Assessment of Factors Limiting Uptake of Project Financing in Infrastructure Development in Kenyan Public Universities

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Abstract
Developing countries all over the world continue to experience challenges in provision of sound infrastructure. While traditionally the role of infrastructure development vested with the government, recent years have witnessed a shift from this trend. This has led to the government appealing for private sector participation in infrastructure development. In Kenya, increased demand for higher education has caused pressure on existing university facilities thereby compromising the quality of education. In order to bridge the gap in provision of sound infrastructure, private sector participation is needed. Given the enormous amounts of money required, private sector individuals and firms may find it prudent to opt for project financing. Despite the apparent advantages of project financing, this means of funding remains largely underutilized in provision of infrastructure especially in Kenyan Public Universities. The study assessed factors that limit use of project financing in infrastructure development. The study also identified areas where project financing is appropriate. The study gives recommendations that lead to increased uptake of project financing in infrastructure development thereby enhancing economic growth in the country. The study adopted a census research design. Data collected was analysed using both descriptive and correlation analysis

Keywords: Project financing, Infrastructure, Project parties, Special purpose Vehicle, Sponsor and Project Lenders

1. Introduction
1.1 Background of the study
Developing countries all over the world continue to experience challenges in provision of sound infrastructure. While population has been on the rise, infrastructure development has not maintained the same pace. This has led to pressure on existing facilities which if not upgraded, will not bear the impact of increasing population in the future. Anderson W. Petal (2005) while researching on infrastructure and utility services in Brazil found out that the quality of infrastructure greatly influences the productivity of the economy. The level of infrastructure development in Africa is even worse. This is evidenced by poor road network, lack of access to clean drinking water and low electricity connectivity. I.F.C (2001) in its annual report noted that environment for private sector investment in sub-Saharan Africa remains difficult due to poor infrastructure. In the same spirit World Bank (2005) in its annual report noted that Africa is a high risk place to do business. This was attributed to poor infrastructure. Most African countries have in the past relied on donor funding to develop their infrastructure. Poor governance and financial mismanagement have led to misapplication of the donor funds leading to deteriorating level of infrastructure in Africa. This has been worsened by high levels of insecurity in countries such as Somalia and Democratic Republic of Congo. Such levels of insecurity hinder private sector participation as well as foreign direct investment in the infrastructure development.


In Kenya the level of infrastructure development is wanting. Insufficient funding has seen several projects stall for years. Roads are in bad state and housing continues to be a biting problem especially in urban areas. There has been a steady rise in population with no matching provision of infrastructure. In December 2006 I.F.C extended financing to support the revitalization of the Kenya- Uganda railway under a private operator, Rift Valley Railways, at a cost of 32 million U.S dollars in addition to other financiers. Traditionally it was the role of government to provide infrastructure facilities. However considering the heavy capital investment required, most governments are unable to fulfill this role on their own. In appreciating the
importance of sound infrastructure in economic development and considering its inadequacy to provide the same, the government of Kenya has in the past come out to appeal for private sector participation. One such area that requires private sector participation is provision of decent housing.

The country continues to experience increased demand for decent housing. Initiatives have been put in place to upgrade slums. However, the government’s efforts have not been adequate and slum dwellings persist. According to government of Kenya and UNDP (2005) report on improving the lives of slum dwellers, 30% of people in Nairobi live in slums, 35% for Kisumu and 30% for Mombasa.

The situation in the public universities is similar. Over the years there has been a steady rise in the university intake following increased demand for higher education. This has led to a situation where universities admit high numbers of students regardless of their capacity in relation to the physical facilities. The worst affected area is provision of boarding facilities. While not a core area of the university, decent and conducive boarding facility is key to learning. The University admissions are not based on bed capacity especially following the introduction of self-sponsored programmes. This has led to students making arrangement for their own accommodation. Most reside in areas not conducive since they share facilities with commercial businesses. The expansion of Universities has seen opening of new constituent Campuses in commercial areas. In less than three years, the government has established thirteen constituent Colleges. Most of them are poorly equipped; others are in commercial areas next to bars. Inadequate lecture halls and offices for staff are common in public universities as well as inadequate reading space in libraries especially during examination time. This impacts negatively on learning.

1.2 General objective
To assess the factors limiting use of project financing in infrastructure development in Kenyan public Universities.

1.3 Specific objectives
i) To ascertain the extent to which government policy hinders uptake of project financing in infrastructure development in Kenya Public Universities.
ii) To determine the extent to which availability of lenders influences use of project financing in infrastructure development in Kenya Public Universities.
iii) To ascertain the extent to which the need to own and control the project by the project sponsors hinders the use of project financing in infrastructure development in Kenyan public universities.

