“Innovative financing mechanisms for government to leverage private sector investment in infrastructure for sustainable development in South Africa: case study in the water sector”

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Innovative financing mechanisms for government to leverage private sector investment in infrastructure for sustainable development in South Africa: case study in the water sector

Abstract

The research article presents catalytic and innovative mechanisms for the use of fiscal grant funding to crowd in private sector investment for water infrastructure projects in the Republic of South Africa. Chapter Two of the South African Constitution (1996) includes a series of socio-economic rights, of which the right of access to water is one of those afforded its people, but this access is not currently provided to the entire population. The study uses a mixed methods approach, utilizing both quantitative and qualitative data sequentially. The data gathered involved a non-random purposive sample of best practice from European Union-funded projects internationally, South Africa-based projects, and qualitative interviews with officials from international development finance institutions and the National Treasury. It was found that the strategic targeting of grant funding to mitigate project risks, better enabled investor confidence. Through the use of three innovative financing tools, specifically investment grants, interest rate subsidies and technical assistance, government was able to leverage further investment into projects. The research concluded that blended grants for debt financing should be a consideration in South Africa. Specifically, as the current challenges in the water sector relate to constrained financial gaps, as well as capacity and skills deficits, these could be addressed strategically and deliberately through the use of blended fiscal grants targeting innovative financing tools. To allow for blending as recommended, budget reforms in South Africa are necessary.

Keywords: blended finance, infrastructure, innovative financing, funding, financing, leverage.
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Introduction

The South African government acknowledges that access to water is a high priority on its developmental agenda and through its National Development Plan (NPC, 2011). The 2013 budget was the first budget in which the fiscal allocations were aligned with the framework of the National Development Plan and for the first time it included a chapter in the Budget Review on infrastructure development and investment. This chapter outlines a set of so-called "mega projects", which are under consideration by the South African government for the period 2013–2023. The total projected value of these mega projects amounted to R3 592m and covered a wide range of sectors including water, transport, electricity, liquid fuels, education, health, telecommunication and human settlements. The water sector projects, in terms of rand value, constitute only 3.6% of the projected expenditure of all the listed mega projects (RSA, 2013).

1. Theoretical model for behavioral portfolio

In most developing countries, government's role in facilitating support for infrastructure projects is hampered by lack of finance, capacity and expertise. For the private sector to consider financing infrastructure development, the concerns of project companies, sponsors or lenders will have to be addressed. It is understood that ring-fenced project financing (Gatti, 2013) is the most appropriate manner to address these concerns and thereby procure dedicated financing and management for infrastructure projects by public and private sector partners on a project. The question then arises as to what governments can do to enhance this method of financing? What are the prerequisites or conditions that would facilitate project financing? What instruments does it have at its disposal to facilitate project financing?

The theoretical analysis of infrastructure project finance is a fairly recent development. One of the first studies was by Aschauer (1989) who found that certain categories of public expenditure, namely, water and transport, influenced productivity, and thereby growth. This analysis draws from public finance theory by arguing that it is necessary for governments to use public funds to provide certain goods and services where the private sector is unable or unwilling to participate.

The private sector will invest in a project when its risks are addressed and/or shared in a manner that proves profitability. Investors make decisions based on their self-interest, namely where they can get best benefit. Theoretical analysis in this regard then needs to look at what the public sector can do to facilitate this investment by the private sector. This is done through addressing the concerns and risks

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that the private sector may have. In other words, what security can the public sector provide for private involvement?

Building on previous theories, Shefrin and Stratman (2000) developed the Behavioral Portfolio Theory (BPT). This theory tackled portfolio construction and security design of a portfolio, and argued that investors have different rationales in creating portfolios, both being risk averse and risk seeking; and thus, portfolios are designed to address both these facets. Investors are driven by emotions of fear and hope which in turn drive their choices. This results in different layering of a portfolio, or pockets of portfolios. How these layers are configured and specifically the configuration of the riskier layers become important. An appreciation of this configuration allows the public sector to understand when, where and how the private sector invests in water projects and provides a paradigm where the public sector can influence the outcome of these configurations to facilitate the inclusion of the private sector within project finance.

