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Research Paper

The water finance gap and the multiple interpretations of 'bankability'

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ABSTRACT

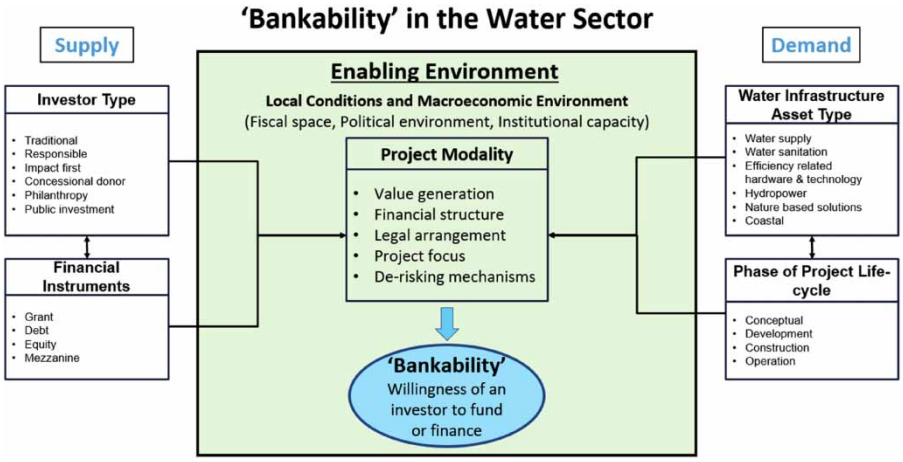
In discussing progress on achieving SDG target 6.1 (universal access to water services by 2023), a large 'financing gap' is frequently referred to. It is often repeated in development circles that the key to bridging the 'financing gap' in the water sector is through the creation of 'bankable' water projects. However, there remains a wide gap between technical professionals in the water sector and market-oriented financiers in understanding how 'bankability' is practically operationalized. This paper presents a framework of bankability, which highlights the complexity of making projects in the water services sector bankable. This complexity means that making projects bankable requires innovative water project structuring to align interests of investors, water entrepreneurs, and society to leverage more capital into the water sector.

Key words: bankability, blended finance, financing gap, water finance

HIGHLIGHTS

- Different factors determine the 'bankability' of projects in the water sector.
- Different investor types have different interpretations of when projects are 'bankable'.
- Different understandings of 'bankability' complicate the achievement of blended finance as an instrument to generate investment in the water sector.

GRAPHICAL ABSTRACT



1. INTRODUCTION

Sustainable Development Goals (SDGs) 6.1 and 6.2, which stipulate that universal access to safely managed water and sanitation services should be achieved by 2030, has become a guiding objective in the global water services sector. Achievement of this objective is often linked to the so-called finance gap, which indicates the difference between the required investment

level to achieve these goals and the actual level of investment in the global water services sector. An often-cited World Bank study from 2016 estimates the required investment in the water sector to be US$ 114 billion per year to achieve universal service coverage (Hutton & Varughese 2016). This figure of US$ 114 billion is three times the actual annual global investment in the water services sector (Ajami *et al.* 2018). Although the figure of US$ 114 billion represents a global figure, it also obscures regional differences. Hutton & Varughese (2016: 7) highlight that 'greater capital spending is needed in Sub-Saharan Africa'.

In discussing this finance gap, the private sector is often forwarded by organizations like the World Bank and OECD as this gap (Leigland *et al.* 2016; OECD 2017, 2019). In deliberating the role of private sector investments, these organizations frequently refer to the challenges of accessing private sector finance. A major challenge in generating private investment in the water sector of developing countries is that these '[p]rivate investors tend to view the water sector in emerging markets as not creditworthy' (Leigland *et al.* 2016: 3).

To address this challenge and allow for greater access to private sector finance, the approach of blended finance is increasingly promoted by the World Bank and OECD. The central aim of blended finance is to take projects that are on the verge of commercial viability and bring them, through a creative mixture of public and private money, to a state in which they are deemed 'bankable', and, as such, able to access the large volume of commercial lenders that are potentially available to organizations in the water sector (Andersen *et al.* 2019). In blended finance, this concept of 'bankability' plays a prominent role. Illustrative of this emphasis on bankability is a quote by the former World Bank President Jim Yong Kim, who declared in 2015 that '[t]he real challenge is not a matter of money but a lack of bankable projects – a sufficient supply of commercially viable and sustainable infrastructure projects'.[1] Although the term bankability is frequently referred to as an important component of bridging the finance gap, the concept is rarely defined (Bender 2017; Alaerts 2019; OECD 2019).

