

Private finance: discussion of risks and challenges

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The session on private finance at AFRICA 2019 earlier this year took the form of a panel discussion. As there were no formal papers included, the session Chair, Dr Judith Plummer Braeckman, has prepared a report of the discussion and outcomes.

he discussion began with an introduction by Dr Judith Plummer Braeckman, from the University of Cambridge Institute for Sustainability Leadership, UK, noting the importance of considering issues of sustainable finance. Public sector funding, especially in developing countries, is insufficient to meet the infrastructure development needs of those countries, making it necessary for them to secure private sector finance. At the same time the multi-lateral development banks (MDBs) have insufficient funds to finance all the projects which are needed. Thus, the role of the public sector and the MDBs is shifting from being major financiers to leveraging financing from the private sector. This development is making risk more of a focus than before. While projects have not actually become riskier, the changing financing structures of projects means that risk is more at the forefront of the focus because of its importance as a decision-making factor for private sector financiers. Facilitating finance and managing risk was thus the key focus of the discussion, which continued with brief presentations by each panellist and then a broad question and answer session with the audience.

Perspectives from the panellists

Luciano Canale of the World Bank spoke of the ideal model for hydropower development in emerging markets being one where the host country government would fund all studies to maximize the sustainable benefits of its natural resources, including economic benefits and then sell this optimized project to the private sector on a competitive basis. When the preliminary studies, considering not only where projects should be built, but also what functions should be included, are not carried out by the host country government, there is a risk that economic, environmental and social costs and benefits are not fully included in the analysis. In reality the ideal process is disrupted by governments agreeing to speed up and take shortcuts, which means that projects that are developed are not necessarily the ones that provide greatest benefits and lowest impacts for the host country.

Today, public finance is no longer the key funding mechanism, especially in developing countries that have limited borrowing capacity. As the number of projects needing private sector finance grows, risk assessment is becoming increasingly important because the private sector is very risk averse. In an ideal world, there would be a legal framework in place to produce high quality, standardized studies for hydropower projects. In reality, this does not happen, and sometimes the scoping studies are of poor quality. The role of the MDBs is thus increasingly in 'de-risk-ing' the projects. Cameroon (as was presented in the plenary session, see H&D Issue 3, 2019 for the full

AFRICA 2019 report) is a good example of this, where the Government has financed studies to make projects more attractive to the private sector.

Dr Harrison Mutikanga from the Uganda Energy Company Ltd, Uganda, highlighted the challenges that the private sector is likely to face when investing in Uganda, where the energy sector is now disaggregated into three separate companies: one for each of distribution, transmission and generation (Uganda Energy Company). To date the power purchase agreements for projects such as Bujagali have been capacity based, protecting the private operator from hydrological risk and the risk of low demand. It is the Government's intention to move away from these arrangements and put more of the supply and demand variability risk onto the private sector for future projects. At the same time, there is pressure by the energy sector regulator to keep tariffs low, meaning that legal contracts are not always appreciated or respected. As a result, the Ugandan context may not look very attractive to private sector investors. The regional energy and capital markets within Uganda are also underdeveloped, and the weak grid is struggling to manage with intermittent renewables.

Ajay Chaudhary from Mott MacDonald Ltd, UK, focused on the need to categorize risks. He summarized risk under several key areas: capacity risk, a lack of availability of government funding at scale and, a lack of capacity within country institutions to understand how to negotiate best with the developer; technological risk, which can be partially mitigated and managed by good preparatory studies; and, market risk, understanding whether the national/regional market for energy is strong enough (whether there is sufficient demand for additional capacity at a price reflective of the cost of production). The developer may not have the ability to accept all these risks, but in some instances will be forced to do so against their will, especially where risks emerge that have not been well identified. Forcing the private sector to accept risk that they cannot manage can be a costly strategy for governments.



Dr Judith Plummer Braeckman with expert panellists during the 'Private finance' session at AFRICA 2019.



Dhruva Sahai from the World Bank discussed the challenges of attracting finance for projects in developing countries, where even a well prepared project can fail to achieve financial closure, if located in a particular country. The key reasons for this are often related to a perception of high risk related to the political context, regulatory framework and off-taker default risk. From a development perspective, countries often have competing needs between various options for the use of public funds (education, health, energy and so on) as well as between different types of projects in any one sector (such as what type of power station to build). Governments, especially in developing countries, need to acquire more experience of dealing with the private sector to be able to maximize the benefits from private sector finance. The World Bank provides some support for governments to help them improve their regulatory and financial frameworks to enable them mobilize more private capital and offtake risk can be controlled/mitigated by a sovereign guarantee.