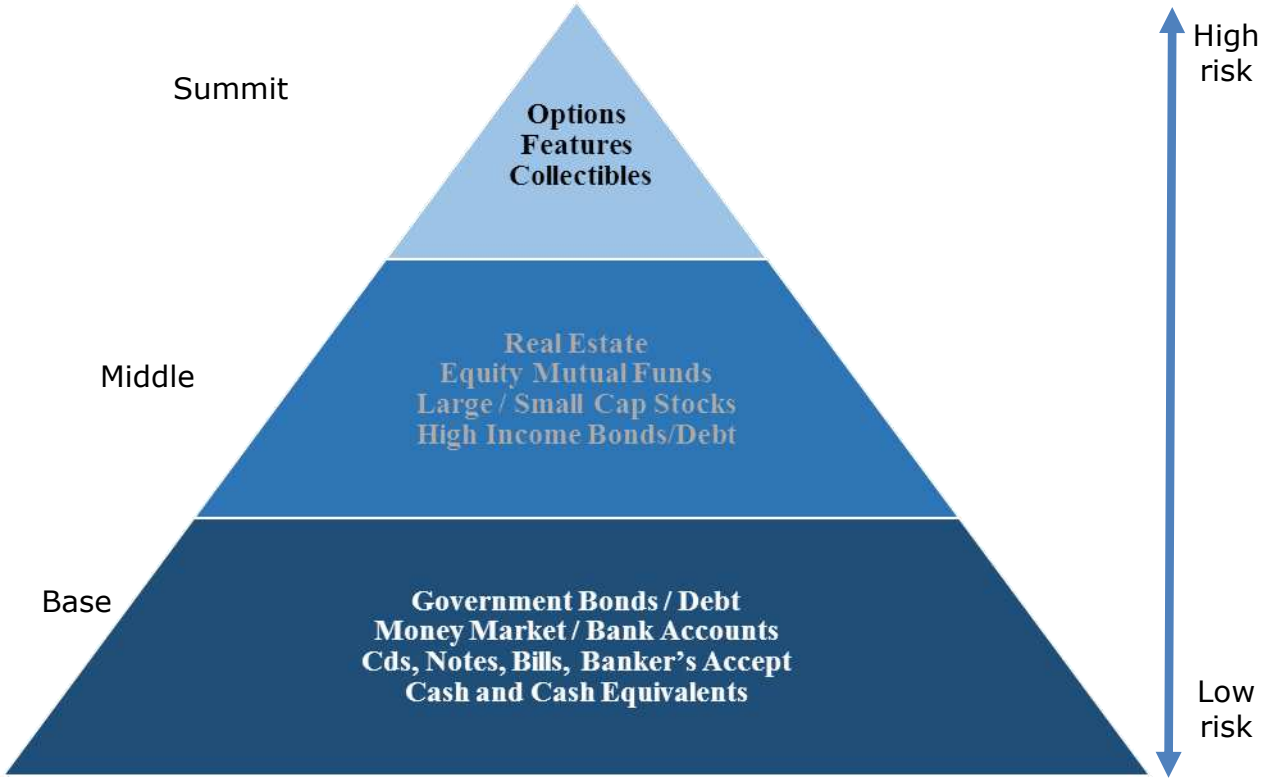

Figure 1. Behavioral portfolio theory

Source: Blog.sharenet.co.za (2017).

Within BPT, there is a greater potential for investment in riskier projects. According to Shefrin and Statman (2000), the base layer of the model is to allow for stability and financial well-being, while the upper layers allow involvement in riskier projects. Using BPT allows the public sector to appreciate the involvement of the private sector within water infrastructure, and specifically it enhances an understanding of the private sectors appetite for risk. Then, armed with this knowledge, the public sector can determine which risks could be addressed while limiting public funds and enhancing private sector investment.

2. Review of the related literature

South Africa understands that its developmental needs can only be addressed by partnerships between the public sector, private sector and non-state actors (NPC, 2011). However, as South Africa is a developing country, its developmental challenges are far greater than those facing a developed nation. This would require that investment risk perceived by private sector be addressed to ensure a conducive environment for attracting private sector investment in the delivery of infrastructure.

The OECD supported a model called FEASIBLE that many of its member countries have used as a tool to assess financing options for water. In a report (OECD, 2003) on the assessment of the use of this tool, the OECD found that in countries that rely on government budget to finance operational and maintenance costs within the water sector, this is not a sustainable option. The different countries and their mix of financing tools were considered within this framework. The report found that government's

role in financing the water sector is the "establishment of policy, regulatory and institutional frameworks, through which resources from users, financial markets, capital markets, local budgets and enterprises can be mobilized in a complementary way, and applied as cost-effectively as possible to achieve agreed goals" (OECD, 2003).

Bruinette (2010) called for South Africa to deal with its political and governmental constraints to allow for private-public collaboration to not only address infrastructure backlogs, but also to include infrastructure maintenance and the development of new infrastructure that will have an impact on economic growth. The study offered a gearing mechanism for government grants, isolating projects and using the grant as a "limited risk deposit", alongside loans.

The gearing of grants to be used as leverage to source additional financing has been used strategically in South Africa. The Municipal Finance Management Act Circular 51 (RSA, 2010) provided for the use of conditional grant transfers to the municipalities as guarantees against loan financing. The security of these annual transfers from conditional grants would facilitate the other debt financing to fast track capital projects. These budgets are, however, confined to the period of the medium-term expenditure framework, which is three years (Baloyi, 2011).

2.1. The concept of innovative financing. During the last decade, the concept of "innovative financing" within the infrastructure sector has become popular. It has been sometimes referred to as "blended finance", especially within the official development assistance (ODA) environment, where grant aid has been used to leverage other forms of finance that are mainly loans. Grants are usually official development assistance alongside concessionary loans offered by the implementing DFIs that these development partners bring into countries as part of a suite of instruments for development cooperation.

The World Bank (2009) identified four mechanisms of innovative financing. See Figure 2 below for more on these mechanisms.

USES

SOURCES	Public	Private
Leverage Private	**Public-Private Partnerships** *Private finance for public service delivery and other public functions*	**Pure Private** *Private initiative in the market and in civil society*
Mobilize Public	**Solidarity** *Public-to-public transfers using concessional flows (Official Development Assistance)*	**Catalytic** *Public support for market creation and development or for promoting private entry into existing markets*

Figure 2. Innovative mechanisms of development finance

Source: World Bank (2009).

The four mechanisms are: private, solidarity (either through public entities within a country or bilateral arrangements between countries), public–private and catalytic (where the public sector creates and develops the private sector to allow for private sector involvement). The catalytic category in Figure 2 above is important within this research study, where public funds would be considered to provide lever age for private inclusion within infrastructure investment. Financial leverage in this scenario would be calculated as the catalytic effect of the public sector grant to allow for the mobilization of the private sector to ensure the total costs of the project is addressed. This can be calculated as $\frac{Overall\ cost\ of\ project}{grant\ element}$.

There are a number of instruments and tools of innovative financing that enhance the understanding of grant funding facilitation role in attracting private sector investment. The instruments, mainly debt, equity and risk mitigation, provide certainty for a greater rate of return for the investor, and this secures the investment. In terms of debt, catalytic innovative financing mechanisms include diaspora bonds, social/development impact bonds and resource backed finance. Equity instruments entail encouraging private voluntary contributions through matching funds and risk capital. A variety of risk mitigation instruments exist including: viability gap funding, investment grant, interest rate subsidy, guarantees, technical assistance and project preparation assistance.

