure has come to occupy a strange place in development policy, inasmuch as it is a requirement for private sector development (PSD) while the nascent private sector is encouraged to actually provide the infrastructure that is also supposed to stimulate PSD. For the United Kingdom's Department for International Development (DFID), for example,

"Not only are infrastructure services essential for private enterprises to function and flourish and improve livelihoods but there is also considerable scope for the involvement of the private sector in the delivery of such services."

DFID, 2005: 18

This is an ambiguous and confusing position. The state of a nation's infrastructure is both a determinant of PSD and a means by which PSD policies can be implemented—by inducing the private sector to invest in infrastructure, the absence of which would normally be considered a deterrent to investment. The private sector is deterred from investing where there is weak infrastructure, yet the PSD approach attempts to persuade it to do so.

Policy outcomes can be contradictory. Policies to attract investors may not sit comfortably with policies to develop infrastructure. For example, taxation can be used to raise finance for infrastructure, yet many countries reduce their tax rates to very low levels because of the perceived need to attract foreign direct investment (HoC, 2006a). Similarly, what might be beneficial in terms of infrastructure may not be good for PSD. For example, it might be cheaper to employ a large contractor to provide a water treatment plant, but this then works against the interests of small firms and the domestic private sector, and it is not clear which approach should take precedence.

Another way in which PSD and infrastructure are confused relates to small-scale local providers in public service delivery. The domestic private sector is widely used in the delivery of water to those without piped connections, for example through the use of tanker trucks. Private water sellers are considered to be an entrepreneurial group and are to be encouraged from a PSD perspective, but this is not the cheapest way to provide water and regulation can be difficult. Rather than indicating the dynamism of the private sector, these providers can be viewed as a sign of the limitations of the public delivery system.

DFID, in a drive to promote policies to develop the private sector, points out that 90 per cent of jobs in the developing world are in that sector (DFID, 2005). The implication is that donor efforts will reach more people if they focus on private enterprise. The public sector therefore accounts for about 10 per cent of jobs in developing regions. In the United Kingdom the corresponding figure is around 20.4 per cent, so the public sector accounts for about twice

the proportion of employment in the UK than in developing regions. Thus, rather than focusing development efforts on the private sector because that is where people are employed, an alternative interpretation would be that the state sector in developing countries is weak and under-resourced. Given the importance of a strong state for the development of the private sector, arguably this is where donor efforts should be focused.

# **3 POLICIES TO ENCOURAGE PSP IN SSA INFRASTRUCTURE**

This section looks at specific policies that have been adopted by governments and donors to attract more private investment into water and electricity in SSA. The focus is on larger investments, usually requiring international finance. This region and these sectors have trailed others in attracting investors. In the water sector, private participation in infrastructure (PPI) has taken the form of long-term concessions, lease and management contracts, and outsourcing specific bulk water treatment plants. In the electricity sector, PPI typically takes the form of either a concession or management contract for an electricity distribution utility or private generation through the establishment of an independent power producer (IPP).

In the past, donors used to persuade developing-country governments to implement privatisation by means of coercion, privatisation being a condition to receive debt relief, for example (as with the case of water in Dar es Salaam, Tanzania). More recently, donors have focused on private firms and an extensive array of facilities has evolved to encourage investors to invest in SSA infrastructure (see Appendix 1 for details). Many of the facilities are based on the idea of reducing the risk exposure of potential investors. There is a sense that if the risk profile of SSA investments could be reduced, there would be more investment—for example:

"A shortage of risk capital—the provision of finance for investments perceived to be risky—is holding back the potential for pro-poor growth in many countries."

HoC, 2006a: 49

"Donors and governments should help mitigate risks that the private sector cannot afford to take."

HoC, 2006a: 82

#### 3.1 GOVERNMENTS

With donor support, countries have taken specific measures on infrastructure investment, measures that are ostensibly intended to improve the efficiency and governance of delivery in general, but that have the added goal of making the sector more attractive to potential private investors. Two key measures in this regard are restructuring and pricing, which are explored below.

The water and electricity sectors have seen the widespread implementation of a process of unbundling, in terms of both geography and function. In the electricity sector, power generation is separated from transmission (which usually remains with the state) and distribution (which is ring-fenced and has been privatised in some cases). This was supposed to pave the way for competition in the generation of electricity, but such ambitions have largely been dropped in SSA. Such restructuring, however, allows the private sector to step more

easily into electricity generation through the establishment of IPPs. These can easily be ring-fenced with a single reliable customer, which is the state-owned transmission company.

In the water sector there has been unbundling on a regional level through decentralisation policies and the separation of water in rural areas and small towns, as well as the separation of water from sanitation. In many cases, there has been a functional separation of utility management and infrastructure ownership. Typically, as a prelude to water privatisation, the state establishes some kind of asset management unit which is responsible for investing in infrastructure. The private sector is invited to take on only the management of the water utility, so there is no requirement or responsibility for more risky operations such as investment in infrastructure (see, for example, Angola, Ghana, Mozambique, Tanzania and Cameroon).

As regards pricing, countries in SSA have a history of providing water and electricity below cost. While such an approach is not necessarily a problem if it is part of a cohesive policy of subsidisation, low pricing is not fiscally sustainable in much of the region. Hence many governments and donors have pushed for a transition to full cost-recovery pricing. While pricing issues are a feature of financial sustainability generally, regardless of PSP, investors prefer prices (rather than subsidies) to cover costs, since this reduces their reliance on government payments. A transition to full cost-recovery pricing is thus important in attracting investors. In Zambia, for example, raising tariffs is regarded as crucial in order to attract investor interest:

"The current electricity tariff in Zambia does not cover costs of supply. To attract investment in new generation capacity, a financially sustainable power sector is vital. At current tariff level, no investors will be interested in new generation capacity."

World Bank, 2007a: 3

According to Farlam (2005) in his review of PPPs in Africa, the issue of pricing is crucial to avoid political fallout and to ensure that the contract is commercially viable.

Across the continent, with World Bank support, the concept of a "pass-through" on costs has become generally accepted. This means that variations in exogenous costs such as inflation, exchange rates and fuel are automatically incorporated into the tariff structure for water and electricity. In Ghana, for example, the regulatory agency determines tariffs "at the prevailing exchange rate at the time of the tariff determination". There is an automatic adjustment formula for the pricing of petrol, electricity and water, which is defined to ensure full cost recovery at Ghana's state-owned oil refinery and utilities by passing onto consumers changes in the costs of exogenously determined inputs (GoG, 2004).

Nigeria and Uganda also have cost pass-throughs in the electricity sector, which mean that fluctuations in exchange rate, fuel costs and inflation are automatically passed through to end-users. In Cape Verde, a review of energy and water pricing is to include the implementation of an automatic tariff adjustment to modify electricity and water prices in response to changes in the cost of imported petroleum products. The aim is to depoliticise price setting and reduce pressure on the budget (OECD, 2008b).

In Uganda, a clear reason for automatic tariff adjustment is to provide operating companies with a reasonable return and profit, to give confidence to current and new investors, and to "provide for future progress towards a commercially competitive system" (ERA, 2006: 5) Prices are based on the principles of full cost recovery with no cross-subsidy

because this "therefore promotes greater efficiency" (OECD, 2008b). As a result, domestic users pay more than industrial consumers because the cost of delivering services to them is higher. A significant depreciation of the Ugandan shilling would cause tariffs to increase sharply even when everything else is stable. Tariffs are highly sensitive to changes in fuel prices, given the increasing share of thermal power in the total energy mix. Increases in fuel prices and inflation are passed through to the consumer on a quarterly basis (ERA, 2006).

Cost-recovery policies are appealing because they appear politically neutral. In the water sector, for example, the importance of pricing was emphasised by the chief executive officer of the International Finance Corporation (IFC), discussing PPPs:

"There are political and social obstacles to getting water allocation right. We also lack the incentives for optimal water allocations where water is priced below the cost at source and at the tap. Without this *basic market mechanism*, water projects will struggle to attract investors and waste will continue."

Lars Thunell, IFC chief, speaking in Stockholm, August 2008 (emphasis added).<sup>2</sup>

Here, pricing water at cost is described as a "basic market mechanism" but the issue is more complex. First, it is not clear what costs should be covered, especially where there are high rates of leakage and inefficiencies in production. Second, cost-recovery policies can deepen regional inequities if accompanied by decentralisation (Bayliss, 2008). Third, affordability is a major constraint, and providing services to the poorest users should be a central rather than peripheral component of water and energy policy. Fourth, increasing prices can reduce consumption, which can adversely affect the overall revenue position and can have negative social consequences.

Finally, there is a limit to how high prices can go. In the electricity sector there is little space to raise prices further. While some electricity tariffs have been kept low, the cross-country average tariff in SSA is high at US\$ 0.13 per kwh—almost double those in other parts of the developing world and almost as high as in OECD countries. Yet prices are barely covering costs (IMF, 2008a). In the water sector, prices in SSA are also high compared to other developing regions, but still remain below cost-recovery levels (Ouayoro, 2008). Continuing to focus on increasing prices rather than other forms of revenue management will cripple consumers and undermines development objectives as services become increasingly unaffordable.

#### 3.2 DONORS

There are various ways in which donors encourage private investment in infrastructure. While much of the literature on PPPs in industrialised economies points to the need to transfer risk to the private sector in order to secure efficiency gains, in practice governments and donors in SSA are shaping parameters to reduce the private sector's risk exposure in order to encourage investment.

Various donors are involved in initiatives to promote PSP in infrastructure, but the most important is the World Bank. Not only does the Bank provide loans to governments through the International Development Association (IDA)—the division of the World Bank Group that provides long-term, interest-free loans to the poorest developing countries—but the IFC—the division of the World Bank Group that provides support to the private sector—is also involved

in many aspects of donor policy to promote PSP in infrastructure. The IFC focuses on providing finance, equity, guarantees and advice to encourage private investment in "frontier markets". In addition, a number of other donor-sponsored initiatives for the private sector have emerged over the past decade as donor support for PSP has grown.

There is now a confusing array of donor programmes for PSP; Appendix 1 provides a list of some of them. Recently, six new facilities have been created under the aegis of the Private Infrastructure Development Group (PIDG), which was established in 2002 by donors from the United Kingdom (DFID), Switzerland (SECO), the Netherlands (DGIS), Sweden (SIDA), Austria (ADA), Ireland (IrishAid) and the World Bank. The total funding capacity of PIDG is US\$ 700m (Hodges, 2008) and the Group aims to encourage private sector participation in developing country infrastructure through the facilities set out in Table 3.