A straightforward definition of a bankable project is that it concerns a project which an investor is willing to fund or finance. However, what determines this willingness to fund is not clear. When a project is considered bankable is clear, but what makes it bankable remains opaque.

1.1. A broader understanding of 'bankability'

'Bankability', while often depicted as being dichotomous in that a project is either able to receive financing from a commercial bank or not, is in fact more complex within the context of the water sector. Water and sanitation services are both a basic human necessity as well as a human right. As a basic and essential necessity, these services develop and exist in a context of complex environmental and social dynamics. For water-focused projects, where complex environments and a relatively high amount of project-related risks exist, 'it is clear that there are various complexities surrounding any attempt to define bankability' (Ellis & Pillay 2017). With different metrics used to evaluate water projects and services, for different investors, at different investment phases, different interpretations of 'bankability' in the water sector are possible. As more impact-oriented investors in the water sector are emerging globally, there is a gradual transition away from a purely financial understanding of 'bankability'. An alternative and broader perception of 'bankability' and what it means to be 'bankable' in the water sector is slowly growing. There are growing arguments that the 'definition of bankability should be wider and encompass both financial returns and capture the social/environmental benefits of projects' to create an environment in which more eligible projects are also deemed to be 'bankable' for different investors (Ellis & Pillay 2017).

A broader definition of 'bankability' embraces a wider middle ground on the spectrum between 'non-bankable' to 'bankable'. This can be done though acknowledgement of the multiple benefits that water infrastructure investment has on society and the environment at large (Roy *et al.* 2011). A water project that has an unclear business model from a cash-flow perspective and that may quickly be deemed 'non-bankable', like a river restoration project, provides an illustrative example. Through acknowledging and quantifying different value outputs creatively to attract certain investors, it is possible to turn such a 'non-bankable' project into a 'bankable' one. In a river restoration project, while there are few cash-based revenues, the project will likely be 'improving habitat and carbon sequestration, sustaining livelihoods, controlling nutrient flows into water bodies, and buffering the potential impacts of climate change' such as flooding (Roy *et al.* 2011). As international incentive structures such as carbon markets, natural capital accounting, and the EU Taxonomy continue to evolve, it is possible that consortiums of investors embracing these frameworks will also emerge. In these blended investor consortiums, some investors willing to accept concessional financial

[1] https://www.reuters.com/article/imf-worldbank-idINL2N0S40SH20141009.

returns will be able to leverage the skills and mandates of other investors who focus on other types of returns to make the project 'bankable' for that particular consortium of investors given the conditions.

In this article, we develop a framework to operationalize a broader understanding of bankability. The proposed framework defines bankability as a multi-dimensional concept that consists of six elements that jointly determine the degree to which a project is judged as being bankable. The elements we will elaborate on concern the investor type, the financial instruments, the enabling environment, the type of water infrastructure, the phase of the project cycle, and the project modality. We suggest that an understanding of these elements explains the willingness of a particular investor or consortium of investors to invest in a particular project, thus making it bankable. The framework also highlights that many different interpretations of bankability will exist depending on the elements in the framework. Although the framework highlights different dimensions of bankability, the discussion of the elements also indicates that ultimately the bankability depends on the investor's acceptance of the risk/return profile of a given project. This risk/return profile figures in most elements of the framework (Figure 1).

2. METHODS

The proposed bankability framework was developed through an elaborate literature review conducted between September 2021 and April 2022. In addition to reviewed literature, a total of 47 semi-structured interviews were carried out. These semi-structured interviews were carried out both in person and online with financiers and funders active in the water sector to understand how 'bankability' is understood by different organizations and investors. The interviewees mainly concerned Dutch agencies and businesses and organizations active in the Kenyan water sector. A range of questions were posed to understand how different investment criteria are prioritized by different investors. Answers were recorded and analyzed to capture how 'bankability' is practically operationalized depending on the priorities, mandates, and approaches of investors active in the water sector. A list of the interviewed organizations is presented in Supplementary Annex 1.