3. Research methodology

3.1 Research approach. This study used a mixed research approach, utilizing both qualitative and quantitative data collection methods. The quantitative analysis was mainly based on information from secondary documentation. The qualitative data from interviews were used to support the findings and strengthen the recommendations of the study.

3.2. Research sample selection. The sample for the quantitative data was a non-random purposive sample composed of 39 projects funded by the European Commission outside South Africa through grant funding, as well as selection of nine South African projects. All projects were either current or recent projects in the water sector. This enabled the evaluation of alignment to current policies and legislation, and for the officials interviewed to be in a position to reflect on recent projects they are familiar with in the sector. A further consideration was the availability of quantitative data as much of the data had only recently been uploaded on the official EU website, and information had to be requested for current SA projects.

The selection of the qualitative sample was done on the basis of expertise, knowledge and understanding of the sector. A total of 12 officials, from both the South African public sector and international development finance institutions were interviewed in ten interview sessions. Table 1 provides the detail of the interviewees and the rationale for their selection within the sample.

Table 1. Interview schedule

Interview	No. of officials	DFI/ Unit within the NT	Position	Rationale for interview
1	1	AFD	Regional Director	DFI experience in South Africa, regional and international; understanding of blending mechanisms
2	2	EIB	Head of Regional Representation and Business Analyst	DFI experience in South Africa, regional and international; understanding of blending mechanisms
3	1	KFW	Regional Director	DFI experience in South Africa, regional and international; understanding of blending mechanisms
4	1	ALM: NT	Acting Chief Director, Governance and Financial Analysis	Issues relating to governance and borrowing of SOEs, and in particular, TCTA and the DBSA.
5	2	Water Sector Policy, ALM: NT	Director and Senior Analyst for Water Sector	Issues relating to the water authority and water boards; borrowing mandate within the water sector and policy reforms.
6	1	Water Sector, Public Finance: NT	Senior Budget Analyst, Water	Fiscal matters regarding the Department of Water and Sanitation
7	1	Water Sector, Public Finance: NT	Director, Water and Cogta	Fiscal matters regarding the Department of Water and Sanitation, and Cogta
8	1	Neighborhood Development Grant, IGR: NT	Chief Director	Support to the metros and secondary cities that access the Neighborhood Development Grant
9	1	Intergovernmental policy and planning, IGR: NT	Director	Responsible for the conditional grants and transfers that municipalities access
10	1	Government Technical Assistance Program: NT	Director: Transaction Advisory and PPP	Manages PPP support from National Treasury PPP unit within GTAC; experience in providing government technical assistance

Source: authors' own.

3.3. Data collection. The data collection focused on the use of innovative financing mechanisms within the water sector. Figure 2 outlined the four mechanisms that the World Bank (2009) considered innovative, where grant funding is used catalytically to leverage private sector support within projects. Debt, equity or risk mitigation are the main instruments within these mechanisms that allow for this inclusion of the private sector, by addressing private sector concerns and risks. The data collection mainly focused on which of these instruments and their tools were used and how each was applied within the EU-funded projects in order to consider and inform the replication within South Africa.

3.3.1. Primary qualitative data collection. The population used to sample participants were primarily policy makers and implementers within international Development Finance Institutions and the South African government, most specifically those responsible for budgetary allocations in the water sector. Specifically, the population sample targeted officials within development finance institutions for a perspective from a financier or lender's point of view, and officials from the South African government, National Treasury, for a perspective from a borrower's point of view.

The interviews covered 12 officials in total, including the key stakeholders. The first round of interviews was with four officials within the three international development finance institutions (iDFIs) that lend to the water sector in South Africa and internationally. These are the European Investment Bank (EIB), the German Development Bank – Kreditanstalt für Wiederaufbau (KFW), and the

French Development Bank, Agence Française de Développement (AFD). The second round of interviews was with eight officials from the National Treasury (South African Government) responsible for developing and implementing key decisions on financing mechanisms, allocation of fiscal funds, and borrowing.

The main purpose of the first round of interviews targeting iDFIs was to understand what funding tools have been used and how they facilitated investment in the water sector. These interviews assisted in the verification and triangulation of the quantitative data. The aim of the second round of interviews heldwith the South African government officials from the National Treasury was to share the initial findings of the study and ascertain the possibility of replication and application of these financing tools within a South African context.

Both rounds of interviews were guided by a set of questions covering three aspects:

- to ascertain the potential and challenges for investment;
- to seek clarity on how grants have been used strategically; and
- to seek clarity on how investments in water sector projects were facilitated.

In addition, an open ended discussion was facilitated regarding the understanding and potential for replication in South Africa of best practices used within the EU. The interview process of the first round of qualitative data gathering builds on the initial findings of the quantitative data and the second round of qualitative data gathering enriched the research assignment's initial analysis and recommendations. This contributed to the credibility of the data and relevance of the study to South Africa.

3.3.2. Secondary quantitative data collection. Data from an EU sample of 39 projects were collected and collated into a dataset. The data were sourced from a variety of documents including annual reports, sector reports and independent evaluations of the projects, as well as the specific project reports supported by information from the EU project portal: http://ec.europa.eu/europeaid/policies/innovative-financial-instruments-blending/blending-operations_en.

Information on the projects was then captured with Microsoft Excel to form a dataset of EU projects. Data included information on sources of financing, a breakdown of budget allocations, the financiers, and a breakdown of what the grant element within the budget was used for in terms of investment in the water sector. The dataset was sent to the European Union Delegation for validation with a request for clarification and explanations of the data as captured within the Excel sheet.