TABLE 3

Component Facilities of the Private Infrastructure Development Group

DevCo	Emerging Africa Infrastructure Fund	Global Partnership for Output Based Aid	GuarantCo	InfraCo	Technical Assistance Facility
2003	2002	2003	2003	2004	2004
Supports transactions, providing consultants to help prepare projects for private sector investment	Lends to private companies for infrastructure projects	Provides output- based aid	Provides local currency finance	Project development agent (broker)	Provides technical assistance to attract private capital

Source: <www.pidg.org>.

#### 3.2.1 Sector Loans

This section explores three main ways in which donors encourage PSP in infrastructure. First, the World Bank provides concessional loans to developing-country governments through the IDA. These loans are for physical investment in infrastructure and for institutional reform, and often the institutional component is based on some form of PSP. It may be that efforts to develop PSP have not been successful, or that the country context is so fragile (as, for example, where states are emerging from conflict) that PSP is not possible at this stage, in which case policies often focus instead on creating the right conditions to attract PSP in the future. Second, donors work with governments on country policies to create an attractive investment climate, termed the "enabling environment". Finally, donors provide incentives and support directly to private investors.

Most countries in SSA have loans from the World Bank, many of which are for physical investments and institutional reform in the electricity and water sectors. For more than a decade, a common theme in these loans has been institutional reform based on some kind of PSP. Even where PSP has not been achieved, the focus is on stepping back from this to create conditions that will be more conducive to PSP. In July 2008, for example, the World Bank agreed a seven-year, US\$ 113.2 million project, of which the IDA will provide US\$ 57 million, to improve the delivery of water in Angola. The project is to help with an institutional reform that includes "designing systems which will enable the government to maximise the use of the private sector in the delivery of services to both improve the quantity and quality of services

provided and to reduce the cost to the consumer" (World Bank, 2008a: 3). In Guinea Bissau, "private sector participation in EAGB's [the combined water and electricity utility] operations is necessary to improve efficiency and effectiveness" (World Bank, 2006a: 22). In Ethiopia, the intention is to introduce private sector participation in the water sector on a relatively small scale so as to pave the way for a larger investment in the future, possibly with the support of the IFC and the Multilateral Investment Guarantee Agency (MIGA) (World Bank, 2007b). In Madagascar, a two-year management contract for the state water and electricity utility, Jirama, is to be replaced by a longer-term "solution" based on a PPP (World Bank, 2006b).

Elsewhere, failed attempts at privatisation have led to a revised strategy. For example, the government of Malawi has tried for several years to privatise the Lilongwe and Blantyre water boards. The latest policy is to start with a service contract, which will be followed by a deeper form of PPP (World Bank, 2007c). In Senegal, renewed efforts are afoot for PPP in the electricity utility Senelec after two failed attempts between 1999 and 2002 (World Bank, 2005a). In Benin, the privatisation of the electricity utility was a component of a 2004 World Bank project, but in 2007 it became clear that this would not be possible and so instead the aim is to implement internal restructuring between January 2008 and December 2009 with a view to privatisation after this period (IMF, 2008b). In Nigeria, a World Bank project aims to develop PPP in the water sector in Lagos. In 2000–2002, the IDA worked with the IFC on a plan for a concession for Lagos water but there was little private sector interest in a concession. As a result the plan is to start with a smaller, performance-based contract on which to build more profound forms of PPP (World Bank, 2005b).

Even where privatisation was achieved but failed to be sustained, the response is not to look at public sector provision of water and electricity but to focus on restructuring with a view to future privatisation. For example, Cape Verde privatised its water and electricity utility, Electra, in 1999 with a 50-year concession. In 2006 the government had to buy it back because it was in financial difficulties. The approach now, however, is not to focus on public service delivery but it is expected that Electra will be re-privatised following the work of a new management team (OECD, 2008b).

World Bank loans are vital for infrastructure in many countries in SSA. Often the bulk of the loan is for essential investment in networks, including both rehabilitation and extension. The need for such finance means that the institutional reforms come with the infrastructure finance. Throughout the project appraisal documents that are produced by the Bank in connection with projects in SSA, the tone indicates that the private sector is clearly the preferred service provider and the state is second best.

# 3.2.2 Enabling Environment

Donors encourage governments to create a country environment that is conducive to private investment and better suited to PSP. This involves providing support to governments to draw up projects that are of interest to investors, as well as wider initiatives to improve the investment climate more generally. Support can take the form of publications and technical assistance. For example, a recent publication co-sponsored by the Infrastructure Consortium for Africa (ICA), the World Bank and the Public-Private Infrastructure Advisory Facility (PPIAF), "Attracting Investors to African Public Private Partnerships: A Project Preparation Guide ", provides advice to governments on designing projects and the tendering process to attract PSP (ICA, 2009). According to this publication, there is a need for infrastructure and the growth

in telecoms shows that there are people who are willing to pay for services; hence the problem is not one of demand but of supply. Policymakers should therefore focus on improving conditions to attract investors, thereby easing supply constraints.

The PPIAF is a multi-donor technical assistance facility that provides policy, legal and regulatory support for governments. There are two strands to its operations: it provides technical assistance to governments on how to engage the private sector and on dissemination of best practice in PPPs. The PPIAF's involvement assumes that the privatisation decision has already been taken and the Facility advises on the best way of effecting it. From 2000 to 2007, PPIAF operations in SSA amounted to US\$ 41.47 million. Between its inception in 1999 and the end of 2007, the funds received by the PPIAF totalled US\$ 148 million (PPIAF 2007 Annual Report). The United Kingdom is the biggest donor, contributing over 50 per cent of the PPIAF's funds.

There have been criticisms of the PPIAF. For example, the Facility's general policies on the business environment fail to capture country-specific factors. Support for governments to implement PPPs can entail the adoption of a piecemeal approach, which can lead to fragmentation and a dominance of PPP over other policy alternatives. Focusing on promoting the private sector can mean that wider sectoral needs, for example in water delivery, are neglected. The PPIAF also devotes resources to what is known as "consensus building", which comes down to persuading communities of the benefits of privatisation.

In May 2007 a campaign including more than 138 civil society groups and trade unions from 48 countries delivered an open letter urging donor governments to withdraw support for the PPIAF because of the efforts to privatise the supply and delivery of water, arguing that the PPIAF's bias towards private sector "solutions" for water access represents a poor use of aid money. In February 2007, the Norwegian government withdrew its support for the PPIAF on the grounds that private sector involvement in the water sector will not increase access for the poor. In May of the same year, Italy also withdrew its support for the PPIAF.<sup>3</sup>

Other donor facilities have been set up to help governments create an environment that is more likely to attract investors in infrastructure. Within the PIDG, discussed above, DevCo helps to spread the cost of expert consultants (including the services of the IFC) for governments undertaking PPI projects. The Technical Assistance Facility provides grants for consultancy and training for governments on a range of aspects of PPI, including infrastructure development strategies and mechanisms to promote private sector involvement, advice on policy and regulatory reforms that seek to facilitate infrastructure financing by the private sector, support for pilot transactions and capacity building. InfraCo becomes involved in projects at an early stage by taking an equity stake. The IFC also advises governments on privatisation transactions, and in 2008 DevCo and the IFC appointed consultants to conduct studies for a planned hydro project in Zambia. The IFC has also advised on PPPs in the water sector in Cameroon, Senegal and Madagascar.

Moving beyond infrastructure, the IFC, along with the World Bank and other donors, has put much emphasis on helping countries to create an attractive environment for investors with the 'Doing Business' (DB) project (www.doingbusiness.org/). This is an annual benchmarking exercise based on data on the costs to firms of business regulations. In addition to documenting the status of reforms in each country, DB also aims to motivate policymakers to implement pro-business reforms.

Each year, the project ranks 181 economies on a series of 10 indicators<sup>5</sup> intended to capture the ease with which it is possible to operate a business. A high ranking on the ease of doing business index means the regulatory environment is conducive to the operation of business. Countries that implement policies that are favourable to business development are celebrated and move up the ranking. Africa dominates the lower end of the scale. Of the bottom 30 (and Iraq is 30th from bottom), 22 countries are from SSA.

A recent evaluation of the DB project by the World Bank's Independent Evaluation Group (IEG) had a number of criticisms: the DB project covered less than half of the typical complaints made by businesses, which also include access and cost of financing, infrastructure, political risk and so on. In addition, the project only covers written laws, not custom or practice and implementation of the laws, and it does not cover the benefits that regulation might provide. The informants for the indicators are mainly lawyers and there are often very few informants for each indicator.

Furthermore, tax rate indicators are not of the tax burden or red tape but of fiscal policy. The top performers in tax rates include tax havens and oil states. The indicators cannot be useful for cross-country comparisons and cannot provide guidance on the sequencing of reforms. It is not possible to link regulatory change to specific macroeconomic outcomes (IEG, 2008a). Seven of DB's 10 indicators presume that lessening regulation is always desirable, whether a country starts with a little regulation or a lot. Reform as measured by the DB indicators typically means reducing regulations and their burden, irrespective of their potential benefits. The danger is that the focus on such reforms may distract policymakers from more important development objectives (IEG, 2008a).

Considerable resources have been devoted to helping governments attract private investors into African infrastructure. As the IEG evaluation outlined above indicates (IEG, 2008a), focusing only on what will be good for investors may not lead to equitable development outcomes for water and electricity, nor in the wider economy.

#### 3.2.3 Donor Facilities for Private Firms

A number of donor facilities have evolved that provide specific facilities to encourage private firms to invest in SSA and in infrastructure. These facilities have two main elements: the provision of finance (in some form or other) and provision of guarantees/insurance. The range of available products to reduce risk exposure is extensive and complex—see Matsukawa and Habeck (2007) for a detailed analysis. Appendix 2 contains some definitions of the terms used in this section. The IFC division of the World Bank has the most comprehensive range of facilities. Financial support for the private sector is also provided by other divisions of the World Bank and by other agencies such as the African Development Bank (AfDB) and the European Investment Bank (EIB).