1.4 Research questions
i) To what extent does government policy hinder uptake of project financing in infrastructure development in Kenya public universities?
ii) To what extent does the availability of lenders influence use of project financing in infrastructure development in Kenyan public universities?
iii) To what extent does the need to own and control the project by the project sponsors hinder the use of project financing in infrastructure development in Kenya public universities?

1.5 Scope of the study
The study assessed factors limiting use of project financing in infrastructure development in Kenyan public universities. The study was limited to the period between the years 2007 and 2011.

2.0 Literature Review
2.1 Evolution of project financing
Project financing as a way of funding economic activities has come a long way. Project financing has been used in the past to finance major projects especially in oil exploration and power generation. According to Kensinger J.W and Martin J.D (1988), one of the earlier application of project financing dates back to 1299 when the English crown enlisted a leading Florentine Merchant Bank to aid in development of Devan Silver mines. The bank received a one year lease for total output of the mines in exchange for paying all the operating costs without recourse to the crown if the value of the amount of extracted ore was less than expected. Over the years, project financing has developed and has been applied in various economic sectors. Since the 1990s deregulation and globalization have accelerated use of project financing.

According to World Bank publication on Global Financing(1997)volume 1, the first growth of the market for infrastructure financing in the 1990’S was likely to continue and broader because of the desire of the government to deliver efficient high grade service and the potential for increased developing country access to international market.

2.2 Financing and ownership models
2.2.1 Build own operate and transfer
This is a financing and ownership model where the build the project, operate it to recover the capital invested together with interest and then transfer ownership back to sponsor. According to CAS consultants (2000) on
private sector participation in rural water supply and sanitation using survey method, it was found thatBOOT contracts are applied in infrastructure development in the water sector. The study found out that BOOT could be useful where the public sector wishes to develop water and sanitation services infrastructure so as to stimulate economic growth but does not wish to be bogged down by the day to day operations and wishes to hand over the scheme for community management after the necessary capacity building. The contractor will be responsible for initial investments and subsequent operations while training the community to take over. This arrangement frees the public sector from the immediate development burden and instead spreads it over time. Such contracts would also be applied in undertaking rehabilitation schemes. The study recommended that sufficient legislation to regulate private sector participation should be put in place. This includes harmonization of Water and Environmental Acts and registration of Community based organizations.

According to World Bank (1994) in its annual report the value of efficiency gain from private participation can outweigh the extra cost of borrowing through a BOOT project, relative to direct government borrowing. The report recommends the strengthening of private sector participation in infrastructure development through BOOT arrangements. BOOT project can either be solicited or unsolicited. When proposals are solicited the project is identified and formulated by the government and the private sector is invited to submit offers for participation. Private company or a group of companies can also submit unsolicited proposals on their own accord. The private group in most cases consists of international contractors, heavy equipment suppliers and plant and system operators together with local partners.

According to Benjamin, C.E. (2004), I.F.C has participated in several infrastructure financing in Africa and other developing worlds in areas of electricity and oil exploration. Using BOOT projects are mainly implemented in areas of power generation and construction but can be extended to areas such as ports and railway line construction. 

Kenya private sector alliance (2004) on infrastructure development and rehabilitation found out that the road network is inadequate to support market growth and recommended road concessioning strategy that will allow private sector participation in the development and maintenance of sections of the roads. The report recommends use of BOOT model.

2.2.2 Build own operate. 

According to a report by Ministry of Water Resources (2006) on commercialization and private sector participation, BOO arrangements are used in supply of water where private companies build wells from which water is drawn and sold to surrounding areas. These included Nyali Wells Water Company which supplied water to residents of Nyali and Karen properties, a private company in Karen. In BOO arrangement the aspect of transfer is not considered since in most cases it takes place after so many years.

Kenya Private sector Alliance (2004) on infrastructure development and rehabilitation recommend the use of BOO model in investment partnerships in areas like Airport development. One problem with the transfer provision is the likelihood of the capital stock of the project being run down as the date of the transfer draws nearer. Unlike in BOOT arrangements, in BOO structure, the project is not transferred to the host government (sponsor). However the owner can divest his stake through the capital market where the public is invited to subscribe to the shares of the entity through an I.P.O. The sale through the capital market will avail financing thereby enabling the lenders to recover their initial investment. This type of structure is good especially in the telecommunication industry

2.2.3 Build Lease Transfer.

For purposes of operation the project control is transferred from the project owners (shareholders) to a lessee. The shareholders retain the full ownership of the project but for operation purposes they lease it out. The sponsor agrees with the lessee to buy the output or service of the project. The lessor (S.P.V) receives the lease rentals guaranteed by the sponsor. This type of structure can be suitable in the housing subsector. In the case of infrastructure development at the local universities, the university council becomes the sponsor of the project. The lenders can be a consortium of companies or individuals, together with international lenders like I.F.C or A.D.B. Operation of the project is left to those who are best suited to run the project professionally so as to maximize output.