The second sample was of nine South African projects. The information was gathered from concessionaires and owners of the projects. This dataset included information on sources of finance, a breakdown of budgets, the financiers and activities that were funded under the different funding sources.

4. Data analysis

The quantitative data were analyzed using Microsoft Excel, which allowed for the dis-aggregation of the data, amongst others focusing on the types of financing tools used, specific economic country classification, aspects of the project funded by grants, and financial leverage of the grant.

The qualitative data process of the interviews provided an understanding and substantiation of the financing tools and their relevance, and presented a descriptive analysis of the different considerations for the application of the instruments. This facilitated an explanation-building technique in interpreting what conditions allowed for investment in the international examples, and which opportunities and recommendations the research assignment could offer to South Africa.

5. Main findings and analysis

5.1. Eu-supported projects. The dataset for the EU-supported projects covered 39 projects, all in the water sector, which were initiated in the period between 2008 and 2015. The total value/cost of the projects amounted to 5 423.69 mln. Euro and the total value/cost of the grant component of these projects amounted to 379.44 mln. Euro. The grant component was official development assistance (ODA) to countries and in all cases it was earmarked as a targeted financing mechanism to support water projects. The grants in this sample were used for technical assistance, investment grants and interest rate subsidies.

The projects were implemented in countries where the GDP per capita ranged from USD 608 to USD 8,861, with the country economic classification ranging from lower income to upper middle income. The countries (owners of the projects) were located in Eastern Europe (Armenia, Georgia, Kyrgyzstan Republic, Ukraine, Moldova, and Azerbaijan), South America (Peru, Mexico, Columbia, Nicaragua, and Dominican Republic), Asia (Lebanon, Sri Lanka, Bangladesh, and Timor-Leste) and Africa (Tunisia, Morocco, Uganda, Tanzania, Egypt, Angola, Namibia, and Kenya). Some projects were regional in nature, which included a few countries collaborating on a joint project.

The individual total project cost/value ranged from 1.6 mln. Euro to 615 mln. Euro and the grant portions per individual project, from 0.8 mln. to 50 mln.

The grant contributions in the 39 projects originated from seven EU-affiliated donor entities (Asian Infrastructure Fund (AIF), Caribbean Infrastructure Fund (CIF), Investment Fund for Central Asia (IFCA), Investment Facility for the Pacific (IFP), Infrastructure Trust Fund (ITF), Latin America Infrastructure Fund (LAIF) and the Neighbourhood Investment Facility (NIF).

Figure 3 illustrates the breakdown of total grant value as a percentage of total project costs per project within the sample. The grant valueas a percentage of total project cost ranged from 1.26% to 96% in the sample.

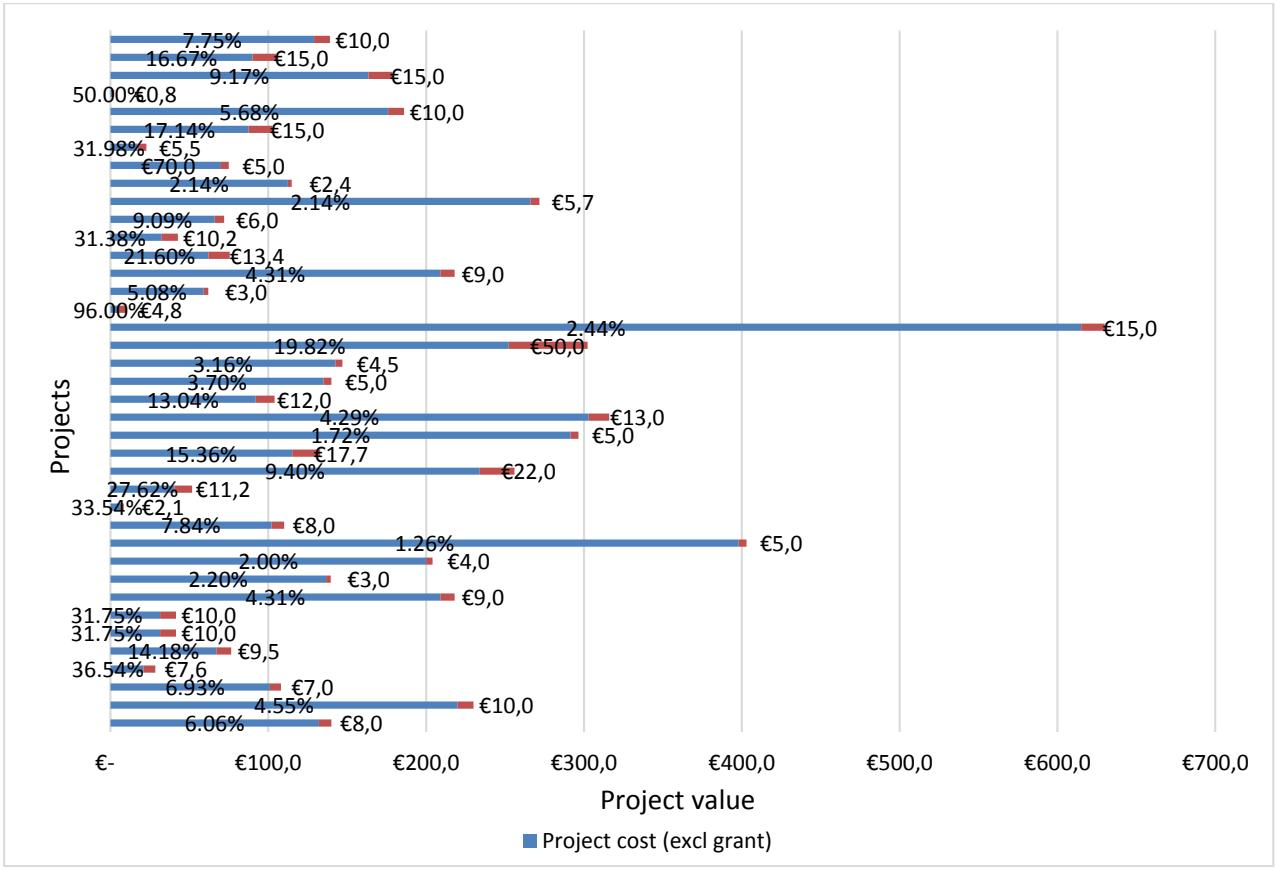

Figure 3. Proportion of grant cost per total project cost of the EU-supported project sample

The grant contributions within these 39 projects were used as risk mitigation instruments, specifically using the financing tools of investment grants, interest rate subsidies and technical assistance.