The IFC is the largest source of multilateral funding to the private sector in the developing world, and its funding is growing. In 2007, new IFC commitments reached US\$ 10 billion, double the level of just four years earlier (Thapar, 2007). In the energy sector, the IFC has played a major role in securing financing for some large private electricity projects such as the Azito project in Côte d'Ivoire and Bujagali in Uganda. To date, the IFC has had little involvement in the water sector in SSA, though it has advised on water transactions in Cameroon, Senegal, Tanzania and Madagascar, and now has a 13 per cent stake in the

French firm, Veolia AMI, which has concessions for the water utilities in Gabon and Niger. The IFC is clearly planning to expand its role in water and sanitation:

"We believe that providing clean water and sanitation services is a real business opportunity ... The debate is shifting. Instead of 'should the private sector be involved in water?' the question is 'how can we work together for sensible and fair solutions?'"

IFC Executive Vice President and CEO Lars H. Thunell, speaking at the end of World Water

Week in Stockholm, 2008.<sup>6</sup>

The IFC aims to leverage funds from the private sector, and thus IFC loans are usually limited to 25 per cent of the total estimated project costs for greenfield projects or, on an exceptional basis, 35 per cent in small projects. For expansion projects, the IFC may provide up to 50 per cent of the project cost, provided its investments do not exceed 25 per cent of the total capitalisation of the project company. The IFC provides A and B loans. Generally, A loans range from US\$ 1 million to US\$ 100 million. B loans are syndicated loans whereby the IFC arranges loans to projects that are financed through the IFC by commercial banks and other financial institutions. The IFC sometimes takes equity stakes in private sector companies investing in developing countries' financial institutions, and portfolio and investment funds in developing countries. The Emerging Africa Infrastructure Fund (EAIF), established in January 2002 as part of the PIDG (see Table 3), is a US\$ 365 million debt fund that also provides finance for firms investing in infrastructure, specifically in Africa. To date the EAIF has disbursed US\$ 315.5 million. Projects have included just one company in the electricity sector (US\$ 30 million to AES Sonel, the operator of the Cameroonian electricity distribution utility) and no water projects. Over a third of disbursements have been to telecoms projects.

In addition to finance, donors also provide guarantees to private investors. A World Bank division, MIGA, provides political risk guarantees for private firms investing in developing countries. MIGA offers private investors guarantees against transfer restriction, expropriation, war and civil disturbance, and breach of contract. In 2007, SSA accounted for 18 per cent of MIGA's outstanding portfolio (www.miga.org/).

Multilateral development banks offer private sector investors partial credit guarantees (PCGs) that apply only to a portion of the funding but that pay out regardless of the reason for non-payment. These guarantees are usually applied to state-sponsored projects that involve sovereign borrowing. Multilateral development banks also provide partial risk guarantees (PRGs), which are guarantees against particular project risks such as risk of default due to non-compliance with contractual obligations undertaken by governments or certain political force majeure events. Examples of common obligations include the maintenance of an agreed-upon regulatory framework, the delivery of inputs and payment for outputs. In addition, the risks of currency transfer and convertibility can also be covered by a PRG.

The Azito power plant in Côte d'Ivoire was the first to use a World Bank (IDA) PRG loan in 1999.<sup>7</sup> The guarantee applies to a debt tranche of US\$ 30 million, which is the portion of finance raised from commercial banks and the guarantee is against payment default. The total project cost is US\$ 223 million and it also has a number of IFC facilities in its financing structure (Nandjee, 2006). IDA guarantees are expected to be used in more projects. In Guinea Bissau, a proposed IDA PRG for the power component of the World Bank project is expected to provide "a key incentive for highly qualified private sector operators to

participate" (World Bank, 2006a: 26). In Senegal, PRGs are expected to reduce the cost of raising the long-term financing required to develop Senegal's electricity infrastructure (World Bank, 2005a).

Both the IFC and EAIF offer loans on commercial rather than concessional terms. In addition to those mentioned above, various other facilities have evolved to stimulate investment, such as export credit facilities and IFC initiatives like PEP Africa and Infraventures. There is also the Investment Climate Facility and the Business Action for Africa. As extensive array of facilities exist (see Appendix 1) with varying terms and conditions but all with similar aims.

To conclude, then, a great deal of donor attention and resources have focused on trying to increase private participation in infrastructure. This involves shaping the institutional framework, providing advice to governments on PSP, and providing finance and guarantees to investors. Even though the vast majority of water and electricity service providers in SSA and elsewhere are in the public domain, there are no comparable facilities for public providers. The policy momentum is so deeply ingrained that PSP is often perceived as an end in itself. For example, a key objective of donor facilities like those provided by the IFC and EAIF, which provide finance to private sector infrastructure projects, is to "leverage" private sector finance, and this is a goal in its own right. The World Bank's Sustainable Infrastructure Action Plan for 2009–2011 plans to scale-up PPP programmes using all parts of the World Bank Group. The plan states that:

"One measure of the effectiveness of these efforts is the amount of private finance leveraged by WBG interventions."

World Bank, 2008b: 15

This does not allow for consideration of the quality of the private finance that is leveraged. The leveraging of private sector finance in infrastructure is usually achieved at a high price to compensate for the perceived risks, with long-term contracts and tight government guarantees (see the next section). The mere raising of private finance alone does not necessarily make for the best development outcomes. Creating an attractive investment climate with the above tools is not without some cost, as discussed below.

#### **4 OUTCOMES**

This section looks at the outcomes of efforts to promote PSP in infrastructure. These are grouped under four headings: investment, sector governance, risk transfer and project finance. The section shows that there has been little investment from private firms in water and electricity in SSA, despite extensive efforts by donors and governments to reduce the private sector's risk exposure.

#### 4.1 INVESTMENT

In the water sector there has been very little investment. There has been more in electricity but it has been tightly secured and designed to encounter minimal risk. Project designs are reflecting a reduction in investor appetite for risk. Rather than deep forms of privatisation such as divestiture and operational contracts (where the investor assumes more elements

of commercial risk), there has been more emphasis on Build-Operate-Transfer contracts (where the private sector is contracted to design and operate a facility for a specified period). These are underpinned by long-term fixed contracts that incorporate purchase agreements, often with take-or-pay clauses (Torres de Mästle and Izaguirre, 2008). Data on actual volumes of private sector investment in infrastructure are limited. The most easily available and widely cited data come from the World Bank's Private Participation in Infrastructure Database (http://ppi.worldbank.org/), but this contains data on what are termed "investment commitments" rather than amounts that are actually transferred. While it can be useful to use this data to look at general trends, therefore, it must be kept in mind that these are commitments rather than actual investments (see Hall and Lobina, 2006).

Figure 2 shows overall PPI investments from 1990 across sectors. Clearly, telecoms dominates the picture and total investment trends mirrors trends in telecoms. Water has attracted least investment and electricity has tailed off from a 1997 peak.

FIGURE 2

Total Private Sector Investment Commitments in Infrastructure, by Sector

Source: World Bank Private Participation in Infrastructure Database.

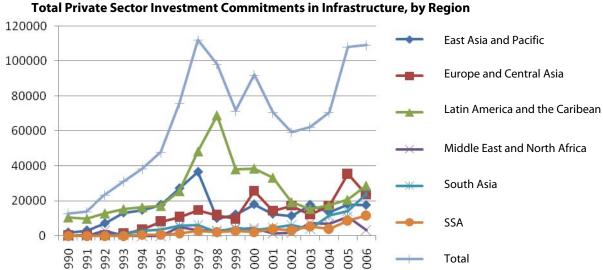


FIGURE 3

Total Private Sector Investment Commitments in Infrastructure, by Region

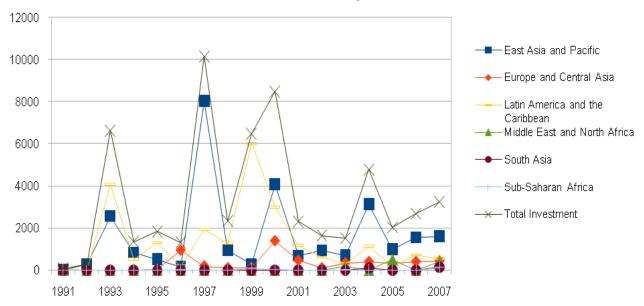
Source: World Bank Private Participation in Infrastructure Database.

On a regional level, Figure 3 shows that investment funds have been dominated by flows to Latin America initially, and more recently to Europe and Central Asia, and to South Asia. SSA has trailed.

Turning then to water and sanitation, Figure 4 shows that recent investment in water and sanitation was dominated by East Asia, particularly China. In electricity, a similar picture emerges (Figure 5).

FIGURE 4

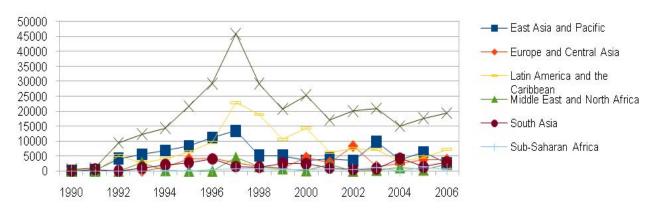
Private Investment Commitments in Water and Sewerage



Source: World Bank Private Participation in Infrastructure Database.

FIGURE 5

Private Investment Commitments in Electricity (US\$)



Source: World Bank Private Participation in Infrastructure Database.

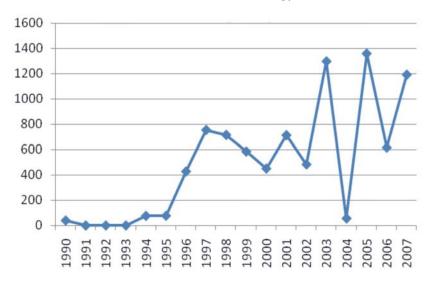
The charts above give an overview of what has happened to attempts to generate private sector investment in infrastructure. Investment peaked around 1997 and then tailed off. Investment was concentrated in telecoms and in Latin America initially, and more recently in East Asia. Water and electricity fared worst in privatisation initiatives and SSA attracted least

investment. Thus privatisation initiatives brought least benefit to these sectors in Africa. There, PPPs have been more successful in sectors such as ports, telecommunications, transport and ecotourism projects than in power and water (Farlam, 2005).

