

SDGs: ISLAMIC PROJECT FINANCE FOR INFRASTRUCTURE PPPs IN SUB-SAHARAN AFRICA

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ABSTRACT

Sub-Saharan Africa (SSA) is the region with the highest number of countries that did not meet the Millennium Development Goals (MDGs) which expired in 2015. Meeting the newly established Sustainable Development Goals (SDGs) is inextricably linked to the availability of quality infrastructure. The current slowdown of the post-global financial crisis economy is already threatening to hinder the ability of SSA to meet the new SDGs. Without investments in key infrastructures that support a modern economy such as roads, electricity and safe water and sanitation, SSA may not meet the new SDGs targets. The past PPP-based conventional debt-financed solutions to SSA infrastructure have failed to produce the desired results and are being terminated. A growing body of empirical studies points to the conventional debt-finance used as a major weakness of the PPP model. The pressure to meet lender's debt repayment covenants force Project companies to pushback scheduled maintenance, and critical infrastructure investments leading to contract breaches and eventual cancellations. This article seeks to highlight why SSA countries should adopt Islamic project finance for PPP financing. We argue that Islamic project finance will eliminate the pressure of meeting specific debt service covenants, lower the cost of services, ensure service sustainability, affordability, and will assist SSA countries meet the new SDG targets. Islamic project finance instruments are partnership-oriented, equity-based, share risks and are compatible with SDGs.

Keywords: Conventional Debt Finance; Islamic Project Finance; PPP; SDGs; Sub-Saharan Africa.

1. INTRODUCTION

The millennium development goals (MDGs) which expired in 2015 were developed and agreed to by 189 countries with the purpose of ending extreme poverty globally. And modern infrastructure provision was seen as one of the most important tools for achieving the various MDG targets. However, sub-Saharan Africa (SSA) was the region with the highest number of countries that did not achieve their MDG targets (JMP, 2015). Only 5 countries out of the 53 assessed score up to 50% in the MDGs Global Track Index (Spooner, 2014). A new and more comprehensive set of goals called the Sustainable Development Goals (SDGs) have now been agreed for another 15 years ending in 2030. Without the relevant infrastructures that underpin modern economic development, achieving the new SDGs will still remain elusive for countries in SSA. Infrastructure is both an *explicit* and *implicit* component of the SDGs' goals and targets (World Bank, 2017a). The infrastructure dependent SDGs include *goal 3* (health), *goal 4* (Education), *goal 6* (water supply & sanitation), *goal 7* (Energy), and *goal 9* (all other infrastructures). SSA lags behind all other regions of the world in all infrastructure class except *unpaved roads* (Loxley, 2013). The World Bank estimates that SSA's infrastructure deficit holds back its economic growth by 2% each year (WEF, 2013). In order to catch up with the rest of the world, it has been reported that SSA would require \$93 billion investments annually comprising \$60 billion for capital expenditure and \$33 billion for Operation and maintenance (Foster & Briceno-Garmendia, 2010). Providing

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the required infrastructure would require substantial investments beyond what national governments in SSA can afford through tax revenues. Although SSA governments, foreign aid and private sector are making combined investments of about \$45 billion, there still exists a funding gap of \$48 billion. Governments in SSA have attempted to close the infrastructure funding gap using Public Private Partnerships (PPP) model. However, the poor performances being recorded globally and in SSA across numerous projects have led to anti-PPP sentiments, terminations, cancellations and remunicipalisations. The World Bank in its “2016 annual PPP update” acknowledges a 37% reduction in financing and a 27% reduction in number of PPP projects globally (World Bank, 2017b). Furthermore, as many as 235 PPP water contracts have been cancelled globally due to performance-related issues from 2000 to 2015 (Kishimoto et al., 2015). In Germany, 72 PPP electricity contracts were also cancelled for poor performance and remunicipalised (Wagner & Berlo, 2015). PPPs are financed using a highly leveraged project finance structure in the realms of 90%-10% debt-to-equity ratio (NAO, 2018; World Bank, 2017c; World Bank, 2014). There is a growing body of empirical evidence suggesting that the excessively high leveraged structure used in financing PPPs increases risk of default (Nthatsi, 2016; Hall, 2015; Ehrhardt & Irwin, 2004). To avoid defaulting, project sponsors make debt repayment rather than service delivery the focus once operation starts (Ehrhardt & Irwin, 2004). This results in the private consortium’s inability to meet contractual obligations. Breach of contracts related to lack of infrastructure maintenance and agreed infrastructure investments is a major reason for contract renegotiations, cancellations and remunicipalisations (Hall, 2015; Kishimoto et al., 2015). The uncontrolled use of conventional project finance structure for PPPs is creating a debt load that impacts the *sustainability* of the provided infrastructure (Nthatsi, 2016). And the need to design tariffs to ensure full cost recovery consequently creates affordability problems leading to service disconnections and inability of the provider to realise the required revenue.

