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# WORKING THE CONUNDRUM IN PUBLIC-PRIVATE PARTNERSHIPS (PPPs) FOR COMMUNITY BENEFIT IN SOUTH AFRICA

South Africa, like other African economies has been faced with funding constraints resulting in the inability to finance infrastructure development for its exponentially growing population. In recent years, the country has witnessed a wave of protests against poor service delivery especially in the poor communities. Post-apartheid, the government tried to privatize inefficient and unprofitable parastatals to improve service delivery. However, the move faced strong resistance from unions and community representatives who were against the user-pay privatization initiatives. With the growing frustration in the poor South African communities, the government has slowly been engaging the private sector to meet its perennial funding gap through Public-Private Partnerships. Although PPPs have enabled the government to access private finance for investment in infrastructure, it has been widely argued that PPPs are a reincarnation of the controversial and unpopular privatization concept that failed in the past. This study investigates the success of public-private partnerships in financing infrastructure development in South Africa. The study conducted interviews and applied capital budgeting techniques to examine the success of government goals and the net benefit from public-private partnerships. The results show that government overestimates the extent to which public-private partnerships can solve infrastructure and service

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delivery problems. Hence, the findings suggest that the public see PPPs as private entities created to siphon the coffers of government. Thus, this study recommends improved transparency in PPPs management for government to gain public trust.

**Keywords**: public-private partnerships, South Africa, corruption in government, public funding, infrastructure development

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# РОЗВ'ЯЗАННЯ ПАРАДОКСІВ ПУБЛІЧНО-ПРИВАТНОГО ПАРТНЕРСТВА (ППП) ЗАДЛЯ ДОБРОБУТУ ГРОМАДИ В ПІВДЕННІЙ АФРИЦІ

Південна Африка, як і інші африканські економіки, стикається з обмеженим фінансуванням, що визначає неможливість фінансування розвитку інфраструктури для населення, що зростає експоненціально. В останні роки в країні спостерігається хвиля протестів, пов'язаних із поганим наданням послуг, особливо в бідних громадах. Після апартеїду уряд намагався приватизувати неефективні та збиткові «напівдержавні» організації, щоб покращити надання послуг. Однак цей рух зіштовхнувся з сильним опором профспілок та представників громад, які виступали проти ініціатив приватизації, покликаних зробити послуги платними для споживачів. З огляду на усе більше розчарування бідних південноафриканських громад уряд повільно почав залучати приватний сектор для заповнення пробілів у фінансуванні шляхом публічно-приватного партнерства. І хоч воно створило можливість доступу до приватного фінансування інвестицій в інфраструктуру для уряду, широко обговорювалося, що цей механізм є реінкарнацією контроверсійної та непопулярної концепції приватизації, що не принесла результатів у минулому. У статті проаналізовано успіх публічно-приватного партнерства в фінансуванні розвитку інфраструктури в Південній Африці. Дослідження ґрунтується на інтерв'ю та використанні прикладних технологій капітального бюджетування з метою вивчення успіхів у досягненні цілей уряду та чистих вигод від публічно-приватного партнерства. Результати показують, що уряд переоцінив його можливості у вирішенні проблем інфраструктури та надання послуг. Висновки свідчать, що громадськість розглядає публічно-приватне партнерство як приватні структури, створені задля «вимивання» урядових фондів. Тому в даному дослідженні уряду рекомендовано покращити прозорість управління таким партнерством, щоб повернути довіру суспільства

**Ключові слова**: публічно-приватне партнерство, Південна Африка, державна корупція, державне фінансування, розвиток інфраструктури.

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# РЕШЕНИЕ ПАРАДОКСОВ ПУБЛИЧНО-ЧАСТНОГО ПАРТНЕРСТВА (ПЧП) РАДИ БЛАГОПОЛУЧИЯ ОБЩЕСТВА В ЮЖНОЙ АФРИКЕ