Looking at SSA, the charts below show what has happened in terms of investment commitments in water and electricity. These are effectively a close-up view of the plotlines for SSA, which are shown at the bottom of Figures 4 and 5. In the energy sector (Figure 6), private investment appears to be volatile and the amount is not high compared to the annual investment requirement of US\$ 42.6 billion (see Section 2.1 above). In the water sector (Figure 7), there were virtually no private investment commitments after 2001. Clearly, the private sector has not delivered any of the investment required in the water sector. Other research also indicates that privatisation has generated very little private sector finance (Hall and Lobina, 2006).

FIGURE 6

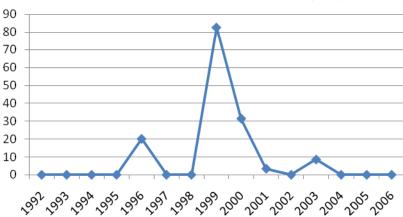
Private Investment Commitments in Energy, SSA (US\$)



Source: World Bank Private Participation in Infrastructure Database.

FIGURE 7

Private Investment Commitments in Water, SSA (US\$)



Source: World Bank Private Participation in Infrastructure Database.

Why, then has there been such a weak private sector response in SSA? Bertolini attributes the lack of investor interest in SSA to the nature of infrastructure investments, which require high up-front costs and then entail a long payback period, uncertainties in pricing and regulatory policies, and the fact that there are better investment prospects elsewhere and thus private infrastructure funds have mostly gone to developed countries or telecommunications, where the payback period is shorter (Bertolini, 2008). Other research into drivers of PPPs in the water sector in developing countries finds that the size of the population and ability to pay are significant factors in achieving a PPP contract (Jensen and Blanc-Brude, 2006). In SSA, many end-users cannot afford to pay prices for services that would allow a commercial rate of return.

Possibly in response to poor private sector responses, there has been an increase in South-South cooperation and in investments from state utilities rather than purely private companies. For example, in 2007 a consortium led by the Moroccan public water utility, ONEP, was awarded a contract for the management of the Cameroon water utility, SNEC.<sup>8</sup> In 2006, a contract for the management of Ghana Water Company Limited (GWCL) was awarded to a consortium, Aqua Vitens Rand Limited (AVRL), consisting of the Dutch public water utility, Vitens, and a South African bulk water supplier, Rand Water. In the energy sector, Gratwick and Eberhard (2008) found that IPPs were more successful if, rather than being carried out by purely private firms, they were effected by what these authors term "development-minded" organisations such as Globeleq. The latter is owned by the Commonwealth Development Corporation (CDC), which is a development enterprise of Britain's DFID, and Industrial Promotions Services (IPS), a subsidiary of the Aga Khan Foundation.

As a rule, PPPs (and privatisation more generally) are preferred where competitive market prices can be established, since this will result in a greater transfer of risk to the private sector. Weak investor interest means that there is little competition in awarding contracts and some calls for tenders for PPPs have yielded only one bid. The study of African IPPs by Gratwick and Eberhard (2007) clearly demonstrates the impact of the investment climate. They find that the number of bids submitted to international competitive bids (ICBs) in North African countries is generally double to triple those submitted to ICBs in East Africa. They cite three East African IPPs that received only two or three bids. According to the mainstream literature on PPPs, competition is vital to ensure that sufficient levels of risk are transferred to the private sector (see Section 4.3). The main infrastructure competition in SSA, however, comes from governments competing for private sector funds rather than firms competing for contracts, and the degree to which risk can be transferred to the private sector is much lower.

#### 4.2 SECTOR GOVERNANCE

Many states in SSA are weak and have shallow legal and regulatory frameworks. Some states are relatively new, recently emerging from conflict. Policymakers have pushed PSP in part because of low levels of state capacity. Weak states, however, are a major constraint to PSP policies. The introduction of PSP does not remove the problems of state capacity but does provide alternative ways in which weaknesses may be manifested. A key example is corruption, which has been highlighted as a major constraint to development in the water sector (Transparency International, 2008). Rather than removing corruption, PSP can exacerbate it—for example, when deals are done behind closed doors, undermining the possible benefits that might be achieved through increased efficiency (Plummer and Cross, 2007: 234). The private sector is not a substitute for a weak state.

In weak states, sectors may lack policy coherence. In the energy sector, for example, many countries lack a single agency responsible for power sector planning and procurement. According to the ICA, the inefficiency of African power utilities is a major bottleneck to progress in the electricity sector (ICA, 2008). The African energy sector is in crisis and high-cost, short-term emergency power projects are being established (Gratwick and Eberhard, 2008). Capacity in the water sector has been further hampered by decentralisation programmes whereby the responsibility delegated to subsovereign parties is not necessarily matched by the financial resources and capacity corresponding to such responsibilities (Mehta and Mehta, 2008).

The process of implementing PSP programmes requires a high skills base and can be costly. In the United Kingdom, tendering is estimated to last for an average of 34 months and transaction costs can reach about 5–10 per cent of the capital cost of a project; hence PPP is considered to be unsuitable for projects of low capital value. The British Treasury currently considers PFI projects for less than £ 20 million to be poor value for money (lossa and Martimort, 2008). In developing countries the time period is often considerably longer.

With weak state capacity, governments lack the skills to draw up project specifications, design effectively and monitor project progress. While this is a constraint under public provision, it raises specific challenges for PPPs. The growth of PPPs has led to a revision of the role of public sector workers, who have become PPP managers rather than implementers. Contracts need to be effectively monitored and regularly reviewed. The government's lack of skills may mean that the expertise required to monitor and regulate a contract is insufficient. With the PPP contract, firms typically make greater effort at the start in order to maintain their reputation. If investment is to be reimbursed there is an incentive to leave this until the end of the project, and thus projects often have an inefficient level of investment (lossa and Martimort, 2008). Weak government skills can undermine efficiency gains that might arise from a PPP, and government can be at a disadvantage if the contract has to be re-negotiated. This is exacerbated by low levels of competition for contracts, as discussed in Section 4.1. In its Sustainable Infrastructure Action Plan, the World Bank acknowledges the need for a strong state:

"The public sector needs strong capacities to understand the commitments entered in the partnerships with the private sector and to design and regulate these projects."

World Bank, 2008: 14

Arguably, by the time the public sector has sufficient capacity to effectively implement PSP, it could just as easily provide the service itself.

The traditional view of bargaining positions over the course of a contract is that the standing of the private investor weakens considerably once heavy infrastructure starts to be built (the obsolescing bargain), as the original deal becomes obsolete and the host country can expropriate the benefits. However, in their study of power generation contracts in SSA, Gratwick and Eberhard (2006) found no evidence of this, suggesting that governments remain in a weak bargaining position, dependent on foreign firms that they could only attract with extensive concessions, sovereign guarantees and donor support.

A robust legal framework and a predictable regulatory regime are better for PPPs. Contracts are usually long-term. It is impossible to include provisions for every eventuality for, say, a 30-year period in the contract at the start of the project. Over the course of the contract, the initial terms are likely to become obsolete. Furthermore, firms may deliberately

underestimate costs in order to win infrastructure contracts. Changing societal needs may lead to the need for renegotiation of the contract, and it is more straightforward for the parties to step outside the contract terms in the context of a robust legal and regulatory framework. In SSA, however, many countries have a fragile political and regulatory framework. This poses additional country risks for investors that face the possibility that their profit stream will be affected by changing political and regulatory parameters in countries where these are not well established.

In addition, where contracts are drawn up for long periods, the government that implemented the contract may well not be in place when the future liabilities fall due. It is therefore important that the wider legal framework can support the contract, and that it is not based on one specific political party. Contract renegotiations have been pervasive in PPP arrangements worldwide. In Latin American countries there have been numerous instances of governments having failed to honour contract terms and of projects having been abandoned. Often, new governments fail to approve the price increases or tariff pass-throughs that previous governments agreed to—see Guasch (2004); lossa and Martimort (2008). In SSA, few PSP contracts in the power sector have collapsed, though many have been renegotiated. In the water sector, 40 per cent of contracts have been cancelled before completion (Foster, 2008).

The nature of regulation is different in SSA, partly because of weak capacity but also because of failed efforts at privatisation, and thus it is the state that is regulated. In much of the region, since privatisation has not materialised, the function of the regulator is rather hazy because in the absence of firms to regulate, the regulator has to regulate the government. While this has meant that some of the more traditional roles of the regulator—such as the use of sanctions in the event of non-performance—have had to adapt, the regulator can perform an effective monitoring function and provide some scrutiny of state performance.

Estache and Rossi (2008), on the basis of a study of electricity distribution, conclude that the establishment of a regulatory agency in developing countries is associated with higher social welfare. A weak domestic legal framework can mean that investors may opt to enforce the terms of a contract through recourse to international bodies. Research into the drivers of PPP contracts in the water sector in developing countries finds that successful contracts are associated with government effectiveness, the protection of property rights, control of corruption, and the rule of law (Jensen and Blanc Brude, 2006). Contract enforcement, however, was not found to be so significant. This is attributed to the fact that few contracts accord legal competence to local courts, and international PPP contracts rely on international arbitration facilities (Jensen and Blanc Brude, 2006).

In an effort to compensate for weak regulatory capacity, some have considered outsourcing regulation to the private sector—see, for example, Tremolet (2007)—but at some stage some interface with the state is required. Lack of skills leads the government to spend large amounts of money on advisors when negotiating with businesses (OECD, 2008a). There have been criticisms that the growing reliance on private consultancies (or the 'consultocracy') increases the influence of private sector management consultants on the reform agenda and processes of the public sector. The concern is that profit-maximising private firms will hijack public sector reform processes and that the traditional distinction between the public and private realms is becoming blurred as private consultants enjoy undemocratic influence over government policy with little accountability. There is a danger of conflicts of interest when consultants are involved in devising policies that will subsequently affect them and or their clients. Where public capacity is weak, who is to guard the public interest (Hodge and Bowman, 2006)?

#### 4.3 RISK TRANSFER

If the private sector is to be more efficient than the public sector, it is crucial that sufficient risk be transferred to the private party. In order to have an incentive to operate efficiently and at least cost, private contractors must bear the risk of their own actions. Even if the private sector is more efficient, for the benefit to reach users, improvements depend on the transfer of risk (OECD, 2008a). To achieve sufficient transfer of risk, competition is required. The nature of PPP contracts is that once they are established they can run for decades and thus are not competitive; hence competition is required at the bidding stage. The presence of too few bidders can compromise the PPP gains (OECD, 2008a).