Therefore, the challenge for SSA is to identify alternative sources of *equity-based* financing for its infrastructure to overcome the *full cost recovery* trap of debt finance, share risks and reduce the distortions to efficiency caused by debt guarantees and interests payments. The need for full cost recovery affects tariff design and consequently service affordability. Affordability is a problem for low-income consumers in most countries, in particular in the water sector and in the Commonwealth of Independent States (CIS) (Fankhauser & Tepic, 2007). Therefore, an appropriate financing for SSA countries should improve service affordability and increase value for money (VfM) of projects. VfM provides the same quality and quantity of services at a lower overall cost (Cruz & Sarmiento, 2017). Multi-lateral development banks pushing PPPs in SSA are already exploring the application of Islamic finance to enhance sustainability and affordability (World Bank, 2017a; World Bank and IsDBG, 2016). Therefore, this article seeks to draw the attention of SSA policy and decision-makers to the potentials of Islamic project finance in solving their infrastructure financing challenges while enhancing service affordability and laying the foundation for achieving the SDG goals. We argue that adopting Islamic project finance by SSA governments will eliminate the pressure to meet lenders’ stipulated debt service obligation, ensure sustainability and enhance service affordability. The rest of the article is structured as follows; *section 2* describes the impact of infrastructure shortfall in SSA, *section 3* explores Current experience with conventional debt-financed PPPs globally, *section 4*, provides insights into Islamic finance and its financing instruments while *section 5* concludes.

2. IMPACT OF INFRASTRUCTURE SHORTFALL IN SSA

In the *water supply subsector*, there is a general lack of access to clean, and safe domestic water supply, making SSA the region with the highest Diarrhoea deaths of children below the age of 5 years. In 2015, SSA had the highest percentage of under-five deaths at 81 per 1000 live births (WHO, 2016). SSA still remains the region with the highest number of people without access to safe drinking water (WaterAid, 2011), and the impact is that there are more people without access to water in 2015 than in 1990 (Scanlon et al., 2016). This poor progress in the water supply subsector has meant that only 43% of the population has access to safe water supply sources and only 32% have access to improved sanitation (JMP, 2015). The poor coverage of water and sanitation leads to an estimated annual productivity loss of about \$28.4 billion (UN-Water, 2009). Consequently, improving sanitation and water supply in SSA would lead to annual benefits worth \$10 billion and \$3.2 billion respectively (Hutton, 2012). However, between 1990 and 2011, only a meagre \$300 million was invested in the water subsector in SSA (Loxley, 2013).

In the *transport subsector*, Sub-Saharan Africa did not receive any form of private investments neither did it commission any projects in the water supply and sanitation subsector in 2014 as shown in Table 1 below. The

simple reason for the lack of private investments is that the private sector allege that the projects are not ‘bankable’, another word for profitable.