The choice of focusing on Dutch agencies and organizations, and particularly those actively investing in the Kenyan water sector, was driven by two reasons. Firstly, the authors are based in the Netherlands and have networks in Kenya allowing for relatively easy access to resource persons. Secondly, the Dutch 'aid to trade' policy positions the Netherlands as a country actively seeking to leverage more private capital into the global water. This ambition is illustrated by the 2022 Policy Note on the strategy for the aid and trade agenda of the Netherlands. According to the Dutch Ministry of Foreign Affairs: '[t]o achieve the SDG […] targets it is crucial to mobilize private financing' (Netherlands Ministry of Foreign Affairs 2022: 12).[2]

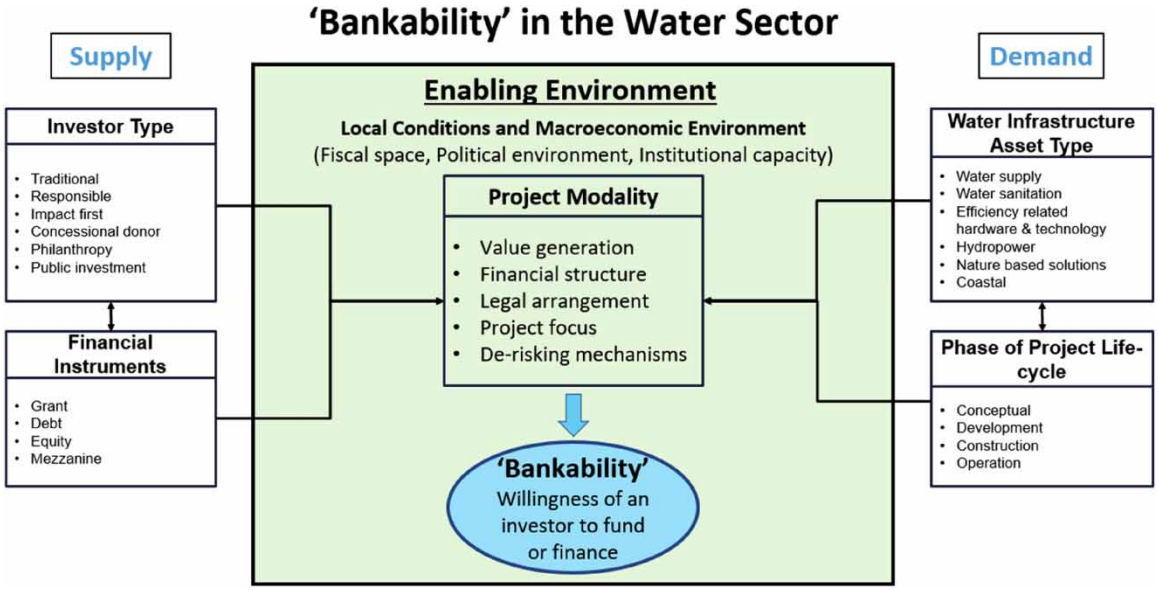


Figure 1 | Framework of 'bankable' water infrastructure projects.

[2] Authors' own translation.

This article focuses on the bankability of water projects rather than the bankability of a water utility. Financing a water project or business is distinctly different from the funding and financing mechanisms used for utilities.[3] This paper will focus on the factors that influence bankability at the project level with the understanding that water infrastructure development is often done on a project basis. However, improving the bankability of a water project is intrinsically linked to improving the creditworthiness of water utilities that are often the sponsors of water projects.

3. RESULTS: ELEMENTS OF THE BANKABILITY FRAMEWORK

3.1. Investor type

There is a wide typology of investors in the water sector, all holding different appetites for risk and return within their mandate and investment approach (Ellis & Pillay 2017). Other than the enabling environment, the investor's desired risk–return profile is among the most important considerations in determining whether a water investment is 'bankable' or not.[4] A categorization of six different investor typologies with their different evaluation approaches, return timeline, risk/return profile, and 'bankability' criteria is presented in Table 1. The investor typology presented below uses ideal types constructed for the purpose of showing how different investors have different objectives and will thus adhere to different criteria for determining if a project or activity is 'bankable' according to them.