2.3 Project financing in general

Antonio Estache et al (2004) on infrastructure services in developing countries found out that Private Public Partnerships are increasingly becoming popular in the wake of disappointment with privatization and concern about fiscal inadequacy. He recommended that PPP should be well structured to enhance service delivery. There should also be increased participation of multilateral agencies in terms of investment and policy reforms. Multilateral agencies have access to capital and are best suited to participate in long term projects. Their presence in different countries affords them an opportunity to compare and contrast diverse policies hence can recommend that which works best.
According to Paul, N.U and Severine, D. (2005) on private sector participation in infrastructure projects in the Republic of Korea, the country had relied on PPP to expand and modernize its infrastructure facilities. They recommended enhancement of the partnership by the government streamlining bidding process and enhancing oversight of PPP contracts by developing effective regulatory institutions.

In another study sponsored by World Bank, Thorsten, B. and Ross, L. (2005) on “Law and Firms Access to Financing”, found out that firms in French legal origin countries face high obstacles in contracting external financing than firms in other countries.

In a World Bank sponsored publication titled “Why government should stop non-social subsidies”, Ramon, L. (2005) found out that governments tend to spend a large share of their resources on goods that have low returns while foregoing investments with very large rates of return. This tends to slow down economic development. He recommended that governments should switch spending priorities so as to get massive dividends.

Sahid, Y. (2007) in a study titled ‘From Creativity to Innovation’ found out that development and commercialization of an idea calls for expertise, ingenuity and entrepreneurial creativity to achieve success. According to I.F.C (2001), the environment for private sector investment in sub-Saharan Africa remains difficult. This was attributed to legislative impediments. Similarly, World Bank (2005) in its annual report noted that Africa is a high cost, high risk place to do business. This was due to poor infrastructure development. Poor road network increases cost of production due increased vehicle repairs and high transport costs.

Political instability increases foreign risk thereby reducing foreign direct investment. The report recommended private sector participation to boost infrastructure development.

2.4 Project financing in Kenya.

Kenya being a developing country has several needs in infrastructure development. The government of Kenya has in the past engaged in various projects with assistance from development partners. According to Kenya private sector alliance Report (2004) on infrastructure development and rehabilitation, the government has initiated projects in areas such as roads and power generation. In the roads sector the government has partnered with development partners to construct Mombasa –Emali road. Currently the government together with Government of China and African Development Bank hasdeveloped Thika Road into a super highway to reduce traffic congestion. They recommend road concessioning strategy to allow further private sector participation in development and maintenance of roads. In 2006, I.F.C extended financing to support revitalization of the Kenya –Uganda Railway under a private operator called Rift Valley Railways. The I.F.C loan of $32 million was meant to support investment program in the railway infrastructure.

In the power subsector, a private company, Mumias Sugar Company sponsored a project that was co-funded by PROPARCO, a leading International Development Financing Company, to the tune of 35 million US dollars. The balance of funds was from the company’s cash flow. The co-generation project produces 38 megawatts, 26 of which it sells to K.P.L.C. The production of electricity has enhanced the overall profitability of the company due to increased revenue arising from sale of electricity. The government in its report titled ‘Achieving Millennium Development Goals in Kenya (2005)’ indicate that energy requirement projection for the period 2005 to 2015 are expected to grow from 5118 Gwh to 9010Gwl. This will require adding capacity from 125 Mw in 2005 to 1714 Mw in 2015.

To meet this target, the report recommends the participation of private sector in provision of electricity by establishing mini hydros and development of alternative energy sources such as wind power. According to World Bank Publication on Global Financing(1997) volume 1, the fast growth of the market for infrastructure financing in the 1990’s was likely to continue and broaden because of the desire of the government to deliver efficient high grade service and the potential for increased developing country access to international capital markets. International participants may come in the form of foreign direct investments where private firms or individuals engage in infrastructure development in foreign countries.