Table 1: Investment Volume and Number of Projects by Region

| Sector | Total value of Investments (2014) | Percentage of total investment earned by regions (2014) | | | | | | Total |
|---------------------------|-----------------------------------|---|-----|-----|-----|-----|-----|-------|
| | | LAC | EAP | MNA | ECA | SAR | AFR | |
| Transport | 55.3Billion | 82% | 3% | <1% | 9% | 6% | 0% | 100% |
| Water supply & sanitation | 4.1Billion | 90% | 7% | 3% | 0% | 0% | 0% | 100% |
| Energy | 48.2Billion | 41% | 20% | 6% | 20% | 7% | 5% | 99% |
| Sectors | | Number of projects | | | | | | Total |
| Transport | | 26 | 3 | 1 | 4 | 15 | 0 | 49 |
| Water supply & sanitation | | 12 | 20 | 1 | 0 | 0 | 0 | 33 |
| Energy | | 72 | 23 | 11 | 19 | 25 | 7 | 157 |

Source: Adapted from PPI database

The poor conditions of roads in SSA reduces the useful lifespan of vehicles, the life of tires, fuel efficiency, and increases maintenance costs of vehicles (Teravaninthorn & Raballand, 2008). This results in higher cost of goods and services as manufacturers transfer these costs to consumers. Many opportunities, such as the production of high-valued fruit crops and nuts, are unexploited due to the inability of farmers to bring these goods to market in urban centres (Naudé & Matthee, 2007). Furthermore, Inland transport costs and time delays are a much larger share of total export costs and time for landlocked countries in SSA (Christ & Ferrantino, 2009).

In the *energy subsector*, the World Bank reports that the combined generation capacity of the 48 countries in SSA is roughly the same as that of Spain (World Bank, 2013). Electricity is a key factor in the fight against poverty and elimination of inequalities in SSA (Hall & Niekerk, 2013). The entire SSA is only able to provide electricity for about 31.7% of its population and the number without access is rising (IEA, 2014). The IEA report went further to assert that the “severe shortage of essential electricity infrastructure is undermining efforts to achieve more rapid social and economic development, necessitating widespread and costly private use of back-up generators running on diesel or gasoline”. These alternative sources of electricity and energy are a leading cause of illness and deaths among low-income neighbourhoods in South Africa (Eberhard & Von Horen, 1995). The use of generators, wood, paraffin and biomass have adverse health and environmental impacts including respiratory diseases, with whole families dying due to inhalation of toxic generator fumes. SSA has consistently been unable to reach its growth potentials due to absence of key infrastructure that support growth.

3. PERFORMANCE OF PPP PROJECTS

In the early 1990s, the world woke up to privatization as espoused by Multilateral Development Banks (MDBs) and donor agencies. Bouyed by the PPP debate in terms of ‘public is bad, private is good’ allegedly on the basis of selective evidence (Loxley, 2013); SSA governments accepted the new infrastructure ‘silver bullet’. SSA governments eager to please lenders and donors alike quickly sold off national assets and privatized public services as a pre-condition for loans (Pigeon, 2012). Almost 3 decades after, most of the concessions and privatizations have been reversed, cancelled, renegotiated or abandoned (Gualberti et al., 2009). It is increasingly being found that there is no difference between public & private ownership in terms of efficiency & environmental violations (Perard, 2009); and in terms of costs (Kirkpatrick et al., 2006). A review of all published econometric studies of water and waste privatisation since 1970, found little support for cost reduction as a result of privatization (Bel & Warner, 2008). Another comparative study of 301 Privatized and 926 public utilities in both electricity and water across 71 developing countries found that the involvement of the private sector did not lead to any significant investment gains (Gassner et al., 2008). Across developing countries, concessions failed to invest what they had originally committed to investing, and did not always meet their original contractual targets for coverage (Philippe, 2009). In Argentina, a 95 years concession signed in 1998 was cancelled due to under investments (Izaguirre & Perard, 2010). In SSA, 17 lease & management contracts in the water sector did not result in any investments by the private consortium (Hall & Lobina, 2006). It was also reported that from 1990-2009, no new water projects were signed in SSA while about 51 existing

concessions were cancelled within the same time (Izaguirre & Perard, 2010). The authors also report that PPP projects in the water sector fell by as much as 46% in 2009. Consequently, SSA is reputed as having the highest number of cancelled water contracts (Philippe, 2009). As a result of the many failures experienced, infrastructure finance to developing countries from international sources has declined by almost 50% (Auriol & Blanc, 2007).