Table 1 | Bankability criteria for different investor typologies[a]

Investor type	Evaluation approach	Return timeline	Risk–return profile	Bankability criteria
Traditional	Purely financial	Short-term	Minimal risk, market-based returns	Financial credibility, creditworthiness of the project's sponsor, project team and track record, transparent governance
Responsible	Financial + environmental, social, and governance (ESG) screening	Short–medium-term	Minimal–medium risk, nearly market returns	Financial credibility, creditworthiness of the project's sponsor, alignment with fund principles, effectiveness, economic efficiency, project team and track record, transparent governance
Impact First	Financial + paradigm shifting potential, ESG returns	Short–long-term	Medium risk, varying levels of concessional returns	Financial credibility, environmental and socioeconomic impact, gender equality, paradigm shifting potential, transparent governance
Concessional Donors	ESG returns with minimal financial return	Medium–long-term	High risk, highly concessional financial return	Ability to attract additional financiers or 'additionality', financial credibility, environmental and social impact, transparent governance, gender equality, paradigm shifting potential, quantifiable social and environmental outputs, alignment with donor's principles
Philanthropy	Purely social + environmental returns	Long-term	High risk, no financial return	Social impact, environmental impact, gender equality, paradigm shifting potential, alignment with philanthropist principles, additionality, transparent governance, innovation, inability to access other forms of capital
National Government	Social, environmental, and economic returns	Long-term	High risk, varying levels of concessional returns	Socioeconomic impact, alignment with national principles and goals, social equity, social and environmental resiliency, minimal financial returns, additionality

[a]The six investor types are based on primary data.

[3] For more information on the access of service providers to financial markets, see Metha *et al.* (2007).

[4] Interview CSC Strategy & Finance, 19/11/2021.

Every type of investor represented in this typology, other than philanthropy and national governments, will consider financial credibility as a primary indicator for determining a project's 'bankability'. Put simply, if there is no cash-flow potential, most investors will be unwilling to come onboard (Kazimbaya-Senkwe 2018). As one looks further down the scale towards philanthropy and national governments, more and more weight and criteria are devoted to social and environmental returns and outputs. A category to be emphasized here are the emerging 'Impact First' investors that deeply consider how ESG (environmental, social, and governance) issues impact or can be improved by a project; this body of asset managers is rapidly growing and becoming increasingly mainstream (Marais *et al.* 2022).

An essential parameter that has an influence on a financier's interest and financing available for a water initiative is the total cost of the project.[5] Many financiers will not be willing to come on board unless total project capital expenditures is upwards of US$ 1 million (Alaerts 2019). This largely has to do with the transaction costs involved with administering the projects.[6] The intensive risk quantification and mitigation processes that must be undertaken by financiers make smaller projects unattractive.[7] For this reason, the total cost of a water investment effects the interest of different financiers that could potentially lend to the water investment.[8] There is room for different types of intermediaries such as specialized investment vehicles or aggregators models currently being developed to overcome transaction cost barriers that limit the viability of smaller sized projects (Lardoux de Pazzis & Muret 2021).

3.2. Water infrastructure asset type

Different types of water investments align with different business models with different cash flow potentials. For example, a hydropower project has a very predictable project lifecycle in terms of costs and projected revenues along with large sums of capital involved (Alaerts 2019). Concurrently, a rural sanitation service scheme has a much more complicated business model in terms of generating a cash-flow and attaining a status of 'bankability' (Shah *et al.* 2013). In other words, different kinds of water infrastructure projects and businesses come with different risk/return profiles.[9] Investors within the water sector may specialize within specific asset classes to reduce uncertainties that come along with the diversity of water infrastructure assets and business models that exist globally.[10] Initiatives in the water sector can be classified as either projects or businesses. For example, a hydropower dam is a water project that has a predetermined time of operations, off-take structure, and is typically serviced by project finance. A water business, like a water utility that will theoretically operate in perpetuity, lends itself to corporate financing instead of project financing. In funds that specialize in water investment, such distinctions are important considerations.[11]

It is helpful to generally classify the water services sector into three general sub-sectors: (1) water supply, (2) sanitation, and (3) water efficiency-related hardware and technology. Among the three sub-sectors, there are differing regulatory, social, and political dynamics that determine how 'bankability' is understood per type of asset (see also Section 3.5 on the enabling environment). Water supply and sanitation are typically heavily regulated and considered a basic service resulting in affordability considerations playing a key role in the tariff setting, which ultimately funds the business.[12] As a result, decision-making about water supply and sanitation investments is deeply political in nature (Schwartz & Schouten 2007; Tiwale 2019). Furthermore, these kinds of assets, such as piped networks, are extremely capital intensive to design, build, maintain, and have long pay-back periods that in fact may never be fully repaid (Hughes *et al.* 2010).