5.2. Leverage rate. For the purposes of the research assignment, the project leverage rate (calculated as total costs/grant cost) were calculated for each project. For the EU sample of projects, this leverage rate per project ranged from 1.04 to 79.6, with an average leverage of 18.63 across the 39 projects. This implies that for each 1 million Euro spent on either of the innovative financing tools (investment grants, interest rate subsidy or technical assistance), the project was able to leverage total costs to the average amount of 18.63 mln. Euro. The higher the leverage amount, the more the financing tool was able to crowd in private sector financing for the project.

No clear or direct link could be established between the total project cost and the leverage rate. Although a simple regression analysis showed a moderate positive linear correlation ($r = 0.677$) between the total project cost and leverage, r^2 and the adjusted r^2 were 0.459 and 0.444, respectively. In other words, the size/cost of the project did not directly impact, or explain the changes in the leverage rate.

Figure 5 and Table 3 illustrate the proportion of the tools used against the total budget per project, and then the leverage rate per tool against total value/cost of the project.

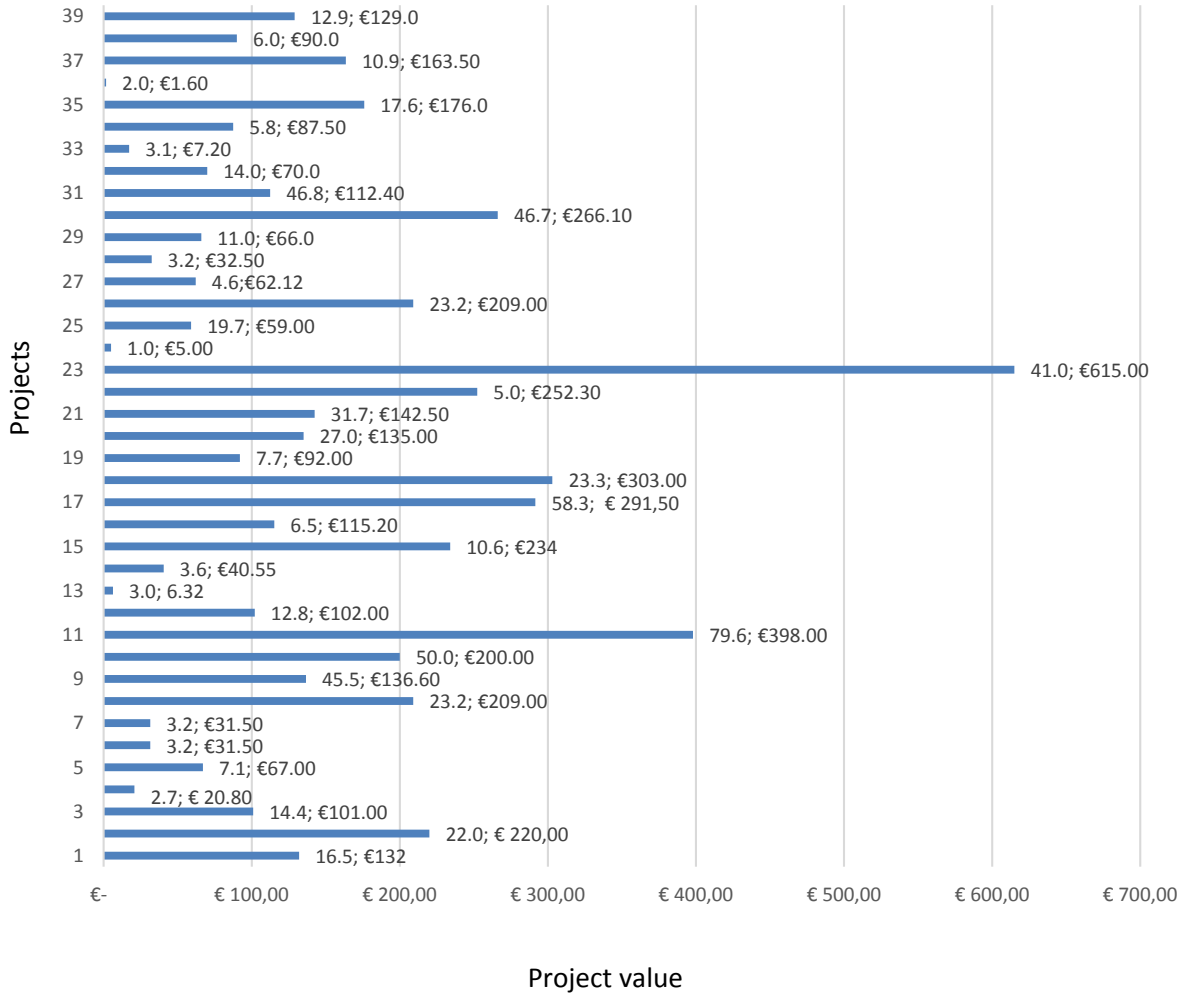

Figure 4. The leverage rate and total project cost for the EU projects

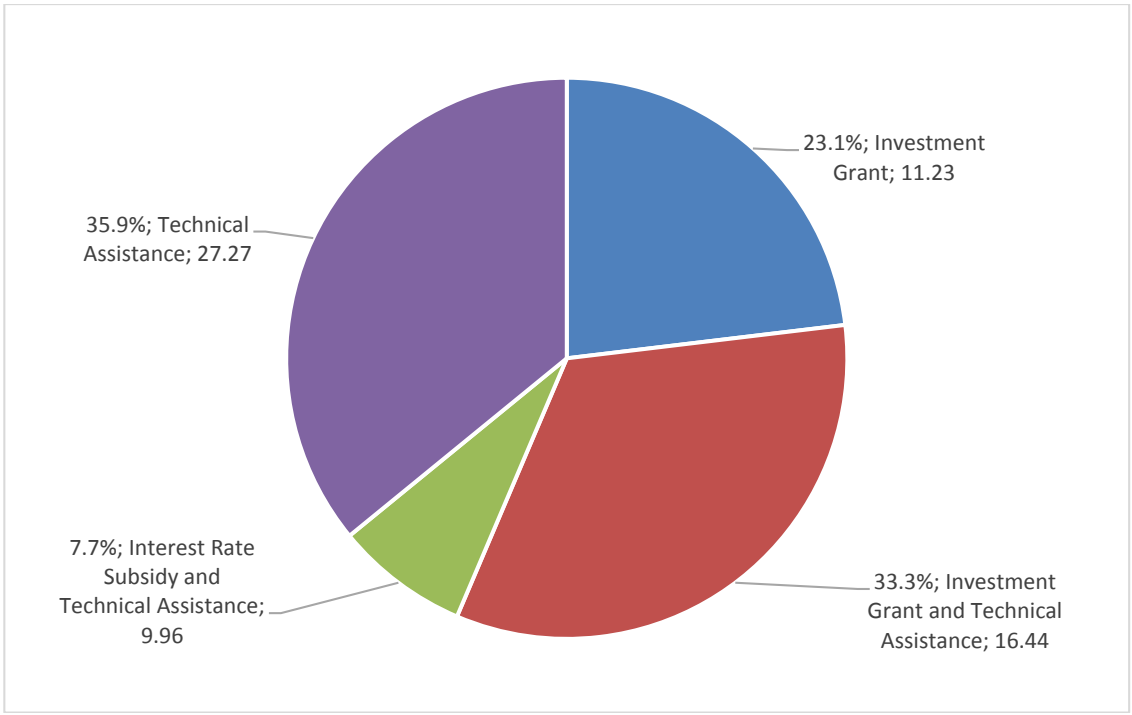

Figure 5. Average leverage rate per financing tool: EU project sample

Table 2. Leverage rate of financing tools used within the EU-supported project sample

All projects – financing tools used	Average leverage	% used	Number of times used
Investment grant	11.2	23.1%	9.0
Investment grant and technical assistance	16.4	33.3%	13.0
Interest rate subsidy &technical assistance	10.0	7.7%	3.0
Technical assistance	27.3	35.9%	14.0

The leverage effect of the grant element on the total financing costs of the project within the EU-supported projects, can be seen as effective in ensuring financial closure to projects by the leverage rate being substantive within each tool, and with the number of times they were used within the sample. Technical assistance was used the most and provided the biggest leverage, followed by its combination with investment grants and lastly with interest rate subsidies.