According to Kipsang, K. (2003), poor infrastructure has largely affected and eroded investor confidence. The state of roads, railways and housing is poor. Power subsector has suffered from shortage attributed to low water levels in dams. This poor state of infrastructure has negatively impacted on the economy. He recommended that urgent measures should be undertaken to rehabilitate the road network and improve housing so as to attract investment in the country. Kabiru, E.G (2008) in his study titled “financial management in tertiary institutions” noted that the institutions are inadequately funded. This was depicted by poor physical facilities in these institutions due to reliance on fee collection and government allocation. Poor infrastructure impacted negatively on quality of education in these institutions. He recommended that the management of these institutions should be encouraged to look for alternative sources of income to supplement fee income so as to enhance financial capability and thus develop infrastructure.

According to Gaitho, V.G (1997) on community participation in rural shelter development, communities contribute to financing of projects in the rural areas to supplement government initiatives. Their contribution was in terms of provision of labour and locally available material in construction of simple houses. To improve the
quality of houses constructed, additional funding is required where private sector contributes towards shelter improvement.

Biebei, C.C (2008) assessed factors influencing the level of outsourcing of non-core services as a cost reduction strategy in public universities in Kenya and noted that budgetary allocation for provision of non–core services by universities is inadequate. The study recommended that public universities should develop a documented plan of non-core services for outsourcing. Such services would then be provided by private sector.

3.0 Methodology
The study adopted census research design. Both Primary and secondary data were used. Interviews and questionnaires were used to collect data from the finance officers of the seven public universities. Data collected was presented in charts and frequency tables and then analyzed using descriptive statistics correlation analysis.

4.0 Results and discussions
The data collected from respondents on adequacy of teaching /learning facilities in the seven public universities was summarized as follows:-

The respondents indicated that generally the facilities at the Universities are not adequate, with 71.4% of them saying that the facilities are very inadequate and 28.6% saying they are It was noted that major sources of funds was from fee collection at 57.1 %. This was followed by government grants at 28.6% while bank loans had only 14.3%.

The respondents indicated that following the introduction of parallel degree programme Universities have been able to undertake infrastructure development especially in areas of tuition blocks, hostels, laboratories and libraries. While there is need for expansion, funds have been a limiting factor given declining government funding compared to increasing student enrolment.

From the data collected 71.4% of the respondents indicated that the funds obtained were very inadequate while the rest i.e. 28.6% indicated that the funds were inadequate. This therefore means that generally the public Universities face shortage of funds. This is in comparison to the need for infrastructure development. While all indicated that the physical facilities are not adequate, the funds available cannot meet the need to develop the required facilities. This is based on the fact that infrastructure development requires heavy capital investment and therefore the available sources can be concluded to be generally inadequate. In order for the public Universities to meet the needs to develop physical infrastructure, there is need to look for other sources of funds to supplement the existing ones. The respondents indicated that innovative sources should be pursued.

The data collected indicates that project financing has not taken root in infrastructure development in Kenyan Public Universities. Over 70% of the respondents indicated that they have never employed project financing in their universities. Only 28% indicated some form project financing. Most respondents indicated this means of funding has not been exploited. Given that the physical facilities are inadequate and considering that the current sources of funds are not sufficient, then use of project financing could be the solution. From the data collected it is evident that project financing remains largely under-utilized in infrastructure development.

Most respondents indicated that legislation governing uptake of project financing is not adequate. Over 71% indicated that legislation was not adequate. Only 14.3 % indicated satisfaction with the current legislation.

The lack of adequate legislation governing use of project financing acts as an impediment to employment of this source of funds. The respondents noted that clear policy guidelines should be in place to direct them on employment of project financing. Poor policy guidelines have led the public Universities to over rely on fee collection and limited government grants for infrastructure development. These sources of funds were earlier noted to be themselves inadequate in meeting development needs.

While the government has itself in the recent past employed project financing in areas of hydro power generation and road construction, it has not been supportive of the same in public Universities. The respondents indicated that clear policies on employment of project financing are lacking. They also mentioned that institutional regulations are not clear on project financing. It is therefore important that clear policy guidelines be put in place to encourage uptake of project financing as it can be the solution to the inadequacy of funds in infrastructure development in public Universities.

From the data collected over 85% of the respondents were confident that lenders in project financing can be found. Only 14% of the respondents indicated that lenders are not available. The respondents indicated that when proper policies are put in place both local and international lenders can be attracted to participate in project financing in infrastructure development in public universities. The respondents indicated that incentives such as tax exemptions can be used to attract investors in project financing. While noting the importance of lenders in project financing, the respondents expressed optimism that with proper policies, financiers can be found. From the data collected it can be noted that availability of lenders is not a great hindrance to the uptake of project financing in infrastructure development in public universities.