Южная Африка, как и другие африканские экономики, сталкивается с ограниченным финансированием, что определяет невозможность финансирования развития инфраструктуры для населения, растущего экспоненииально. В последние годы в стране наблюдается волна протестов, связанных с низким качеством предоставляемых услуг, особенно в бедных общинах. После апартеида правительство пыталось приватизировать неэффективные и убыточные «полугосударственные» организации, чтобы повысить уровень услуг. Однако это движение столкнулось с сильным сопротивлением профсоюзов и представителей общин, выступавших против инициатив приватизации, призванных сделать услуги платными для потребителей. С учетом нарастающего разочарования бедных южноафриканских общин правительство медленно начало привлекать частный сектор для заполнения пробелов в финансировании путем публично-частного партнерства. И хотя это партнерство дало возможность доступа к частному финансированию инвестиций в инфраструктуру для правительства, широко обсуждалось, что такое партнерство — реинкарнация контроверсийной и непопулярной концепции приватизации, ранее не принесшей результатов. В статье проанализирован успех публично-частного партнерства в финансировании развития инфраструктуры в Южной Африке. Исследование основано на интервью и использовании прикладных технологий капитального бюджетирования с целью исследования успехов в достижении целей правительства и чистых выгод от партнерства. Результаты показывают, что правительство переоценило возможности публично-частного партнерства в решении проблем инфраструктуры и услуг. Выводы подчеркивают, что общественность рассматривает публичночастное партнерство как частные структуры, ориентированные на «размывание» правительственных фондов. Поэтому в данном исследовании правительству рекомендовано сделать более прозрачным управление таким партнерством, чтоб вернуть доверие общества.

**Ключевые слова**: публично-частное партнерство, Южная Африка, государственная коррупция, государственное финансирование, развитие инфраструктуры.

**Introduction.** Infrastructure development has become one of the topical issues in Africa's emerging economies. In most African countries, after independence, the available infrastructure services were often inadequate to meet demand from the growing population which result in congestion and service rationing (Williams, 2012). In most cases, the services are also of low quality and unreliable, while other sectors of the population are totally un-served (Oluwole and Kraemer, 2013). Governments usually place the blame at the door of inadequate funding resources and the various needs of the population (Lavlinskii, 2010).

The World Bank's report on infrastructure in Africa estimates that sub-Saharan Africa needs to spend US\$93 billion a year on infrastructure (Oluwole and Kraemer, 2013), of which the existing sources can only finance US\$45 billion through government spending, user charges, and private partnerships (Fombad, 2015). This has created a funding gap totalling US\$48 billion (Kim and Han, 2015). Of the US\$48 billion, Kim and Han attributed US\$17 billion «to inefficiency in existing spending due to poor governance, poor planning of investments, under-investment in maintenance, under-charging for services and operating inefficiencies». According to the World Bank, the continent's infrastructure deficit is considered one of the most significant barriers to sustaining Africa's growth (Wang, 2015).

On the other hand, the post-apartheid promises of the new South African government exert pressure on it to provide basic services to the poor. These essential services that people need in order to participate and advance in society include education, healthcare, electricity, water and sanitation, transport and telecommunications. However, more than twenty years post-apartheid, the government is still struggling to effectively meet the demand for these basic services amid growing population. Progressive economists have for long been calling for privatisation of these major government functions. Conversely, community representatives and unions have strongly condemned any privatisation initiatives citing that they do not benefit the poor. Similarly, other analysts have also defended the stance against privatisation, arguing that these services must be provided by the government for free to the low income society.

According to Adams and Iwu (2015), South Africans express their frustrations through protest marches. As far back as 2004, Wertheimer et al. noted that the wave of protest actions across the country's provinces was due to poor infrastructure performance which has been attributed to poor government planning and coordination. In addition, the construction of new assets costs more and mostly takes longer than expected. On the other hand, the infrastructure assets available are, in many cases, poorly maintained which also increase costs and reduce benefits leading to escalated service delivery protests. In the wake of political promises in South Africa, Kula and Fryatt (2014) argue that service delivery of basic municipal services such as water, electricity and toilets coupled with high levels of poverty and the lack of housing has added to the growing dissatisfaction in the poor communities. With this often disappointing infrastructure delivery, the government has slowly been engaging the private sector to meet the perennial funding gap through Public-Private Partnerships (PPPs) (Akyeampong, 2009).

If properly implemented, Ke et al. (2010) claim that PPPs help overcome some of these pervasive challenges that the government is facing by mobilizing other funding sources for infrastructure development. Along similar lines, Ismail and Azzahra Haris, (2014) add that PPPs also help to improve project selection by attracting private finance. Hence, countries with relatively long PPP histories have found that PPPs manage infrastructure development better than traditional public procurement, with projects coming in on time and on budget more often (Amjad and MacLeod, 2014). Priya and Jesintha (2011) support this view, adding that PPPs also help to guarantee proper maintenance of infrastructure by keeping assets in top form. Therefore many governments now provide broader PPP policies that encompass the interests of all parties so as to capture the salient objectives of each PPP project. However, the choices as well as the relative priority of each PPP objective depend on the government's priorities.