Discussion of the numerous risks associated with the delivery of infrastructure has become more sophisticated as PPPs have gained momentum. The risks include construction risk; financial risk (including variations in exchange and inflation rates); availability risk (continuity of service provision); demand risk; and residual value risk. Under a PPP, the government seeks to transfer at least some of these risks to the private sector. In addition, the investor might face political or regulatory risk of expropriation from the host government. Another dimension of risk that is rarely discussed is the risk that the government faces, such as non-performance or withdrawal on the part of the private firm.

According to most commentators, the basic principle of risk sharing is that risk should lie with the party best able to manage it—see, for example, OECD (2008a); Akitoby et al. (2007). Such a principle is relatively easy to apply to PSP at the ends of the risk spectrum—for example, construction risk lies with the private party while political risk lies with the government. There are, however, grey areas in between, such as demand risk or exchange rate risk.

Investors have shown a marked lack of interest in SSA (see above). A key deterrent is the perception that the region is a high-risk environment for private investment. Thus an important element of policy in the region's water and electricity sectors is to lower the risk exposure for private investors. Instead of promoting risk transfer to maximise efficiency gains, policymakers are trying to reduce private sector risk to promote private sector investment (see Baietti and Raymond, 2005). This is central to a donor policy that provides finance and guarantees for investors, and to restructuring and pricing policies that ring-fence the more secure elements of service delivery for PSP, as discussed in the previous section.

The terms of engagement with the private sector have evolved over the past two decades, with PPP contracts making fewer demands on investors. Risk mitigation measures to attract investors in SSA need to encompass political and regulatory risk so that investors can be assured that their investment is secure. They should also address demand risk in a context of high levels of poverty. However, measures to reduce the risk exposure of investors can mean that this risk is simply passed to governments and taxpayers. Risks are not reduced, they are merely transferred, and these risks may even increase because investors have no incentive to reduce exposure and sectors become increasingly fragmented.

In recent years in the water sector, the volume of investment through PPI has remained low at less than US\$ 2 billion nearly every year since 2002. The number of new projects, however, has been increasing. This is because management and affermage contracts require little or no investment from private participants (Torres de Mästle and Izaguirrre, 2008). Initial efforts at PPP required firms to take on long-term concession contracts, but these potentially exposed the private sector to considerable risk. In the 1990s, concession contracts usually

involved large investment commitments that the private sector was expected to recoup from user fees or revenues. Concessions signed in 2001–2006, however, include a mix of public and private funding for investment and an increasing proportion of PPP contracts are management contracts, whereby the government is responsible for all investment (Torres de Mästle and Izaguirrre, 2008). In World Bank donor-funded projects in water and electricity in SSA, there is greater focus on milder forms of PSP in the immediate future, and the aspiration is for "deeper" PSP at some point in the future.

The current trend is to create two entities for the management of the water sector (as discussed in Section 3.1 above). One is state-owned and is responsible for ownership of the assets and for investment in infrastructure. The other is responsible for the day-to-day running of the utility and for revenue management, and it is this component that is privatised, usually through a management contract. Such arrangements reflect the fact that the private sector does not want to take on the risk of investment and therefore such contracts require little if any financial commitment on the part of the investor. This approach has been adopted in several countries in the region where a management contract has been implemented (Cameroon, Ghana, Tanzania) or where privatisation is planned in the future (Angola).

Similar practices have been used to reduce private sector risk in the electricity sector. In Senegal, after two failed privatisation attempts, the latest proposal for a PPP aims to give the private sector a significant level of participation in the company while not requiring it to make a substantial financial commitment at the outset. According to the World Bank project document, this will lead to greater efficiencies and the government aims to ask the donor community to finance a substantial part of SENELEC's investment programme. Donors have realised that programmes can be more successful when the PPP is accompanied by a large injection of donor funds (World Bank, 2005a).

The separation of electricity generation from transmission and distribution has meant that it is easier for private firms to establish stand-alone generation projects, and this is the main form of PPP in SSA electricity. A few private firms have been involved in electricity distribution (in Cameroon and Uganda, for example) but private investment mainly takes the form of IPPs, which are associated with specific mechanisms to minimise the risk for investors. There has been a sharp increase in short-term power contracts: between 2002 and 2006, at least 18 such contracts were signed in 13 countries, mainly in Africa. These contracts usually charge much higher prices, involve more government guarantees and transfer less risk to the private sector than traditional Build-Operate-Transfer contracts with power purchase agreements (Torres de Mästle and Izaguirrre, 2008).

A key attraction of these power projects is that they do not have to sell to end-users but have just one customer, which is usually a state-owned electricity transmission company. In addition, most contracts for IPPs in SSA (and in most developing countries) are underwritten by a power purchase agreement (PPA). This is a take-or-pay contract whereby the government is committed to paying a fixed charge to the private generator whether electricity is used or not. These PPAs are usually fixed for decades and the payment terms are established in foreign currency. Fluctuations in the exchange rate are passed through in charges to end-users, which means that governments and end-users bear exchange rate costs.

PPAs can be essential to securing funding for a power plant but they can create onerous conditions for governments because they are expensive and inflexible. In their study of IPPs in eight African countries, including North Africa and SSA, Gratwick and Eberhard (2007) found

that all the projects evaluated had a long-term PPA with the state-owned utility, lasting on average for 20 years. This covered the amount of power that would be sold at what price, as well as details such as how plants would be dispatched, fuel metering, interconnection, insurance, force majeure, transfer, termination, change of law provisions, refinancing arrangements and dispute resolution. Such contracts can lack transparency, since the terms of PPAs are usually not made public in the name of commercial confidentiality. Long-term contracts can run into difficulties if demand for electricity falls or if alternative cheaper sources of electricity are obtained. Long-term contracts may reduce the risk for the private sector, but where contracts are on fixed terms they raise risks for the contracting government, such as the risk of technological redundancy, because a government may be committed to paying for PPP that delivers a service by means of obsolete technology. The more rigid the contract, the more risk the government bears, but a flexible contract whereby the private sector assumes higher risk levels will be more expensive (OECD, 2008a).

PPAs are not set in stone and there are cases in which the terms have been modified following changes in national circumstances (Gratwick and Eberhard, 2007). But PPAs can tie governments to long-term and expensive contracts. The pass-through of exchange costs creates a moral hazard, since investors have no incentive to minimise forex exposure. This creates a secure investment for the private sector but it can be very costly for governments and end-users in the event of a depreciation in the value of domestic currency. In Tanzania, for example, IPPs accounted in 2006 for 55 per cent of power generation but 96 per cent of payments made by the state-owned power distribution utility, Tanesco (Gratwick and Eberhard, 2007). The government of Tanzania has considering buying one of the country's IPPs, IPTL (Gratwick and Eberhard, 2007).

Infrastructure pricing policies based on cost pass-throughs and automatic tariff adjustments (discussed in Section 3.1 above) mean that risks associated with currency devaluation, inflation and the costs of key inputs such as fuel are passed through automatically to the end-user in the form of price increases. This flies in the face of the paradigm of risk management, whereby risks lie with those best able to manage them. In SSA, end-users are not the party best able to manage the risk of exchange rate fluctuations and changes in fuel costs. They have no control over these costs and cannot diversity from essential services such as electricity and water unless they increase the use of less safe alternatives. They cannot spread the risk across other aspects of consumption. Firms and governments are better placed to "manage" this risk. The fact that these costs are passed to consumers indicates that risk allocation is about bargaining power rather than ability to manage specific risks. Consumers of utility services in SSA have the least bargaining power. Such an approach is a clear demonstration of the way in which the needs of investors take priority over end-users.

Thus, throughout the region, sector policies and structure are being dictated by the need to make investment possibilities more attractive for investors. This approach has had some success in terms of project stability, since it is clear that projects are more vulnerable when higher levels of risk are transferred to the private sector. A review of electricity sector projects found that a higher proportion of projects in distress were those exposed to more commercial risk, including divestiture projects. In contrast, PSP in forms such as power generation projects, which are far less risky, accounted for only 3 per cent of the projects in distress. Projects that are isolated from market risk through PPAs are less prone to distress, and political visibility also contributes to distress risk (Covindassamy et al., 2005). But the focus should not be on project distress but on service delivery. PSP is not an end in itself and the emphasis should be on the

needs of users rather than project stability. If a contract continues without governments defaulting on payments it appears to be successful, but it may not be the best use of government (or donor) funds. Isolating and hiving off the profitable and low-risk activities to the private sector leaves the state with the more demanding and risky aspects of service delivery and less scope for cross-subsidy. Investors will be drawn to the easiest and most profitable aspects of service delivery. A policy focus that aims for PSP above all else will ensure that this is possible, but the long-term country costs need to be considered.

Ultimately, the two contracting parties with PSP have different and competing objectives. For example, Ghana recently signed a contract with US firm Balkan Energy for a 125 MW refurbishment of an electricity barge. According to the Minister for Energy:

"The agreement between Ghana and Balkan Energy underscores the government's commitment to see the power problem solved and allow normal operations of business in the country."

The private owner of the company has a different perspective on the investment:

"Balkan Energy expects to bill the Ghana government more than \$ 3 billion over the next 20 years." 10

These contrasting priorities highlight the enormous challenge of shaping PSP in infrastructure so that private commercial interests are channelled to meet a country's economic and social needs. This is difficult enough in middle- and high-income countries, but in a context of weak regulatory capacity, massive unmet demand and an absence of competition, what is to stop private investors from fleecing developing-country governments, and will such a transaction be recorded as a success simply because it is a form of PSP?

# 4.4 PROJECT FINANCE AND DONORS

Guarantees and donor participation can strengthen credit ratings and provide easier access to project finance. By using a guarantee provided by a multilateral development bank (MDB), a project finance transaction may receive a credit rating higher than the sovereign ceiling and, in some cases, as high as the level of the MDB providing the guarantee (Fitch ICBA, 2000). Without sovereign guarantees, a donor's participation can be vital for raising project finance. The Kenyan Electricity Regulatory Board takes the view that IPPs are supposed to help commercialise the sector and government guarantees work against this. According to sponsors of Kenyan power projects, the absence of sovereign guarantees has hampered their ability to raise private finance. In Kenya, where there were no sovereign guarantees, stakeholders in the Tsavao IPP indicated that the presence of the IFC was critical in arranging the debt for the project (Gratwick and Eberhard, 2007).