After cancellations of concessions, the water utilities in these countries have improved access and quality of water with corresponding increase in maintenance and renewal of water infrastructure (Kishimoto et al., 2015). For instance, in the first year of cancellation in Paris, the new public-operated water utility realised savings of 35 million Euros which allowed for an 8% drop in water tariffs. Transport for London (TfL) also realised a savings of about 476 million pounds after terminating 3 ppp deals (NAO, 2018). Consequently, private involvement in infrastructure is declining globally (Hall, 2015; Kishimoto et al., 2015). It has been reported that PPPs declined by 24.1% in low-middle income countries (Gutman et al., 2015).

In developing countries, despite efforts to elevate the energy issue by the United Nations, actual investment decisions by MDBs has failed to align with approaches that will ensure the goal of energy for all is achieved (Sierra Club, 2014). This non alignment of MDBs and donor agencies' policies with the needs of developing countries in SSA is responsible for the continued failure of MDBs-linked development projects. One study of the World Bank & its private sector arm, the IFC, found that both organisations have a failure rate of over 50% on all its African projects (Ika et al., 2012). A major factor in all the failures reported is the pressure to design tariffs which guarantee full cost recovery, capable of covering interests and debt repayments including profits for shareholders and investors. SSA needs cheaper sources of infrastructure financing if they are to meet the SDGs. A source of financing that will make it possible to design tariffs that are affordable to low income earners. One thing policy makers tend to ignore is that, there can be no sustainable development unless affordability dominates the thinking of the authorities (Pape, 2002). It is interesting to note that despite the critical nature of water and energy shortages in SSA, existing PPPs in these sectors are experiencing growing number of cancellations and terminations without being replaced by a more credible system. Table 2 below shows some of the water and energy concessions that have been cancelled in SSA countries. Affordability issues, inability of concessionaires to fulfil infrastructure investment covenants and inability of revenue to cover debt service obligations are the major reasons for these cancellations and terminations (Hall, 2015; Kishimoto et al., 2015; Pape, 2002).

Table 2: Status of Some Water and Energy Concessions in SSA

| Water Concessions Status in SSA | | | |
|--|------------------------------|-----------------------------|---------------------------|
| S/No | Countries | operator | Status/Reason |
| 1 | Tanzania | Biwater-UK | Contract Terminated |
| 2 | Mozambique (Maputo) | Aguas de Portugal- Portugal | Contract Terminated |
| 3 | Central African Republic | SAUR | Contract Terminated |
| 4 | Guinea | SAUR & VEOLIA | Private operator withdrew |
| 5 | Mali | SAUR | Contract Terminated |
| 6 | South Africa (fort beaufort) | SUEZ | Contract Terminated |
| 7 | South Africa (stutterheim) | SUEZ | Contract Terminated |
| Energy concessions status | | | |
| | Countries | operator | Status/Reason |
| 1 | Chad | STEE | Cancelled |
| 2 | Gambia | MSG | Cancelled |
| 3 | Senegal | SENELEC | Cancelled |
| 4 | Rwanda | Kibuye Power | Cancelled |
| 5 | Mozambique | Energia de Mocambique | Cancelled |
| 6 | Gabon | Gabon (SEEG) | Distress |

Source: Compiled from Lobina *et al.*, 2014 and Gualberti *et al.*, 2009

The use of debt-based financing often increases the cost of infrastructure astronomically. This is because during the construction period, the project debt grows while there are no revenues from the project to service interest payments which are then added to the debt and compounded (Flyvbjerg, 2016). However, studies show that project sponsors prefer *debt-finance* over *equity-based financing* for a number of reasons. Firstly, interests on debt is tax deductible, while equity is taxed. Secondly, debt is also cheaper than equity and debt helps sponsors spread risks among other benefits (World Bank, 2017c; World Bank, 2014; Yescombe, 2014, p.24). Finally, higher leverage increases returns for investors (Yescombe, 2014, p.21). However, the cost of capital resulting from debt finance is a critical factor in achieving Value for Money (VfM) on PPP projects (Cruz & Sarmiento, 2017). SSA countries are seen as high risk in the international development finance community. And the cost of capital increases with a country's risk profile, leading to higher interest rates for projects loans in SSA countries.