The magnitude of funding required for large hydropower projects means that some form of credit enhancement will typically be required to attract (sufficient) private investment. However, the use of private sector finance can lead to higher tariffs in the early years of the project because of the need to repay debt quickly. It is important to note that both buy and sell sides (power generator and power purchaser) are vulnerable to various risks and balancing these risks is crucial.

Discussion on current critical issues

The discussion which followed these brief presentations, focused primarily on dam safety, the role of the World Bank in hydropower development in Africa, the balance between large and small hydropower projects, and the issues associated with receiving financing from China.

A delegate asked whether dam safety was being given sufficient priority in hydropower development. The panel responded that dam safety is an important precondition, especially for large dams for getting any financial support from MDBs. The safety requirements in this respect are very clear. However, it can appear that where there are no standards enforced, the safety aspects are often not given enough attention by developers because there is no money in it. Finance from sources other than the MDBs may rely on host country systems for safety regulation and these systems may lack capacity. Mr Mutikanga noted that it would be helpful for countries to be able to rely on agencies such as the World Bank or ICOLD to monitor dam safety, but they could not do so if the financing was external, such as that from China Exim Bank. He highlighted this as an issue in Uganda with the recently commissioned Isimba dam and the Karuma dam, which is under construction; both of the projects have been developed with Chinese finance and where none of the Ugandan regulators are focused on safety issues.

Other comments from the audience noted that if the regulatory framework regarding safety is not in place when the project is awarded, the focus tends to be on pre-construction studies, with very little attention being paid to post-construction safety or the safety of related infrastructure, such as roads, bridges and so on. During construction, companies often try to save on costs, and it is not uncommon for compromises to be made regarding safety matters. A lack of engineering capacity can also cause safety problems. Furthermore,

safety is not just a concern relating to life safety/the risk of loss of life. Economic risks are also involved in relation to dam safety.

The panel was asked whether there were competing interests in World Bank-supported projects in Africa, for example between water and electricity users? The panel noted that the World Bank is significantly risk averse in terms of social and environmental risks. A lot of studies and plans are required to get a project approved, including thorough assessment of the impacts on downstream communities. Projects are highly unlikely to receive any funding from the World Bank if sufficient protection and mitigation, to ensure that there will be 'no harm done', cannot be achieved.

Countries need to be clear on what their priorities are, including what is most urgent and what can wait. Wider basin-scale planning is getting more common now, which is positive. Governments need to prepare projects so that they are fit to be put out to bidding for private participation. If the World Bank gave countries more support during the initial stages of project preparation, then the number of bankable projects could potentially increase.

A delegate queried whether larger projects helped to achieve improved access to energy, or if smaller projects address energy access more effectively. The size of the projects that are funded depends on the needs of the country in which they are located. Power generation is only one segment of the World Bank's energy sector budget. The allocation of funds in each country is carried out using a needs-based approach. In the allocation process, the World Bank also considers the country's priority needs as well as what the least-cost option will be to address these needs using a broad energy-sector perspective.

The size of the project is also not necessarily directly correlated to its impact. There are larger projects with comparatively low environmental and social impacts per megawatt and vice versa. A country's energy requirement needs to be met with the minimum environmental and social impacts and this may involve a range of sizes of project.

The World Bank is promoting small hydro, especially in areas that are not connected to the grid (off-grid communities). However, when undertaking studies on which a renewable electricity generation option is the best (and most cost-efficient) for such remote areas, solar often comes out ahead of hydro as the most preferable option.

The discussion also turned to the implications of large numbers of projects funded with Chinese finance. Each government (in Africa) must control its appetite for debt. Uganda does not want to take on any more Chinese debt than they already have, so from now on they are making only BOOT contracts available for Chinese-financed projects.

Some countries prefer a BOO structure as they do not have the funds or the capacity to operate and maintain plants, but this can also limit the indebtedness.

A commentator from the audience added that the reason that many African countries are attracted to Chinese finance is that it is quick, whereas developing a project with World Bank finance takes a long time. In Zambia, Chinese finance had been essential to get a project completed. However, it was agreed that too much indebtedness was undesirable and risky. One of the biggest problems is the bad press that Chinese finance has attracted in recent years. Ideally it would be possible to mix fund-



ing from the China Exim back with other financing and apply it to a range of contractors rather than being tied to Chinese contractors.