Most respondents indicated that ownership and control of the project does not limit uptake of project financing to
a great extent with over 57% saying it is less important. Most respondent indicated that provided the facilities are being utilized for the benefit of the university, ownership and control was not very significant. Further they indicated that with BOOT arrangement ownership eventually reverts to the sponsor after the concession period. Therefore it was found that ownership and control of project does not majorly hinder uptake of project financing in infrastructure development in public universities.

4.1 Ranking of Variables
From the data collected the following were the rankings of the various respondents concerning the influence of the various independent variables on uptake of project financing. Rank 1 shows variable that is most important i.e. one with greatest influence on uptake of project financing.

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<th>Respondents</th>
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Thus from data collected all the respondent noted that government policy was the most important in influencing uptake of project financing in infrastructure development in public universities. Five out of the seven respondents ranked availability of lenders as second most important factor influencing project financing. The need to own and control the project by the sponsor was ranked as third most important factor. Therefore from the ranking of the respondents, government policy has greatest influence on uptake of project financing. All of them noted that were government policy to be improved then uptake of project financing would increase. The ranking goes a long way to confirm that what limits use of project financing is majorly lack of proper policy guidelines from the government.

4.2 Correlations of the Variable
Adequacy of legislation is positively correlated to availability of lenders to the extent of 0.70. This means that when adequate legislation is put in place then more lenders are willing to participate in project financing. The contrary is also true, that lack of proper policy guidelines prevents lenders from participating in project financing. The independent variables are all positively correlated to the dependent variable i.e. extent to which universities employ project financing. The correlation between extent to which universities employ project financing and adequacy of legislation was 0.636. This implies that sound policies would encourage uptake of project financing. Lack of proper guidelines acts as hindrance in uptake of project financing. Therefore sound policies are required to enhance the employment of project financing. The correlation between extent to which universities employ project financing and availability of lenders was 0.849. This implies that project financing can only be employed when lenders are available. If lenders in this sector are missing then this means of funding cannot be employed. The high correlation implies that lenders are an important factor in use of project financing. However as noted earlier most respondents were confident that both local and international lenders can be brought on board provided proper legislation exists. The correlation between extent to which the university employees project financing and the need to own and control the project is 0.513. This implies that there is a positive correlation but not so significant. Thus much as project sponsors are interested in owning and controlling the project, this does not greatly hinder them from employing the same.
Generally the independent variables are positively correlated with the dependent variable. This implies that they move in the same direction, meaning that better legislation, availability of lenders and need to own and control the project will enhance uptake of project financing in infrastructure development in public universities.

The correlation of the variables was summarized as follows:-

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*Correlation is significant at the 0.05 level (2 tailed).
**Correlation is significant at the 0.01 level (2 tailed)

5.0 Conclusions and recommendations.

5.1 Conclusions

From the study it can be concluded that project financing as a means of funding has not been exploited in infrastructure development in public universities. This is majorly attributed to lack of clear policies on employment of this means of funding. There is inadequate policy guidelines thereby hindering the use of project financing. Secondly this means of funding is relatively new in public circles in Kenya and the public universities have not been able so far to embrace it.

It can be concluded therefore that of all the factors limiting employment of project financing, government policy plays most crucial role. In order for this means of funding to be fully exploited, there should be adequate and clear policy guidelines on the same. This should be done urgently given that student enrolment in public universities continues to increase due to an upsurge in demand for higher education. Given the enormous resources needed in infrastructure development, project financing is seen as the proper way to go for public
universities. Therefore the sooner this mode of funding is embraced the better in order to spur economic growth in the country through provision of sound infrastructure in line with vision 2030.

5.2 Recommendations

Since government policy majorly influences uptake of project financing to increase the same the government should develop clear policies that are supportive. Proper legislation should be enacted to take care of the interests of all the project parties. This can be done by bringing together all the stakeholders is a special forum where each would outline their interests. Such stakeholders would include university management, financial institutions (both local and international) as well as property developers. The deliberations of such forum can be developed into policies that would guide employment of project financing.

Further, universities should be given greater autonomy or free hand in sourcing for funds for easy and quick decision making. The universities should be allowed to seek innovative means of funding and compete for resources. Such freedom would lead to innovative thinking and most of them would start embracing project financing.

The universities should establish fundraising committees that should be mandated with the task of seeking funds from both local and international lenders, provided that suitable institutional policies are put in place. Such international sources include African Development Bank and International Finance Corporation both of which participate in project financing. Such financiers can be obtained through advertisement. Thus the universities should solicit for funding by presenting their lists of projects that need funding. Interested financiers would then approach the university for further deliberation.

In addition to proper and clear policy guidelines, the government should also extent tax exemptions on developments by the private sector. This would encourage the private sector to partner with the public sector in development of infrastructure especially in public universities.

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