**Background of the study.** Although public-private partnerships (PPPs) have enabled governments to access private finance for investment in infrastructure, they have systematic limitations and problems that are almost impossible to solve (Poulton and Macartney, 2012). Firstly, PPPs may appear as a relief to funding problems more than is actually the case, but almost all the governments' fiscal commitments to PPPs are usually unclear (Fombad, 2015). Secondly, these partnerships have led most governments to accepting higher fiscal commitments and risks under PPPs than would be consistent with prudent public financial management. Lastly, while PPPs may positively contribute to better project analysis by bringing fresh ideas, responsibility for planning and project selection, usually PPPs contracts are not flexible and their project costs are mostly unclear.

Against this background, a number of hard questions can be asked about these government partnerships with private sector that may not easily be answered through exploratory research. The main objective of this study is to investigate why almost all PPPs fails to complete their infrastructure projects within the agreed budgets, thus requiring additional

funds. In addition, if PPPs invariably involve higher public spending than conventional projects citing higher costs of capital, as is in most cases, does this exercise have efficiency gains or loss? Furthermore, the government is still providing bond guarantees for the PPPs, does this not amount to government funding which defeat the purpose of transferring risk to the private partners in the contract?

This study is therefore inspired by the aim to answer the following sub-questions;

- 1) Are PPPs not a reincarnation of the failed privatisation attempts?
- 2) Are PPPs not deliberately skewed in favour of private profit?
- 3) Are PPPs not government's implied incompetence?
- 4) How much of this is about politicians wanting to avoid blame when government-managed projects run into problems?

Case study. In an attempt to substantiate the merits of this study, the following cases (The Gautrain Project in Gauteng Province, the Kelvin Power Station in Kempton Park, and Municipal Public-Private Partnership in South Africa) are part of a few 'user-paying' PPPs that are considered to be very successful. However, their services are not just beyond the reach of lower-to-middle class, but they have rather transformed into multi-billion rand cash cows for the private partners. Therefore, this study argues that, PPPs have become somewhat worse than ordinary privatisation. Evidence shows that PPPs may be a way of siphoning funds from both the government and the populace through services that should be provided by the government. Hence, further question that can be asked about these "successful PPPs" is, for who are they successful?

### a) The Gautrain Project in Gauteng Province

The Gautrain rapid rail link is an 80-kilometre mass rapid transit railway system which links Johannesburg, Pretoria and O. R. Tambo International Airport. It is the largest and costliest transport infrastructure PPP project ever proposed by a provincial government in South Africa. With an estimated cost of R20 Billion, it was constructed to relieve the traffic congestion in the Johannesburg—Pretoria traffic corridor and offer commuters a viable alternative to road transport. This modern transport network, the biggest public—private partnership in Africa has been strongly questioned by critics who see the project as less beneficial as it is out of reach of the majority of ordinary commuters.

### b) The Kelvin Power Station in Kempton Park

Kelvin Power Station is one of the few power stations in South Africa not owned by government through its parastatal, Eskom. The power station became one of South Africa's first experiments in privatising power generation in 2001 and since then, it has been resold for the fourteenth time to Nedbank and Investec. The coal-powered station technically has the capacity to generate a sorely needed 600 megawatts, but none of its successive owners has been able to deliver more than a third of that. Instead, they have made hasty exits or ceded the station back to its creditors.

## c) Municipal Public-Private Partnership in South Africa

Although there are a number of successful PPP projects in South Africa's infrastructure development, healthcare, renewable energy, transportation and environment, water infrastructure and sanitation (for urban and major metropolitan areas), recent negative developments have put these partnerships on the spotlight. South Africa established a firm regulatory framework governed by the Municipal Systems Act (MSA) and the Municipal Management Finance Act (AFMA) that enables municipal, provincial and national government institutions to enter into PPP agreements. However, these partnerships have not been successful as they have been misconstrued as another form of privatising services that government should provide to the public for free.