The panel went on to add that the World Bank sees hydropower as part of 'development' and thus takes a more rounded approach to finance which tries to address multiple issues. Government-to-government agreements with China are simply to provide finance and the Chinese assume that the local country government will ensure that the project meets their needs and incorporates all necessary standards. This ignores a possible lack of capacity in those countries.

During the past ten years, IFIs funded 10 per cent of hydropower development in Africa, while Chinese money funded 35 per cent. The World Bank's key focus is sustainable development, not only electricity or energy. However, it is also important to remember that the World Bank due diligence and risk assessment approach and requirements may be slower, but may also lead to a more sustainable result. The World Bank pays more attention to the quality of the final output than the speed of delivery. Sometimes the projects that are developed with

Chinese finance are not considered in relation to the network distribution capacity and demand. World Bank procedures can be helpful in ensuring that projects are not developed when there is no corresponding attention to distribution or transmission capacity.

The audience questioned what the World Bank is doing to help distribution companies become more bankable. Utilities often need financial support, which many countries are unable to provide. The World Bank does have some support and facilities to improve the financial sustainability of utilities, such as payment security guarantees. This type of support has been given in Malawi for example. The World Bank can also work with ministries of finance to see if they can help utilities deal with the transition to commercial operation, especially when the host country government is unable to support them.

It sounds as though the Ugandan context is not very attractive for investors because of the lack of certainty over the demand. Delegates questioned why this is so, and whether the World Bank could help. To satisfy demand, the transmission and distribution infrastructure needs to be upgraded, but there is only one transmission company currently in operation in Uganda, this is Government-owned and it does not have the financial resources to fund the required upgrades. At the moment, the supply of electricity exceeds demand, not because people do not want electricity, but because the grid extension works lag behind and many citizens have limited funds to pay for electricity.

Broad questions about project financing included whether the social objectives were compatible with financial objectives and how the revenue requirements of private sector financiers squared with electricity access improvement requirements. The panellists explained that World Bank does try to support efforts to improve energy access at an affordable rate, but often government financial support will also be needed to achieve this. However, many governments lack the capacity and financial resources to do so. To address this problem, the World Bank can provide low-cost loans to governments to help them subsidize energy access at lower tariffs. There is a need to improve energy access so much and so quickly (especially in Africa) that it is simply not possible to achieve this without private sector finance. Developers need to understand what lenders will require when preparing a project and structure the project in a way that meets their requirements.

The panel was asked if project finance as an approach was coming to an end, and what it might be replaced with. Should the government ownership share be in PPPs? The panel responded that project finance is not on its way out, but governments need more support and advice in how to engage with it and how to prepare projects to make them bankable. There are some new instruments to provide this type of assistance, for example a combination of IDA credit and guarantees. In terms of what share should the government hold in PPPs, governments obviously want to retain control over the assets in their territory. However, their ownership share should not be so high that it prevents private sector developers from operating the project efficiently.

The host country government should always be involved in projects, to safeguard their natural resources, with their level of engagement determined by the quality of preparation of the project and the level of development of the market. If the project is less well prepared, the government engagement needs to be greater. The government often wants to have approximately 30 per cent of the equity share. The main goal of the government for domestic projects is generally to keep the tariff as low as possible rather than to make returns from the project, but long term they may get returns. While governments should not aim to receive large returns, some return on their investment is needed to generate resources to fund other infrastructure projects.

Asked whether there should be assistance to countries to develop an 'energy development masterplan' rather than just financing individual projects, the panellists responded that the World Bank can assist governments in developing a set of projects, or a 'package' of projects. Governments need to look at integrated planning across all infrastructure sectors, as well as in energy. In the energy sector, they need to look at all aspects of the sector, not just generation, but also transmission and distribution. Also, master planning can be costly and will soon be out of date, so it needs to have the built-in flexibility to respond to changes as needed.

Outcomes from the session

Overall, the session highlighted the need for more research on the risks as perceived by the private sector and the optimum method for management and mitigation of these risks.

There is a need for financiers and governments to understand each other's concerns and the relative effectiveness versus the cost of risk management strategies. There was also emphasis on the need for more practical support for developing country governments with capacity building to equip them betterto deal with complex financing packages or bilateral finance from new emerging financiers.

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