Most IPPs in the region have used some kind of donor facility such as a loan, equity or guarantee. Certainly these have been effective at bringing in finance to the region. However, research by Gratwick and Eberhard (2008) suggests that the complex facilities and extensive insurance options open to investors have not really been used. In their review of risk mitigation

measures in relation to IPPs in SSA, Gratwick and Eberhard find that international arbitration and sovereign guarantees were the most commonly used type of security. But despite the extensive range of perceived risks and the number of different risk insurances available, these were not widely used and the authors found no cases of the sovereign guarantee or political risk insurance or guarantees being invoked (Gratwick and Eberhard, 2007). Similarly, according to a report from the credit ratings agency, Moodys, IFC loans have never been included in a sovereign debt rescheduling, nor have payments to the IFC ever been permanently interrupted by a general debt-servicing moratorium (Moodys, 2007). This seems to be because the IFC—and other donor agencies—enjoy what is described as de facto preferred creditor status.

This means that member governments grant IFC loans preferential access to foreign exchange in the event of a foreign exchange crisis. As a result, "IFC loans, including the portions taken by participants, are exempt from country risk provisioning when applicable and have never been included in general country debt reschedulings" (www.ifc.org). Similarly, projects involving MIGA, the World Bank agency that provides risk guarantees, are more likely to run smoothly because: "As a member of the World Bank Group, MIGA routinely provides an umbrella of deterrence against government actions that could disrupt insured investments" (www.miga.org).

The preferred creditor status of the World Bank and other multilateral development institutions is not a legal status, but it is embodied in practice and has received consistent universal recognition. It is granted by member governments of the IFC and recognised by other creditors. It is also an important element in the IFC's triple-A ratings. Because of the mitigation of transfer and convertibility risk, capital markets transactions structured under the IFC B-loan umbrella can achieve a rating above the sovereign rating of the host country. Through the IFC umbrella, the ceiling can be "pierced".

The preferred creditor status stems from the fact that defaulting on payments to the World Bank would probably result in a halt to disbursements of other Bank loans, and possibly a stop on the approval of new projects (Fitch ICBA, 2000). Developing-country governments are therefore far less likely to default on payments on a contract involving a major donor than they are on another contract. With a MIGA guarantee, furthermore, MIGA has the right, in the event of a payout, to recoup the cost from the host country government.

Private project financiers depend on credit ratings by experts like Fitch and Moodys. Fitch will grant a higher credit rating to a project where there is a guarantee from an MDB. Furthermore, Fitch will grant a higher credit rating the more the country is dependent on the MDB that grants the guarantee. This is because the more dependent a government is on a particular donor, the less likely the risk of default on a loan from that MDB (Fitch ICBA, 2000). Thus, a higher level of donor dependence can result in a higher credit rating for project finance involving an MDB.

The clout of the IFC also seems to affect negotiations with country governments. Gratwick and Eberhard (2008) compare two IPPs in Kenya, one with an IFC equity stake and one without. The one with the IFC involvement has not lowered tariffs and the presence of a multilateral development institution is cited as one of the reasons. The other IPP did lower tariffs in response to government pressure. The researchers also find that the power projects that have finance from development institutions have fewer contract changes.

The backing of donors is important for other donor-sponsored project financiers. In an interview broadcast on CNBC, Orli Arav, the Director of EAIF, indicated that the organisation did not require political risk insurance, unlike other financiers, because the EAIF has the backing of European governments.<sup>11</sup>

Thus, while there is an extensive array of risk mitigation mechanisms, it seems that what investors are really looking for—and what donor-sponsored facilities to promote PPI are offering—is a development institution partner that will put them above other private investors in the government payment pecking order and hence the risk is lower than for other investors. Presumably, if IFC-partnered investors receive preferential treatment then other private firms are relegated. Donors, therefore, are not merely providers of finance. They determine where and what investment will take place. Hence PSP under such terms is not exactly a market response to the external conditions but is entirely moulded by donor policy.

Organisations like the IFC play a major role in determining what private investment takes place. To date, however, little investment has reached SSA. Despite priding itself on a focusing on frontier markets ("IFC goes where we are needed most, reaching the underserved wherever they are"), to date the SSA region has accounted for a relatively small proportion of activities—just 10 per cent of the IFC's committed portfolio in 2008. The IFC is planning to scale-up its activities in SSA and in 2007 the SSA countries in which it operated increased from 17 to 25 (IFC Annual Report, 2008).

However, not only have few projects taken place in SSA but the performance of those projects has been weak. The weak environmental and social effects of projects in Africa, compared to projects in other regions, have been a feature since 2003. The poor performance of the IFC's African projects stems in part from of lack of "client commitment", while capacity to pursue sustainability has proven to be problematic, particularly when businesses underperform financially, and at times there have been "substantial imperfections in legal and regulatory frameworks and implementation" (IEG, 2008b: 8). IFC projects work best where market conditions are best, which suggests that PPI responds to rather than shapes market conditions. "Positive market conditions in most regions, with the notable exception of Africa, have contributed to better overall development performance" (IEG, 2008b: 11).

The above discussion, then, shows that efforts to divert PSP into areas where it does not want to go have limited success. It is an uphill struggle akin to slotting a square peg into a round hole, and even the IFC finds it difficult to operate in these sectors and this region. Private investment in the water sector in Africa has all but dried up. PSP in electricity is only achieved when investments are tightly ring-fenced, and when government guarantees and donor clout ensure high returns for investors. Some funds have been raised from the private sector, but at considerable cost.

# **5 CONCLUSION AND ALTERNATIVES**

Overall, despite the extensive efforts and resources devoted to promoting PSP in SSA, the results have been disappointing for those who might have hoped that such initiatives would bring investment on anything like the scale required to achieve the MDGs. It would appear, then, that in contrast to the IFC's exuberance as noted above, water and sanitation in SSA is not a good business opportunity. The up-front costs are high, the payback time is lengthy, poverty is endemic among customers, and the political and economic situation is often fragile.

The region is still a risky investment destination and weak infrastructure is a deterrent to private investment.

This is not to deny that there have been some positive outcomes from the initiatives described. For example, InfraCo (part of the PIDG) is helping to develop a wind farm in Cape Verde and a Ghanaian-owned power project. There are some sound private operators delivering water and electricity in SSA. Water providers in Senegal and Côte d'Ivoire are regularly cited as success stories (although the extent to which their success is attributable to privatisation is not clear) and AES is now well established in the delivery of electricity in Cameroon. But the extent of PSP is small relative to infrastructure needs. Many PSP contracts in the water sector have failed (Chad, Guinea, Cape Verde, Mali) and others did not start, such as in Malawi and Benin. In the energy sector, although most countries have started the process of facilitating PPI by introducing legal reforms and more than a third have IPPs (IMF, 2008a), these are expensive because of poor technology choices, procurement problems and currency devaluation, and often they are subject to renegotiation (Gratwick and Eberhard, 2008).

Despite its shortcomings, PSP remains the favoured policy option for donors in the water and electricity sectors. According to the World Bank's 2004 Water Sector Strategy (which remains current), about 40 per cent of water projects financed by the Bank now involve some form of private sector participation (World Bank, 2004). In the course of the World Bank's Sustainable Infrastructure Action Plan for 2009–2011, the World Bank Group (WPG) "will actively scale-up PPP programmes, using all parts of the WBG" (World Bank, 2008: 15). The slow private sector response has led supporters to step up efforts to encourage investors into the region.

Private firms have been reluctant to commit to infrastructure projects in SSA unless they have no investment commitment or they are virtually guaranteed to make a substantial profit. Measures to accommodate investors mean that governments, and ultimately developing-country taxpayers, face risks from the high costs of IPPs and from contractual arrangements to ring-fence profitable and secure aspects of delivery. In recent years, suiting the needs of investors rather than end-users has dominated sector policies as policymakers seek alternative ways to secure investment and PSP, yet investment is still not forthcoming. There seems to be a fundamental mismatch between the needs of private firms and those of users of water and electricity in SSA.

While much of the focus is on reducing risk for investors, little attention is devoted to how these policies increase the risks for governments, taxpayers and end-users. The above discussion shows that there are costs associated with reducing sector policy to the creation of an attractive business environment. As a result of a focus on PSP, electricity and water prices are high, sectors are fragmented and governments are amassing future liabilities through expensive, long-term guarantees provided for private power projects.

In the longer term, the private sector is unlikely to provide finance for infrastructure on a major scale and expectations that it might do so seem imprudent, given that this can only lead to future liabilities. Furthermore, there is little academic research to support the argument that private sector involvement leads to greater efficiency in SSA. Many of the conditions that the literature on PSP in industrialised countries sees as essential to success are waived in the case of SSA. For example, there is little competition, weak regulation and minimal transfer of risk.

Infrastructure reforms are not always designed to solve perceived problems in the sectors but are often implemented to comply with conditions set by development agencies, MDBs or regional and global trade agreements (Jerome, 2004). Sector policies have had input from several donors reflecting different agendas, donors have promoted policies that are based on industrial frameworks, and strategies have ignored the importance of developing nationally grounded systems (Cook, 2006). Certainly, a review of World Bank projects in the region reveals remarkable homogeneity in the approach to challenges in these sectors despite the disparity of national circumstances. Where PPPs have not been achieved, the remedy is to work on the underlying conditions to support PPPs.

The approach of donors and governments to privatisation has changed over the past two decades. The strategy no longer centres on transferring infrastructure assets to the private sector and the range of policy options is more flexible. Greater use of the domestic private sector can be beneficial but it needs to be regulated and managed as much as international operators. Donors remain wedded to a fundamental belief that the private sector is superior. An alternative approach would be to support and strengthen state provision and encourage public providers because, like it or not, they will continue to deliver these services. This would entail addressing specific issues in order to understand the details of poor service delivery at the country level and to offer appropriate responses and support. It may be that the water and electricity sectors in SSA develop along different lines from the industrialised-country model. Central to such an approach would be to look at what has worked in the region.

Two public utilities in particular are regarded as successful: the National Water and Sewerage Corporation (NWSC) in Uganda and the Office National de l'Eau et de l'Assainissement (ONEA) in Burkina Faso. Both of these have worked with the private sector but remain in the public domain. ONEA was technically capable of managing the water supply system but was facing serious difficulties in its commercial, financial and accounting functions and did not have the resources to expand the water system to accommodate recent urban population increase. Donors recommended a long-term lease contract but the government rejected this in favour of a much smaller-scale service contract which has now ended. The government decided that ONEA should remain a publicly-owned limited liability company because of the strategic nature of water and the need to finance a large part of the investments from concessional resources (World Bank, 2008c).