Another factor to note about the development of water supply and sanitation infrastructure is the complexity that stems from providing a public service where the infrastructure is potentially financed, constructed, or operated by a private developer. In other sectors such as energy, there are well-established contractual frameworks such as power purchase agreements that facilitate the ease of doing business to involve private finance through a clear legal basis. With water supply and sanitation, questions around the role of private finance in the water sector can deter investors or create complicated contractual arrangements.[13]

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[5] Interview Rand Water, 9/2/2022.
[6] Interview Kenya Pooled Water Fund, 25/1/2022.
[7] Interview True North Ventures Partners, 12/1/2021.
[8] Interview Brattle Group, 1/5/2022.
[9] Interview Rand Water, 8/2/2022.
[10] Interview Crede Capital Partners, 15/2/2022.
[11] Interview Carbon Trust, 22/2/2022.
[12] Interview Climate Fund Managers, 11/10/2021.
[13] Interview Climate Fund Managers, 11/10/2021.

Efficiency-related hardware and technology such as pumps, digital water monitors, and irrigation equipment can be classified apart from supply and sanitation sub-sectors. This is due to the typically shorter pay-back period for these business models, proven records of the hardware's potential impact or consultant's capability, and a more streamlined implementation process (Ward 2010). A crucial reason why these kinds of efficiency-based technologies can be seen as more attractive for traditional financiers has to do with the fact that these initiatives are less vulnerable to political interference. For example, the implementation of smart water meters can be undertaken by an external consultant, thus ring-fencing the hardware's implementation from the functioning of the water utility itself (Ramos *et al.* 2020).

3.3. Phase of project lifecycle

Different phases in the investment cycle of an initiative require different types of expertise and requisite financial structuring. As explained by one expert in water finance: 'bankability evolves over time'.[14] This has to do with a very high-risk profile in the initial development phase of an initiative's lifecycle where feasibility studies, financial modeling, and institutional analysis must be undertaken to determine the initiative's viability (Asare 2019). Once the water infrastructure matures from this phase and moves on to construction and operation phases, different risks must be considered, but they are typically lower.[15] Due to this, a wider variety of financiers are typically willing to invest in water enterprise once de-risking within the development phase has taken place.[16] From a public perspective, the more socially and environmentally impactful projects should be given additional resources to reduce their risk profile since more commercially viable projects should be able to attract private finance independently.

Risks in the development phase of the project lifecycle are comparatively larger than subsequent construction and operation phases. This is due to the highly conceptual nature of the water initiative in the development phase.[17] This higher level of risk demands higher-level de-risking through various mechanisms for the initiative to move on to the next stage in its lifecycle (Finnerty 2007). Only once an appropriate level of risk has been mitigated through various actions will a project reach a point in which funds are successfully disbursed and eventually absorbed.[18] A key challenge for projects and businesses within the water sector to reach a status of 'bankability' is the highly involved quantification and mitigation of risk in the development phase. While risks can be mitigated and decreased throughout the development phase, a certain level and risk and uncertainty will always remain throughout the construction and operation phases.[19] Only when risks have been reduced enough for the standards of the investor in question will the enterprise reach the status of 'bankable' for that particular investor.

Interestingly, depending on the enabling environment of the project in question, it may be preferable to finance or provide lines of credit to the water utility or enterprise that may be involved as the sponsor of the project. This method has proven to be effective in scenarios where water utilities themselves are creditworthy and have an established track record of utilizing capital markets (Kimani *et al.* 2011). However, in cases where the utility or sponsor in question does not have a respectable credit history, using project finance on a case-by-case level may be the best option.

3.4. Financial instruments

Depending on the investment phases within the lifecycle of a water infrastructure project or business, different financial instruments may be suited to invest in different phases of the initiative. For example, for some initiatives, grants may be the only source of capital available given the uncertainty surrounding the viability of the project in the development phase (Andersen *et al.* 2019). As the water initiative travels further down its lifecycle, more financing options will become available due to ongoing de-risking. A (non-exhaustive) depiction of different financial instruments and the investment phase at which they commonly operate can be seen in Table 2.