The study then investigated whether the country's economic classification within the EU-supported projects provided an indication of the types of innovative financing tools employed in using grants. From the sample, technical assistance spanned across lower income countries through to upper middle income countries. Interest rate subsidies were only used as a financing tool in lower and lower-middle income countries, with no examples in the sample of these subsidies being employed in upper middle income countries. In a reverse trend, investment grants were not used in any of the projects in lower income countries and this financing tool was only used in upper and lower middle income countries. In the projects of a regional nature, only technical assistance, including technical assistance in combination with investment grants, were used.

Table 3. Breakdown of financing tools as per economic country classification within the EU-supported project sample

Country classification	Tools used	# times used	% used in classification	Average leverage
Low-income countries		2		
	Interest rate subsidies &technical assistance	2	100.0%	8.57
Lower middle-income countries		25		
	Investment grants	8	32.0%	11.75
	Investment grants &technical assistance	9	36.0%	16.31
	Interest rate subsidies &technical assistance	1	4.0%	12.75
	Technical assistance	7	28.0%	19.10
Upper middle-income countries		8		
	Investment grants	1	12.5%	7.05
	Investment grants &technical assistance	3	37.%	14.60
	Technical assistance	4	50.0%	36.51
Regional		4		
	Investment grants &technical assistance	1	25.0%	23.22
	Technical assistance	3	75.0%	34.00

5.3. South African projects. The dataset for South African projects covered a sample of nine projects in the water sector. The information on these projects was sourced from information in the public domain and was augmented through information requested from various sources, including the project owners and the DFIs supporting these projects.

Of the nine sampled projects, five projects belong tomunicipalities (local government) and four to the Department of Water and Sanitation (national government), through its water authority of Trans Caledon Tunnel Authority (TCTA).

Seven of the nine projects in the South African dataset have reached financial conclusion and are currently in the implementation and ongoing operations and maintenance phases. The remaining two projects in the sample have not reached financial conclusion, with the social aspects currently being funded by the fiscus. Of the seven projects where the financing of the project was completed, the grant element ranged from 0% to 32.7% of the total project value.