In its evaluation document on the ONEA project, the World Bank concluded that a lesson from the project in Burkina Faso is that the public-private argument is an artificial debate as the public sector can deliver results. The implication is that it does not matter if a utility is public or private. However, this is not the case. There are costs associated with PSP that rarely come into the debate. PSP raises risks for governments. There are difficulties attached to having a foreign private company running a water or electricity utility. There are competing objectives, and companies are responsible to shareholders rather than to local users. There are information asymmetries that need to be overcome through regulation; this is difficult enough in industrialised countries, let alone in a much weaker institutional context. There is a potential de-skilling of the state, which becomes a contract monitor rather than a service provider. There is a vulnerability that the private provider might withdraw in response to a change in corporate strategy from international headquarters.

The Bank's response to the failings of the PSP model of the 1990s is to adapt the model to take account of lessons and experience (Saghir, 2007)—for example, looking for a new type

of investor. But this is little more than tweaking the established privatisation framework. The lessons of experience show that efforts to promote PSP in SSA result in little investment, high prices, sector fragmentation and potential liabilities for governments with guarantees for investors. It is clearly very difficult, if not impossible, for governments and donors to create conditions that mitigate risks to an acceptable level for investors when the region has such a high risk profile. The costs of trying to create these conditions can be high. When there are other less risky investment destinations, firms will shy away from the region. Rather than adapting the failed PPP model, a radical rethink is required, one that puts delivery to the poorest at the centre. The efforts being made to bring in the private sector are potentially detracting from the development of long-term, cohesive, integrated government policies. Sectors need a coherent strategy rather than ad hoc attempts at privatisation.

# **APPENDIX 1**

# DONOR INITIATIVES RELATED TO PRIVATE SECTOR INVESTMENT IN INFRASTRUCTURE

Not all of the initiatives listed below provide specific support to PSP in infrastructure. Some are sources of information and some support the private sector generally rather than specifically investments in infrastructure. But in this complex area, which is full of sometimes confusing abbreviations, this is a brief guide to some of the organisations and operations involved.

# **Africa Infrastructure Country Diagnostic (AICD)**

# www.infrastructureafrica.org

This is a research project that aims to create a comprehensive infrastructure database on African infrastructure. The project is sponsored by the Infrastructure Consortium for Africa, the African Union, the New Partnership for Africa's Development (NEPAD) and regional economic communities (such as the East African Community, the West African Economic and Monetary Union and the Southern African Development Community). The project covers 24 countries and all major economic infrastructure: energy, information and communication technologies, irrigation, transport, and water and sanitation.

## **Africa Infrastructure Trust Fund**

## www.eib.org/projects/regions/acp/infrastructure\_trust\_fund

In the context of the 2005 Gleneagles Declaration and the establishment of an EU Strategy for Africa, the European Union and African counterparts established a Partnership for African Infrastructure. The EU-Africa Infrastructure Trust Fund is an innovative financial instrument launched in 2007 to support the implementation of the Partnership. The Trust Fund benefits cross-border and regional infrastructure projects in SSA. It channels grant resources from the European Commission and member states in such a way that they can be blended with the lending capacity of the European Investment Bank and member state development financiers. The target infrastructure sectors are energy, water, transport and telecommunications.

# **Africa Progress Panel**

#### www.africaprogresspanel.org

"The objective of the Africa Progress Panel is to focus world leaders' attention on delivering on their commitments, particularly the good governance and economic support which is imperative for achieving the Millennium Development Goals."

## **Business Action for Africa**

# http://www.businessactionforafrica.org/

Business Action for Africa (BAA) was launched at the G8 summit in July 2005. Its aims are to positively influence policies needed for growth and poverty reduction; to promote a more balanced view of Africa; and to develop and showcase good business practice. The current sponsors and Oversight Group members of BAA are (according to BAA website on 15.9.08): Anglo American; British American Tobacco; De Beers; DFID; Joint International Unit of the DWP/DfES; Diageo; UK Foreign and Commonwealth Office; IBLF; Merck & Co; Royal Dutch Shell; SABMiller; UK Trade and Investment; Unilever; Visa.

#### DevCo

# www.ifc.org/ifcext/psa.nsf/content/Devco

Full name: Infrastructure Development Collaboration Partnership Fund.

Established: June 2003. Capital: US\$ 15.7 million.

Managed by: IFC.

Funding: donors make an annual contribution.

The aim is to provide technical assistance in support of PPI initiatives. No activity in the water or energy sectors in SSA. The main use of resources will be to fund the cost of specialised consultants associated with the design and implementation of private sector infrastructure transactions.

DevCo is an untied multi-donor facility established by the IFC and the United Kingdom's Department for International Development (DFID) to support IFC's privatisation advisory work in infrastructure as part of its involvement with the Private Infrastructure Development Group (PIDG). The Dutch Ministry of Foreign Affairs, the Austrian Development Agency and Sweden's International Development Agency have also contributed funds to the facility.

DevCo supports transactions in the poorest nations (DAC list columns I–III) to increase private sector involvement in the provision of infrastructure structure services. The additional funds help defray the costs of expert consultants who work with teams lead by the IFC's Advisory Services to prepare infrastructure projects for private sector investment. DevCo funds also help defray the IFC's project development costs associated with identifying projects for DevCo to support.

# **Emerging Africa Infrastructure Fund**

www.emergingafricafund.com

An initiative of the PIDG.

Established: 2001.

Capital: \$ 365 million.

The Emerging Africa Infrastructure Fund (EAIF) is a public private partnership able to provide long-term US dollar-denominated or euro-denominated debt or mezzanine finance on commercial terms to finance the construction and development of private infrastructure in 45 countries across SSA. EAIF can provide between US\$ 10 million and US\$ 36.5 million (or its equivalent in euros) to projects across a wide range of sectors including telecoms, transport, water and power, among others. EAIF offers US dollar and euro lending to private companies (or soon to be privatised companies) for greenfield projects or for the refurbishment, upgrading or expansion of existing facilities.

#### **GPOBA**

## www.gpoba.org

Full name: Global Partnership for Output Based Aid.

Established: 2003.

Established by: DFID and World Bank.

Managed by: World Bank.

The 2008 Annual Report records a portfolio of active projects of US\$ 72 million. GPOBA provides grants for subsidy funding as well as technical assistance. Under OBA, a service is delegated to a third party under a contract that ties payment to the performance of outputs and delivery of results. The aim is to transfer performance risk to the private sector, thereby providing an incentive to deliver results. These are public subsidies supported by donor funding. In some cases, concessionaires bid for a project on the strength of the subsidy they require rather than the fee they would charge.

#### Guarantco

## www.guarantco.com

Owned by the PIDG Trust and managed by Standard Infrastructure Fund Managers (Africa) Limited.

As most infrastructure projects are paid in local currency, GuarantCo was conceived to support local currency financing for such projects and to more closely match the debt currency and terms with its payment. Thus the key criterion is that the guarantee should aid the availability of local currency.

Guarantco cannot cover equity participations. It can only cover senior and subordinated or mezzanine debt.

It can provide a variety of contingent products, including partial credit and partial risk guarantees, first loss guarantees, tenor extension or liquidity guarantees. It can also provide joint guarantees or counter guarantees as may be required for a particular project.

GuarantCo can support projects in the following sectors: energy supply, including generation, transmission and distribution; water/waste services; transport; telecommunications; gas transportation, distribution and storage; urban infrastructure; mining, provided the financing is for related infrastructure services with access by third

parties; other activities that positively affect the development of the relevant country's basic infrastructure and promote the objectives of Guarantco.

## **International Finance Corporation**

## www.ifc.org

The IFC provides an extensive array of products to private enterprises investing in developing countries including loans (A-loans), syndicated loans (B-loans), equity investment, quasi-equity investment (C-loans), structured finance, hedging products, local currency financing, subnational finance and advice.

IFC was established with a special mandate to support and catalyse private sector development in developing countries. Its purpose is to further economic development by encouraging the growth of productive private enterprise in member countries (articles of agreement).

It shall not undertake any financing for which in its opinion sufficient private capital could be obtained on reasonable terms (articles of agreement). IFC's investments should, where possible, have a catalytic component.

IFC has been expanding its business rapidly—the volume of new investment operations has more than doubled and advisory services expenditures have quadrupled in the last five years.

## InfraCo

## www.infraco.com

Established: 2004.

Funded by: PIDG donors—Netherlands, Sweden, Switzerland, the United Kingdom and the World Bank.

Aims to stimulate greater private investment in African and Asian infrastructure development by acting as a principal project developer, focusing on lower income countries. InfraCo funds early-stage, high-risk costs by taking an equity stake in the project and making decisions that will lead to a socially responsible and successful construction and operation.

# Infrastructure Consortium for Africa (ICA)

## www.icafrica.org

Established: 2005 after Gleneagles.

Members: Africa—African Development Bank, Development Bank of Southern Africa. G8 Bilateral agencies—Canada, United Kingdom, France, United States, Germany, Japan, Russia, Italy. Multilaterals—World Bank Group, European Commission, European Investment Bank.

Aim: the Consortium addresses national and regional constraints on infrastructure development by sharing information, project development and good practice.

The ICA is not a financing agency but it acts as a platform to catalyse donor and private sector financing of infrastructure projects and programmes in Africa.

#### **InfraVentures**

IFC fund of \$ 100 million to provide risk capital for the early stages of development for infrastructure projects. Launched in August 2008.

## **Investment Climate Facility for Africa (ICF)**

# www.investmentclimatefacility.org

The ICF is a new vehicle for improving investment conditions in Africa. The ICF has set a target of \$ 110 million for its first three-year phase, most of which was raised before the launch of the ICF. While being fully operational and funding expenditure from the capital raised so far, the ICF is seeking additional funds from development agencies and corporate investors to increase the scope and scale of its impact.

The donor community will provide most of the ICF's funds. Its donor investors include DFID, the governments of Ireland and the Netherlands, the European Commission and the IFC. The ICF's corporate investors include Anglo America plc, Celtel, Microsoft, Royal Dutch Shell plc and the Shell Foundation, SABMiller, Standard Bank and Unilever plc.