The financial instruments pictured in Table 2 can be combined innovatively as a part of the financial engineering that is used to de-risk a water initiative for different investors. For emerging markets, there is an increased discussion around the role of how 'viability gap funding' can be used as a hybrid vehicle to bridge the high risk profile of many water projects

[14] Interview CSC Strategy & Finance, 19/11/2021.
[15] Interview Netherlands Water Partnership, 8/12/2021.
[16] Interview Cardano Development, 3/12/2021.
[17] Interview USAID, 24/1/2022.
[18] Interview CSC Strategy & Finance, 19/11/2021.
[19] Interview Climate Fund Managers, 11/10/2021.

Table 2 | Categorization of financial instruments to be used over the project lifecycle[a]

	Development	Construction	Operation
Public *(ESG considerations)*	• Grant • Budget	• Budget • First loss • Output-based aid	• Viability Gap Funding • Insurance (Export Credit)
Private *(limited ESG considerations)*	• Equity	• Equity • Junior/sub-ordinated debt • Construction debt • Deferred payments • Performance bonds	• Equity • Senior debt • Bonds • Currency hedging • Insurance • Refinancing

[a]Based on Interview CSC Strategy & Finance, 19/11/2021.

and business (Möykkynen & Pantelias 2021). In what some refer to as the 'capital stack', different kinds of financial instruments, such as viability gap funding, will be used in combination to satisfy the differing risk–return appetites of the financiers involved.[20] A comprehensive capital stack highlights the financial engineering needed to create a financial structure satisfying all parties involved in a water project or business.

3.5. Enabling environment

Conditions and risks stemming from the enabling environment are evaluated and given different weights by different financiers depending on the profile of the investor(s) involved in the initiative (Convergence 2021). These risks and local conditions can be viewed as the central factors that must be mitigated (at least partially) by the investor(s) and project developers responsible for executing the initiative. These conditions set the boundaries in which the initiative will occur. Furthermore, these environmental factors frequently cross national, social, and wide-ranging temporal boundaries adding additional complexity to understanding 'bankability' in the water sector.

These contextual factors, along with others that may be project specific and not listed here, influence the degree of 'bankability' of projects and businesses in the water sector (OECD 2019). The factors that comprise the overall conditions contribute directly to the risk–return profile for any given project (Ajjan 2009). The conditions listed in Table 3 are meant to capture the overall enabling environment in which 'bankable' projects and businesses exist in the water sector. This table is not exhaustive. However, the conditions listed here are still valid considerations for all investor types deploying capital in the water sector.

3.6. Project modality

The enabling environment, along with the cash-flow potential of the initiative, dictates the project's modality. The ownership, financing, and operation of the water enterprise are all important in determining how the project's modality will evolve towards a 'bankable' structure. As private financiers and asset managers become increasingly involved in water investments, their primary consideration will always pertain to what level of risk they are willing to accept for each expected return.[21] This consideration of risk–return is paramount in structuring the most effective project modality.

The parties and types of actors involved in the water initiative affect each dimension of a project's modality. There are many additional aspects that define a water project or business: what kind of value the project generates, its financial structure, legal arrangement, focus, and de-risking mechanisms influence whether investors will view the water initiative as 'bankable' or not. Definitions of these factors can be seen in Table 4.

[20] Interview Cardano Development, 3/12/2021.

[21] Interview Church Pension Group, 10/12/2021.

Table 3 | Illustrative risks and environmental variables

Conditions	Defined here as	Area of high impact
Macroeconomic factors	Economic volatility that includes the possibility of currency devaluations or high inflation as a consequence of international shocks or unsustainable macroeconomic policies.	Devaluation and other macroeconomic events that affect the economic viability of a project as well as its value.
Fiscal space	The financial capacity of the national and/or subnational entities to sustainably and credibly support a project.	Availability of public capital to expand service provision to new areas – Ability to finance ongoing maintenance of the infrastructure – Ability to support a project with a government funded subsidy stream.
Political environment	The likelihood that a project will be significantly affected by a change in the political conditions of a given country or municipality.	Political interference with projects, including expropriation or partial expropriation breach of contract, transfer and convertibility issues – Collateral impacts due to civil unrest or war.
Institutional capacity	Institutional capacity refers to four general topics: (i) the existence of a reliable water regulator; (ii) its capacity to implement the regulatory framework; (iii) the quality of sector authorities to provide technical support to water firms; (iv) the prevalence of corruption in the country and water and sanitation sector.	The ability to set, enforce and monitor a rational regulatory regime, including the tariff regime – Lack of local capacity and technical knowledge that can limit the operations of the utility, or can affect how the project is implemented – Corruption levels affect accountability, transparency and trust, reducing investor confidence.