Table 4. Overview of the financing of the South African sample

ID	Owner	On/off budget financing	Period	Total project cost	Grant portion	Leverage
1	Municipality-concession	On budget	2000–2030	R 435 332 084.81	R 99 809 664.00	4.36
2	Municipality-concession	On budget	1999–2029	R 440 990 000.00	R 13 235 000.00	33.32
3	Municipality-concession	On budget	2011–2021	R 26 477 513.00	R 24 969 536.00	1.06
4	Municipality-concession	Off budget	2001–2021	R 18 000 000.00	R 0.00	N/A
5	Municipality	On budget	2013–2023	R 335 000 000.00	R 0.00	N/A
6	Water Authority	Off budget	2011–2031	R 2 066 000 000.00	R 158 000 000.00	13.08
7	Water Authority	Off budget	2004–2017	R 205 000 000.00	R 670 225 814.00	0.31
8	Water Authority	Combination of on-and off budget. On budget: social. Off-budget: commercial	Current	Not finalized	Not finalized	N/A
9	Water Authority	Combination of on-and off budget (commercial)	Current	Not finalized	Not finalized	N/A

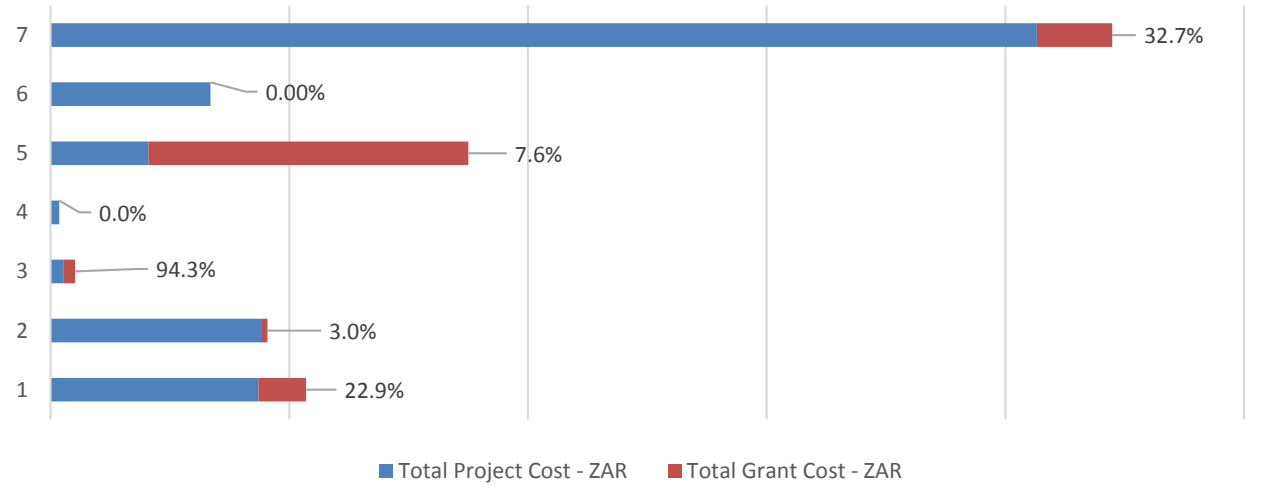

Figure 6. Proportion of grant cost as per total cost of the South African project sample where financing had been finalized

The period of time in which the projects were implemented ranged from as early as 1999 through to 2016. In some respects, the time period of the sampled projects and the related findings, track the natural progression of thinking about financing water sector infrastructure in South Africa, with a progression to a bigger mix of financing options that includes private sector in the later years.

5.3.1. Leverage rate. Given the manner in which the grants were used, the incomplete financing information and that some of the projects had not reached financial close, leverage was difficult to calculate. Of the individual projects where leverage could be calculated (the two concession projects with the municipalities), the leverage of the conditional grants to total project costs ranged from 4.36 to 33.32. In the project where the leverage was low (4.36) the full drawdown from the Development Bank of Southern Africa (DBSA) loan was not taken and thus, the total costs of the project were lower than originally planned and the proportion of total project costs to grants (leverage) was as a result lower than anticipated.

The leverage rate for all the projects in the South African sample, for which the rate could be calculated, ranged from 0 (where there was no grant contribution) to 33.32, with an average of 8.80. These exclude the three projects where leverage could not be calculated due to the project not reaching financial close, and where the borrowing was against the balance sheet of the municipality and not project finance.

The South African sample showed a very weak negative correlation between the total project costs and the leverage rate (r=0.147). R^2 and adjusted r^2 were 0.021 and –0.222, respectively. The correlation between total project costs and leverage rate is even weaker in the sample of South African projects than the EU-supported projects. Although the size of the projects does not have an impact on the leverage rate achieved on these projects, the untargeted nature of fiscal funding towards these innovative tools is a possible explanation for the even weaker correlation as compared to the EU-supported projects, where the correlation was a moderate positive linear correlation.

5.3.2. Innovative tools and financing. On analysis, the South African sample of projects showed a relationship between the nature of the project ownership and the financing mechanisms employed. In the cases where the project ownership was a municipality (local government) 4 out of these 5 projects, the projects could be characterized as concessions. These concession projects were long term and their start dates dated back to the earlier period in the sample – around 1999.

Two of the concession projects brought in the private sector to execute the water services function of the local municipalities. In these cases, the investment was financed through a mix of user charges, conditional grants and loans taken by the concessionaire. Grants were not targeted towards the execution of specific aspects of the project cycle, but rather served as contributions to the overall budget/cost of the project.

From all the projects in the South African sample, 44.4% of the projects used on-balance sheet financing mechanisms; 33.3% used a combination of on- and off-balance sheet financing and 22.2% used purely off-balance sheet financing.

The source of funding for the on-budget projects included the fiscus (i.e., national department budget allocations and transfers to the municipalities), conditional grants, and revenues that were taken into account from taxes and tariffs. For the projects that used off-budget sources, the funding sources included lending instruments, loans and bonds.