4. ISLAMIC PROJECT FINANCE: RAISING CAPITAL

The global Islamic finance industry is reported to own almost \$1.8 trillion dollars in assets at the end of 2013 (IMF, 2015), which was expected to reach \$2.6 trillion dollars by 2017 (PricewaterhouseCoopers, 2013). Given the principles of Islamic finance that support socially inclusive and development promoting activities, the Islamic financial sector has the potential to contribute to the achievement of the Sustainable Development Goals (Ahmed et al., 2015). Financing can be raised by Islamic financial institutions in one of two ways: through depositor's investment accounts or through the issue of Sukuks (the Islamic equivalent of bonds). Sukuk offers an investment solution that complies with the requirements of the Islamic faith, and a debt instrument that has, since the global financial crisis, been perceived as less risky than conventional bonds given its asset-backed nature (Billington & Taha, 2018). Sukuks are not true interest-bearing instruments, but are structured in a way to channel rents, changes in capital gains/losses, or income to investors in periodic payments (OECD, 2015). Sukuks have become the most common methods of raising capital under the Islamic finance industry. Sukuks are either asset-based, meaning the investor is a part owner of the asset to the tune of their investments or asset-backed, giving the investor rights to a stream of income from the underlying asset. Motivated by a heightened interest in financial instruments that emphasize risk sharing, it has been attracting greater attention in the wake of the recent financial crisis (Mohieldin, 2012). Consequently, Islamic financial products have been deployed by non-Muslim majority countries such as Germany, Luxembourg, Singapore, Hong Kong, France, Japan, China and the UK (IIFM, 2016). Many people attribute this interest from non-muslim majority countries to the weaker performance of conventional instruments during the global financial crisis. With increasing recognition of the risk sharing value of equity over debts, many countries and projects in the European countries are making a purposeful shift towards increased equity in privately financed infrastructure (NAO, 2018). Sukuks help pool resources from a broad investor base while emphasising risk-sharing and equity-based financing arrangements which restrains excessive leveraging.

Furthermore, in financing infrastructures, IFIs are more like business partners and have a stronger incentive to monitor and ensure the success of a project as their profitability and repayment is tied to the performance of the asset. Under conventional project finance, financiers often seek government guarantees of full debt repayment before committing funds especially on African projects. This creates distortions to efficiency and does not provide incentives for the project sponsor to ensure success. Project sponsors are often capable of abandoning projects due to their low equity investments and the fact that they could use some form of creative accounting to limit their losses. The London underground PPP failed as a result of a combination of these conditions under conventional finance. Department for Transport (DoT) guaranteed 95% of the private debt for the London underground PPP which had 88.3% debt-finance at an interest rate of 20%; yet it had no direct oversight of the operations of the PPP (Williams, 2010). Under Islamic project finance, the involvement of the lender as a partner can help project sponsors work through bad times thereby lowering the pressure to sell assets at 'fire-sale' prices, and in the process protecting against fall in asset prices and probability of cascading default (Mohieldin, 2012).

4.1. ISLAMIC PROJECT FINANCE INSTRUMENTS

Like its conventional finance counterpart, Islamic project finance has different financing instruments which could be deployed independently or in combination with other instruments to deliver infrastructure projects. While *Sukuks* are the vehicle for raising capital from investors, Islamic financial instruments dictate the manner

in which profits and losses are shared in the venture. The most commonly used Islamic finance instruments include *istisna* (mainly for construction), *Ijarah* (Lease financing), *Murabaha* (Cost-plus contracts), *Mudarabah* (a form of trust financing contract) and *Musharakah* (a partnership contract).