On the other hand, authorities in national departments, provinces and municipalities mistrust private sector intentions in these PPPs' contracts. Further, some political leaders have manipulated these projects to gain political mileage whilst others dislike PPPs because they mistrust the private sector believing that the private sector will try to make profit while shirking its responsibilities to provide infrastructure services. This belief often goes hand-in-hand with the notion that the government will always lose out when negotiating commercial contracts with the private sector because the private sector can bring more resources to bear in the negotiations. Subsequently, questions are raised as to whether PPPs are the most effective government intervention to address the problem of poor service delivery.

Review of literature. Poulton and Macartney (2012) submit that PPPs are value drivers and serve as one of the best ways governments «can improve value for money in infrastructure provision». According to Khadaroo (2014) this can be done in a number of ways; firstly through risk transfer where the greater part of the risk is allocated to an independent body with the right capacity and capability to produce results at a reduced cost to government. Secondly, the nature of the bidding process is such that bidders are encouraged to seek innovative solutions in order to meet the tender specifications (Satish and Shah, 2009). Then lastly, «private parties are motivated to use a single facility to support multiple revenue streams, reducing the cost of any particular service from the facility» (Zaharioaie, 2012). According to De Schepper et al. (2014) this «allows a sponsoring department or agency to enter into a long-term contract for services to be delivered when and as required». Hence, managing a PPP will be about the intended project and its objectives.

Widdus (2005) extended the list of benefits of PPPs if there is transparency and accountability. Demirag, Khadaroo, Stapleton and Stevenson (2012) argue that the benefits of PPP contracts are conditional on the private party providing the specified outputs at the agreed quality, quantity, and time frame; hence government is on the downside. Therefore, it follows that, «if performance requirements are not met, service payments to the private sector party may be abated» (DeCorla-Souza and Barker, 2005). Although PPPs contracts are competitively structured, there has been a lack of clarity on budget allocations which compromises transparency (Osei-Kyei and Chan, 2015). Osei-Kyei and Chan (2015) add that there have been a number of projects that faced foreclosure raising questions of accountability and predictability in the contracts.

Not refuting that PPPs mobilise additional financial resource, Codecasa and Ponzini (2011) argue that in user-charged projects, the PPPs normally end up in a monopoly position exploiting users whose choices are limited. They further question why some of these user-charged projects have no audited financial results and no exact figures are ever supplied on the cost. Wetterberg (2011) substantiates this claim by citing a case in point, The Chapman's Peak PPP in South Africa. Also a number of irregularities were raised on this project, among them: no tender processes for the construction project, no independent quantity surveyors appointed and no clarity on fiscal expenditures (Dreyer et al., 2005).

**Methodology**. A qualitative design was applied in this study. For effect, the interview method was used to collect data. A total of 45 participants were interviewed. The participants included 10 individuals who work or have worked at management levels in entities involved in PPPs in South Africa. These individuals were considered key informants considering their senior positions in the participating firms' PPPs. Another 20 individuals from communities that have or are benefiting from PPPs were randomly selected and also interviewed. They were approached with the carrot that their participation would elucidate their concerns and or satisfaction with the projects. Further, 5 individuals from the private sector, including investment banks, operating companies, construction companies, and transaction advisors

were interviewed. Their participation was considered crucial considering that they were often the funders and implementers of the PPPs. To identify them, we took the route of first establishing the firms that played any sort of role in PPP development and implementation. This was an arduous task that required knowledge of the operations of the firms concerned. Once these crucial subjects were identified and they agreed to participate in the study, interview dates were set and subsequently undertaken. These participants were also helpful in pointing us in the right direction of two major implementing agencies whose senior managers were also interviewed. Lastly, we obtained the consent of four line managers of three provincial and municipal governments. They were also interviewed expressing their opinion on how they view PPPs.

Considering the sensitive nature of the study, the participants were briefed and debriefed after the interview. The reason for this process was to guarantee their anonymity and at the same time strengthen the confidentiality clause in the interview contract.

Data were collected within six months.