The mix of loan financing in the South African project sample included concessionary loans from DFIs (AFD, KFW, EIB, and DBSA), revolving loans as a short term non-concessional mechanism (DBSA), commercial loans to local governments (Investec Bank and Rand Merchant Bank) and bonds or commercial paper to finance projects where the water authority was the project owner.

In addition, the project sample provided examples of using user fees and tariffs in a combination of on- and off-budget mechanisms.

User fees and tariffs were sourced from both residential end users and the industry. The latter included long-term offtake agreements from stakeholders such as state-owned entities and private sector industry, mainly mining and metal companies: some of these offtake agreements are currently under discussion in the projects where financial closure has not been reached.

Lastly, the project sample also included examples of the use of shareholders' equity, which entails a private entity contribution, mainly from their profits in the project to be paid back to the shareholders.

5.3.3. Grant utilization. The data set of South African projects was also analysed to identify how the grants were used. In all cases, in this set of projects, the grants were solely used to fill the gap in securing project financing.

Loan financing, where used, was pledged against the security of conditional grants in the case of the municipalities. In some cases (municipal concession projects), the conditional grants were transferred to the concessionaire to finance the project and/or pay for services delivered by the concessionaire. The examples of the water authority being the project owner, the grant funding (from either the national department, entities or water board) was used to make up the total project budget, and not targeted specifically within the project.

5.3.4. Findings of the administered interviews. The main findings from the administered interviews shed some light on the context in which water projects, and their financing modalities, were executed in South Africa. They specifically provided insight into the risks related with, and the barriers to water infrastructure delivery. These interviews further explored and provided some additional insight, into the understanding and strategic use of grant funding within this paradigm, and an understanding of how EU-supported grant funding targeting specific financing tools was used to crowd in further investment.

During the round 1 of the interview with the iDFIs, it was stressed that in their experience, the South African government is curtailed by an approach where financing water projects is limited to only what the fiscus can buy. In other words, the fiscal funds are not used to leverage funds for further investment. It was explained that, despite the fact that the government is currently borrowing, it was not to the potential they have experienced in other countries. In the view of the iDFIs, there is scope for much more borrowing, and this could, in turn, fast track the delivery of services within the water sector in general.

The round 2 South African interviewees attempted to explain the low borrowing rates though various factors, including the perceptions that water should be free and that authorities lack the skills and capacity to implement projects. The low borrowing rates were further explained by a hesitancy to borrow due to a low capacity to engage within this paradigm because of the added responsibilities for accountability, monitoring and evaluation. They acknowledged that there was a need to increase the requisite technical skills and capacity for management, monitoring and evaluation. The capabilities of the entities and municipalities in terms of technical, financial and management skills was an issue raised by almost all the interviewees.

Project financing would ensure ring fencing of projects, transparency and accountability against projects. Project financing and a more rigorous update of the current framework for capital budgeting was given as examples of the required reforms within the water sector (and infrastructure in general) for budget allocation and oversight. The key departments that were identified to lead this were the National Treasury in collaboration with Cooperative Governance and Traditional Affairs and the Department of Water and Sanitation.

The iDFI interviewees were familiar with the three financial tools that were identified in the quantitative data. The South African interviewees were familiar with the aspects of technical assistance, but not all were familiar with the workings of the interest rate subsidies and investment grants. Furthermore, the targeted nature of allocating grant funding against these financing tools was not familiar to the South African interviewees. In other words, their experience of allocations of fiscal grant funds did not provide guidelines and prescripts to use allocations of fiscal funds against such financing tools. Given the constraints and current budget cuts and the unwillingness to increase debt but rather to manage debt responsibly, the interviewees expressed a willingness to consider the leverage potential for such tools.

Conclusion and implications for South Africa

The themes and issues discussed in the literature review resonated with the findings of the research assignment. The OECD (2003) concerns regarding long-term sustainability due to the over reliance on public sector involvement in water sector infrastructure development, led to a recommended shift towards private sector involvement in this sector.

Similarly, the World Bank (2009) offered innovative mechanisms, using debt, equity and risk mitigation instruments, as possible solutions. This study found that within the water sector, the use of risk mitigation instruments addressed the concerns of the private sector to allow for their participation and inclusion, specifically through the financing tools of investment grants, interest rate subsidies and technical assistance.

This research assignment found that within the EU-supported projects, grant funding was spent on three financing tools namely technical assistance, investment grants and interest rate subsidies, which were used as instruments of risk mitigation. These interventions could be seen as credit enhancement mechanisms aimed towards addressing project risks, and thereby securing DFI funding to the project. Can a portion of the South African limited fiscal grant funding consider these three innovative tools in a similar manner? Participants, in the interview process, unanimously acknowledged that there was an immediate need to consider the use of such catalytic instruments that would leverage debt financing from the strategic use of fiscal funds. The impact of these financing tools within a project is relevant to the amount of financing it was able to leverage within the total costs of the projects. The size of the projects did not matter on the leverage rate of these financing tools as explained in the previous chapter.

Recommendations

Enhancing the delivery of water services requires addressing the challenges across the delivery value chain and developing an investment strategy that aligns and addresses these challenges holistically.

It is recommended that the first step should be recognizing the use of grants within a blended framework of debt financing in order to increase investment within the sector. It is also important that the grants be used not only as funds within a total budget, but also strategically to address risks prevalent within the sector. This would imply that a portion of the grant allocation should be dedicated for the purposes of addressing risks or gaps within the project delivery cycle.

It is further recommended that the two financing tools identified within this study, namely technical assistance and investment grants, be considered within this strategic use of the fiscal grant. These innovative tools will enable government to proactively take on significant risk (as opposed to the lenders taking the risk). These risk mitigation tools, by targeting the challenges within the project, offer comfort to the lender and thereby increase the possibility of committing their investment. In other words, the strategic use of this targeted grant funding leverages funding for projects by the crowding private sector investment.

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