Partnership is one of the best contributions of Islamic finance which distinguishes it from conventional finance (Abushareah & Naim, 2015). The *Musharakah* (a partnership contract) financing instrument will be the focus of this section owing to its partnerships based nature. The *musharakah* financing method involves the SPV and the government contributing to a common fund for the purpose of investment in infrastructure akin to today's PPP partnership arrangements. The profits from the venture is shared between the partners according to a pre-agreed ratio as shown in Figure 1 below, but losses are shared according to each partner's contributions (Obaidullah, 2005). It is permissible to partner with non-muslims or conventional banks as long as the venture is permissible under shari'ah and subject to Shari'ah supervision (AAOIFI, 2015). *Musharakah* has a variant called '*diminishing musharakah*' under which a provision is included in the contract permitting one of the partners (usually the government) to gradually buy-off the other partner. This is the instrument that closely mirrors the Build-Operate-Transfer (B.O.T) commonly used for PPP projects globally. This instrument will be a more suitable vehicle for SSA countries considering their lack of domestic investment funds. Furthermore, for strategic and security reasons, it is not wise for foreign SPVs and banking institutions to own a country's critical infrastructure such as ports, airports, water supply system etc. Therefore, an arrangement such as this where the host government can gradually buy-out its partner overtime is best suited to SSA. The point here is that social conflicts affect the performance of international projects (Al-Sibaie et al., 2014). These conflicts are often the result of various domestic interest groups who view completely foreign ownership or control of public infrastructure in bad light thereby constituting non-commercial risks to the project. Therefore, these non-commercial risks can be reduced by increasing the share of local interest groups or government in the project in absolute terms (Bendjilali & Khan, 1995). The *diminishing musharakah* helps to achieve this outcome more easily while ensuring sustainable service provision, affordability and technology transfer between the partners. Using Islamic finance for PPPs eliminates the need to generate specific stipulated monthly or yearly revenue. Whatever revenue is generated is shared among the investors after deducting operational costs. Citigroup's Chief Economist, Willem Buiter, said 'although the motivation for *diminishing musharakah* may be to adhere to religious codes, but it is a less risky financial arrangement that could solve household debt burdens in the western world' (Shapiro, 2016). Currently, *Musharakah* constitute about 16% of corporate sukuk issues from 2001-2015 (IIFM, 2016).

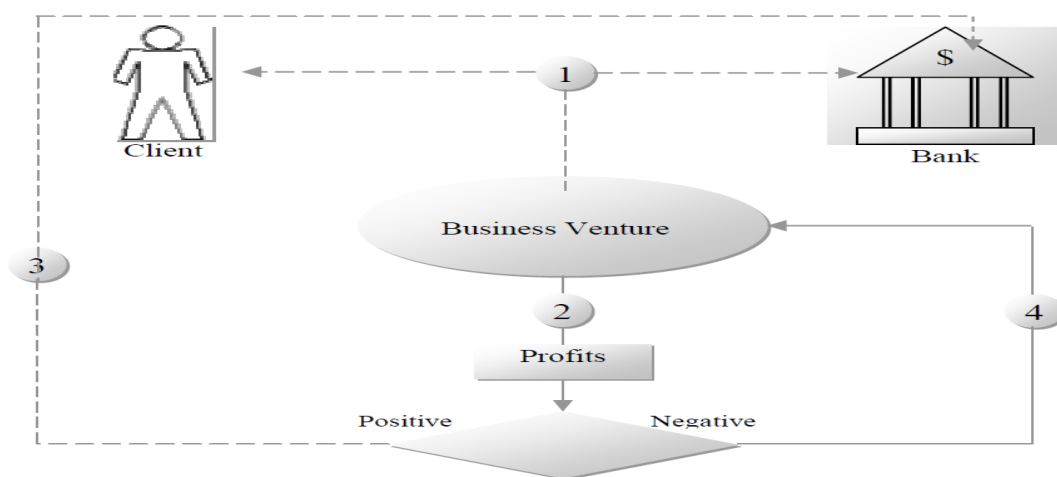


Figure 1: Musharakat Project financing structure

Source: (Obaidullah, 2005)

It is important to note that *Sukuk* certificates are tradable and are either asset-backed or asset-based, making such investments safe. The greatest beneficiaries from a successful application of Islamic project finance to PPPs in SSA will be the millions of people who are forced to drink untreated water (Scanlon et al., 2016), millions of children who die before their 5th birthday due to water-borne diseases (WHO, 2016), millions of farmers whose products perish due to lack of good roads to transport them to urban centres where they are

needed (Naudé & Matthee, 2007), millions of car owners who spend fortunes on car maintenance every year due to bad roads (Teravaninthorn & Raballand, 2008), hundreds of families who die from inhaling toxic fumes from electricity generators due to poor supply from the grid (Eberhard & Von Horen, 1995). Some notable projects that were financed using Islamic finance instruments include:

1. Burj al-Arab - Dubai
2. Maconda park apartments-United States
3. The International Finance Facility for Immunisation-UK
4. Doraleh Container Terminal-Djibouti
5. Bibiyana power plant-Bangladesh
6. Konya hospital-Turkey
7. F1 International Circuit – Bahrain

4.2. CHALLENGES TO ISLAMIC PROJECT FINANCE ADOPTION IN SSA

The use of Islamic project finance for infrastructure projects has been very limited within SSA despite its obvious advantages due to a combination of many complex issues in the region. Some of the challenges include lack of awareness by policy makers in the region, poor marketing by IFIs (Bendjilali & Khan, 1995), market domination by the ‘big four’ consultants relied upon by SSA countries, and the mutual suspicions existing between Muslims and Christians in some SSA countries. In Nigeria for instance, it is the perception of many non-Muslims that using Islamic finance would convert them to Islam despite available evidence to the contrary. Furthermore, PPPs backed by western lenders prefer debt-based financing because higher leverage enables investors achieve higher returns and it is easier to raise debt than equity (Yescombe, 2014). The interest expense on debt is deducted when calculating taxable profit thereby reducing the SPV’s tax liability, this treatment is not given to equity. Furthermore, debt has first claim on the SPV’s assets, hence carries limited risks while equity entails more risk and is compensated with higher dividends. Secondly, governments usually provide protection for debt than equity, creating an incentive for higher leverage (Ehrhardt & Irwin, 2004). Thirdly, the taxation system discriminates in favour of debt in order to encourage external investments in infrastructure (Ehrhardt & Irwin, 2004). The last challenge facing the adoption of Islamic finance has to do with regulation. Banks’ shari’ah boards have been known to give different rulings on the same instrument thereby creating incentives for what has become known as ‘fatwa shopping’ (Oseni, 2017). A recent example of fatwa shopping is the ongoing Dana Gas fiasco in the UAE where the company is asking the courts to declare its outstanding *sukuk* void for their non-compliance with Islamic Sharia law due to the evolution and continual development of Islamic financial instruments and their interpretation. The High Court in London has ruled against Dana gas insisting that it is obligated to fulfil its covenants to *sukuk* investors. The company has instituted another case in the UAE but a judgement has not been rendered in the case. Industry watchers have observed that if Dana Gas succeeds voiding its *sukuk* for non-compliance with Sharia law, confidence in *sukuk* as a financing instrument will be significantly undermined (Billington & Taha, 2018). The shari’ah standards board is working hard on this and many other issues to reduce variability within the Islamic finance regulatory regimes. One way of overcoming these challenges is for SSA governments to adopt well established and less controversial Islamic project finance instruments such as Istisna, Ijarah, Mudarabah, and Musharakah. To further encourage the use of Islamic project financing in SSA, governments can mandate the use of stapled financing mechanism using *Sukuks*. Stapled financing is a pre-arranged financing package for a project developed by the government and provided to bidders during the PPP tender process (World Bank, 2014). SPVs would be permitted to use other financing instruments only if they can prove that it is cheaper and more sustainable than the stapled financing provided by the government.

5. CONCLUSIONS

Sub-Saharan Africa contains the highest number of countries that did not meet the MDGs which expired in 2015. If they are to meet the new SDGs, investments in modern infrastructure using cheap sustainable financing that ensures affordability becomes a priority. However, given the dampening impact of Basel III banking regulations on lending to infrastructure, SSA must seek other sources of financing critical infrastructure. This article has shown that Islamic project finance is a promising financing alternative that is risk-friendly, cheap, and compatible with the ideals underpinning the SDGs. The use of Islamic project finance in PPPs across SSA would lead to increased service affordability, increased value for money and eliminate the

need to design tariffs geared towards full cost recovery. Debt-financing has not done SSA countries much good in the last 3 decades, hence the need to try something else. The use of Islamic project finance will broaden the investor base and help diversify any resulting risks, making PPP project failures the exception rather than the norm in SSA. But, SSA governments and built environment professionals must make the efforts towards understanding Islamic financing instruments in order to decide which instrument best suits their needs.

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