**Project appraisals.** To answer the questions raised, this study applied financial data from two case studies; the Kelvin Power Station and Gautrain Rapid Rail Link in South Africa to evaluate the projects. Before appraising the projects to estimate their real value, the cost of debt financing was determined as follows:

$$after tax k_d = k_d (1 - T) \tag{1}$$

$$k_d$$
 = annual interest charge / market value of debt outstanding (2)

This cost of debt was applied on bond financing, where T is that percentage tax charged on non-exempted financing. For equity financing, the following models were used;

Using bond yield 
$$k_b = long term debt interest + risk premium$$
 (3)

After the cost of capital (which is cost of equity and cost of debt), the weighted average cost of capital (WACC) used to discount expected cash flows for the period was calculated as follows:

$$WACC = W_d k_d (1 - T) + W_F K_\varrho \tag{4}$$

Hence the values of the projects were computed as follows:

$$V_F = EBIT / WACC \times since they are cashflow generation projects$$
 (5)

Equating the project value to the government's shareholding in the PPPs, the fair value must be determined if it is prudent. Also, appraising the projects to establish if they were viable to generate value for the government by applying the following Net Present Value (NPV) model:

$$NPV = \sum_{i=0}^{n} \frac{CF_i}{(1+r)^n} - I_o$$
 (6)

**Findings.** We gathered from the interviews that there is a gross lack of fiscal clarity in these PPP projects, and this has led the government to overstate the levels to which partnerships increase additional resources to fund infrastructure development. Thus, these partnerships create temptations for the projects to be over-budgeted for and over-spent to satisfy politicians who are under pressure to deliver new infrastructure. Ultimately, the government accepts unproportionate commitments under PPPs than they should in a prudent public financial management process. This suggests that the government often takes on excessive fiscal risk under PPPs by providing demand guarantees.

On the question of why most PPPs blow their budgets, the respondents agree that private parties tend to draw enticing proposals when bidding for contracts which are usually not sustainable. Sponsors usually have an incentive to overestimate the demand and create a profit impression on non-viable projects subsequently creating substantial risk for the fiscus.

The analysis of Gautrain Rapid Rail Link Project in Gauteng Province and Municipal Public-Private Partnerships in South Africa projects show that they have an average net present value of approximately US\$7 billion each after a net investment of less than US\$1million. With almost the same results, the Kelvin Power Station in Kempton Park has a NPV of approximately US\$2 billion from an outlay of only US\$211 million. The NPV looks unrealistically high because the private partner is responsible for collecting revenue for over 25 years. Evidence of monopoly and overcharging users can be seen on the Gautrain Rapid Rail Link PPP where commuters pay an average of R70 per trip, which is unreasonably high for a 47km stretch. Also, the interviewees were unanimous in pointing that, even though PPPs may be a noble intention, they create a fertile ground for corruption. Hence, they have become magical sources of free money for the minority (usually politicians).

Conclusion and recommendations. Developing economies are known to experience socioeconomic difficulties, weak institutions as well as dilapidated infrastructure. Often, as a result of unmet needs of the populace, citizens resort to violent protests. Even though the government tends to blame their citizens for its inability to provide functional public goods and services, there is ample evidence that this is not the case. The evidence lies in the numerous cases of maladministration and corruption that have been reported in mainstream media and even in scholarly works. Nonetheless, PPPs have been found to assist governments reach their goals of providing for their citizens. Essentially, PPPs have been beneficial in some instances. But at the same time, some PPPs have been recklessly negotiated and administered. Our findings confirm this view.

After a careful analysis of the results in this study, we make recommendations that may help to improve transparency in PPPs management for governments to gain public trust. While PPPs management has disastrous limitations, they can be mitigated through good contract design. However there is an inherent challenge in delineating the fiscal commitments that government should consider. On issues of corruption, we suggest that if corruption is to be eliminated in the country, there should be a cultural transformation, political goodwill to fight corruption and a vigilant civil society to act as whistle blowers whenever a case of corruption is sighted. At the same time, politicians must behave ethically to uphold the principles of transparency, fairness, non-discrimination, efficiency and effectiveness in public procurement so as to ensure value for money. This adds to other laid down solutions such as government incentives, stretched commissions that enforce internal controls in procurement and conducting surprise procurement audits.

**Future research.** Scholarly discussions regarding PPPs are gathering momentum, especially in sub-Saharan Africa because of growing infrastructure problems. However, some areas are still highly contentious and thus call for further research. Firstly, analysts claim that the

level of PPPs engagement in South Africa is still by far too low than it should be and the process is too slow in important sectors with positive developmental impact on economic growth. Others also contend that the policy framework for PPPs emphasizes more regulation rather than promoting and developing capacity for implementation. Therefore, further research can explore this scholarly conversation. Secondly, talks about PPPs are generally acceptable for large PPPs with huge capital outlays and not accommodative to smaller projects.

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