## **IPPF**

## www.nepad.org

Full Name: Nepad Infrastructure Project Preparation Facility.

Established: 2003, with seed funding from Canada.

The key objective of the NEPAD-IPPF is to assist African countries, regional economic communities and related infrastructure development institutions to prepare high-quality, viable regional infrastructure projects in energy, trans-boundary water resource management, transport and ICTs, which would be ready to solicit financing from public and private sources in support of the objectives of NEPAD.

# **Multilateral Investment Guarantee Agency**

#### www.miga.org

As a member of the World Bank Group, MIGA routinely provides firms with guarantees against government actions that could disrupt insured investments, and helps resolve potential disputes to the satisfaction of all parties. It offers four types of guarantee coverage: transfer restriction; expropriation; war and civil disturbance; and breach of contract. It also offers dispute resolution service.

If the parties are unable to settle their dispute and a claim for compensation is brought by an investor under a MIGA guarantee, the Agency will review the facts of the dispute and make a formal determination. If MIGA finds for the insured investor, it will pay the compensation to

which the investor is entitled under the guarantee. Under the terms of the international convention establishing MIGA, the Agency is then permitted to seek reimbursement of such payments from the host government.

## **PIDG**

## www.pidg.org

The Private Infrastructure Development Group (PIDG) is a multi-donor organisation established in 2002. Its objective is to encourage private infrastructure investment in developing countries that contributes to economic growth and poverty reduction. The PIDG has established a range of facilities and investment vehicles providing varying types of financial, practical and strategic support in order to realise this objective.

Current members include DFID, the Swiss State Secretariat for Economic Affairs, the Netherlands Ministry of Foreign Affairs, the Swedish International Development Agency, the World Bank, the Austrian Development Agency and Irish Aid.

As PIDG is not a legal entity in its own right, it has established a trust (the PIDG Trust) to perform many of its functions. The PIDG Trust is located in Mauritius but is managed by a London-based trust company in conjunction with two Mauritian trustees.

#### **PEP Africa**

## http://www.ifc.org/ifcext/africa.nsf/Content/PEPAFRICA

IFC Private Enterprise Partnership for Africa is the primary vehicle for delivering IFC advisory services in Africa. Established in 2005, IFC PEP Africa works in partnership with multilateral agencies, governments and the private sector to deliver programmes and advisory services that improve the investment climate, mobilise private sector investment, and enhance the competitiveness of private enterprises in Africa.

# **Public-Private Infrastructure Advisory Facility**

## www.ppiaf.org

PPIAF was launched in 1999 as a joint initiative of the governments of Japan and the United Kingdom, working closely with the World Bank. It was built on the World Bank Group's Infrastructure Action Program and designed to reinforce the actions of all participating donors.

PPIAF's members include bilateral and multilateral development agencies and international financial institutions. Owned and directed by its participating donors, PPIAF is managed by the World Bank through a Program Management Unit.

It is funded by donors: the Asian Development Bank, the World Bank, the European Commission, and the governments of Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

PPIAF assists developing country governments and other public bodies to improve the policies, laws, regulations and institutions that allow them to better harness private participation in infrastructure where they wish to do so. PPIAF helps developing countries

improve their infrastructure through specific technical assistance. It also identifies, disseminates and shares best practices in the filed of public-private partnerships in infrastructure in developing countries.

# **Technical Assistance Facility**

The overall objective of the Technical Assistance Facility (TAF), which is part of the PIDG, is to enhance the ability of public and private sector clients to attract private capital to the financing of infrastructure and related services.

TAF achieves this by helping PIDG clients to evaluate, develop and/or implement risk mitigation, financial and regulatory mechanisms, standards, systems and procedures essential to raising funds in the capital markets. This will enable developing countries to make a strong and positive contribution to growth and poverty reduction.

# **APPENDIX 2**

# **DEFINITIONS**

Affermage contracts: see Leases.

**BOT (Build-Operate-Transfer)**: a type of contract under which ownership of the infrastructure during the contract period belongs to the private consortium. Afterwards the infrastructure either reverts to the public sector (for example, hospitals, schools and so on) or remain with the private sector if there is no clear long-term public sector need.

**Concession contracts**: contractual arrangement that grants rights to a firm to operate a defined infrastructure services and to receive revenues from it. The concessionaire is remunerated directly by tariffs and is in charge of operations and investments The firm pays a fee to the concession-granting authority. The assets remain the property of the government. Private companies are given a licence to run the water system and charge customers to make a profit. The private company is responsible for all investments, including building new pipes and sewers to connect households that are not yet connected. This does not have to be from the company's own share capital but can be raised from loans and grants. Concession contracts may set out targets to be met by the company—for example, to invest a particular amount in the first five years. Concessions typically last 20–30 years (Hall and Lobina, 2006).

**Due diligence**: the process of investigation and evaluation, performed by investors, into the details of a potential investment, such as an examination of operations and management and the verification of material facts.

**Lease contract**: the company is responsible for running the distribution system and for making the investments necessary to repair and renew the existing assets, but the public authority remains responsible for new investment. The private company is not responsible for the investment in extensions to connect households that were previously unconnected. These contracts are also known by their French name, affermage contracts (Hall and Lobina, 2006).

**Management contract**: the private company is responsible for managing the (water) service but not for making any of the investment or even, usually, employing the workforce. A typical management contract involves a few senior managers from the private company being assigned to run the water company for a period of between one and five years. These contracts are risk-free for the private sector and do not involve any investment by the private company (Hall and Lobina, 2006).

**Mezzanine debt**: debt that incorporates equity-based options (for example, warrants) with lower-priority debt. It is more like equity than debt in that the debt is usually only important in the event of bankruptcy. It is often used to finance acquisitions and buyouts.

**Non-recourse debt**: debt contracted by the project without recourse to the sponsors of the project.

**On-demand guarantee**: in its pure sense, a demand or on-demand guarantee may be called by the beneficiary by making a demand on the guarantor and without any proof of default by the borrower. In contrast, a conditional guarantee requires further conditions to be met before payment by the guarantor, which could include obtaining full and final judgment of default, acceleration or realisation of the security.

**Partial risk guarantee**: a partial risk guarantee can cover the occurrence of certain specified risks, such as completion risk, liquidity risk and others.

**Political risk guarantees**: this is a specific type of partial risk guarantee that, as its name suggests, covers certain political risk events. Such risks typically include currency inconvertibility, currency transfer restrictions, war and civil disturbance, and expropriation.

Political risk insurance: this covers losses caused by specific political risk events, including traditional political risks for equity investors and debt providers. It includes currency inconvertibility and transfer restriction—this insurance or guarantee covers losses arising from an inability to convert local currency into foreign exchange or to transfer funds outside the country; expropriation—losses from acts by the host government that may reduce or eliminate ownership of, control over, or rights to the insured investment; war and civil disturbance—losses from damage to, or the destruction or disappearance of, tangible assets caused by politically motivated acts of war or civil disturbance in the host country. It might cover breach of contract by the host government and arbitration-award default when a government fails to pay an award made by an arbitral or judicial forum.

**Public private partnerships**: this is an agreement between the government and one or more private partners whereby the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners, and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners (OECD, 2008a: 132).

**Senior debt**: a class of corporate debt that has priority with respect to interest and principal over other classes of debt and over all classes of equity by the same issuer. It has priority in a liquidation.

**Special purpose vehicle**: a consortium of financial institutions and private companies responsible for all the activities of a PPP.

**Subordinated debt**: debt that is either unsecured or has a lower priority than other claims.

**Take-or-pay clause**: an arrangement whereby customers agree to buy a certain quantity over a period of time, often at a predetermined price. If the customers do not buy as contracted, they must pay the seller. This protects the buyer against price rises and the seller against price drops.

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## **ABBREVIATIONS**

AfDB African Development Bank

DB Doing Business

DFID Department for International Development (UK)

EAIF Emerging Africa Infrastructure Fund

EIB European Investment Bank
GWCL Ghana Water Company Limited
ICA Infrastructure Consortium for Africa
ICB International competitive bid

international competitive bid

ICT Information and communication technologies

IDA International Development Association
 IFC International Finance Corporation
 IEG Independent Evaluation Group
 IPP Independent power project

kwh Kilowatt hour

MDB Multilateral development bank MDGs Millennium Development Goals

MIGA Multilateral Investment Guarantee Agency

ODA Official development assistance

OECD Organisation for Economic Cooperation and Development

PFI Private finance initiative

PIDG Private Infrastructure Development Group

PPA Power purchase agreement

PPI Private participation in infrastructure

PPIAF Public-Private Infrastructure Advisory Facility

PPP Public-private partnership
PSD Private sector development
PSP Private sector participation
PRG Partial risk guarantee

PSD Private sector development

SSA Sub-Saharan Africa WBG World Bank Group

# **NOTES**

- 1. Privatisation can take many forms and different terms are used, including public-private partnerships (PPPs), private participation in infrastructure (PPI) and private sector participation (PSP). While there are nuances among the different terms, each of these can be used to describe the kind of contractual relationships discussed in this paper. The term PSP is used most because it is the broadest. Exceptions are made in relation to quotations and references that use other terms.
- 2. IFC Executive Vice President and CEO, Lars H. Thunell, speaking at World Water Week, Stockholm, Sweden. IFC press release, <www.ifc.org>.
- 3. Transnational Institute press release, "Italy Withdraws from Controversial World Bank Privatisation Fund", 22 May 2007.
- 4. Water Power and Dam Construction, August 2008.
- 5. Starting a business, enforcing contracts, trading across borders, closing a business, registering property, protecting investors, dealing with licences, paying taxes, employing workers, closing a business.
- 6. IFC press release, 22 August 2008.
- 7. Business Africa Select, 16 May 2008.
- 8. Reuters News, 19 December 2007, "Morocco's ONEP Takes Control of Cameroon Water Co".
- 9. PR Newswire, 28 March 2008.
- 10. Dallas Business Journal, 6 August 2007.
- 11. EAIF's interview on the CNBC show "Building Africa" was broadcast at 17:00 GMT on Saturday 12 April 2007. See <a href="http://www.youtube.com/watch?v=1JQoqus3aBl&feature=email">http://www.youtube.com/watch?v=1JQoqus3aBl&feature=email</a>.



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