Adapted from Vives *et al.* (2006).

4. DISCUSSION: THE FORMIDABLE CHALLENGE OF BANKABLE PROJECTS

In the introduction of this article, we mentioned the idea that blended finance has been promoted as a source of investment funding for the water supply and sanitation sector. In doing so, we also referred to a former World Bank President, who suggested that '[t]he real challenge is not a matter of money but a lack of bankable projects…'.[22] Our elaboration on bankability as a multi-dimensional concept suggests that the challenge of developing bankable projects to extend water supply and sanitation services (with the aim of contributing to SDG target 6.1) is formidable and complicated.

The first complication relates to the actors involved and, given their desired market rate return and ESG considerations, the steps of providing water services for which they would be willing to invest funds. It may be possible to develop bankable projects for traditional investors for large infrastructure like water treatment facilities. However, it becomes much more complicated if the project covers all steps in extending water services from raw water abstraction, treatment, delivery to the consumers, etc. For such a project, it is likely that a consortium of financiers is required.

Investing in consortiums has been argued to be a de-risking mechanism for financing large-scale water initiatives (Basile & Dutra 2019). However, every investor type covered here, other than philanthropy and national governments, will consider financial return as a primary indicator for determining a project's 'bankability'. Put simply, if there is no cash-flow potential, most investors will be unwilling to invest (Kazimbaya-Senkwe 2018). Creating effective investor consortiums hinges on the ability to balance the financial needs and fiduciary responsibilities of most investors with the public and human rights-related aspects of water management. Developing such consortia and the diversity of partners involved is complicated and, not surprisingly, not frequently occurring. It seems easier to develop bankable projects which are more limited in scope and cater to a particular investor. This, however, also means that the impact of such a project on indicators such as service coverage is limited.

A second dimension in the development of bankable projects is the context in which these projects are to be developed. The underlying theory to creating bankable projects through blended finance is that public money can be used to mitigate the risks stemming from the enabling environment in which the project is developed. The question is if public money can adequately mitigate the risks of the environment in which a particular investment is to be made? Furthermore, how much can public

[22] https://www.reuters.com/article/imf-worldbank-idINL2N0S40SH20141009.

Table 4 | Aspects of project modality[a]

Identified variables	Defined here as	Area of high impact
Value generation	The cash-flow generation; the ability to restore ecosystems; the ability to enhance community and social resilience through the project.	The ability of the project modality to generate value is the largest determinant of an investor's willingness to invest in a project. The kind of value generation determines the kind of investor.
Financial structure	The arrangement of capital deployed; a structure showing which investors use which financial instrument, at what time, with what expected return.	The financial structure of the project must delegate the appropriate amount of risk–return to each investor involved; it is equally important whether the project is a success or failure.
Legal arrangement	The contractual arrangement between actors involved: project developers, investors, off takers, regulatory bodies, consultants, and other relevant parties.	The proper legal structuring of a project is essential for operation within the legal context of the project's environment; the contractual form of the project is also determined by the legal structure.
Project focus	The sub-sector, objectives, methods, vision, mandate, scope, and long-term plan of the water infrastructure asset.	The project's specific objectives and type of water infrastructure asset are key factors for investors that specialize in certain sub-sectors of the water sector at certain phases.
De-risking mechanisms	Credit guarantees, currency guarantees, first loss commitments, insurance, environmental impact assessments, social impact assessments.	Very few investors will be willing to sponsor a project without mechanisms to mitigate the risk that stems from the local conditions and project-specific risks.

[a]Primary data.

capital ideally leverage from private investors and what is the real-world ability of blended finance to actually attract private investment to the water sector?

A third aspect giving nuance to the ability of blended finance's contribution to achievement of target 6.1 of the SDGs is that the separate dimensions of project and business considerations that coalesce in different environments make 'bankability' complex. Although a particular infrastructure project may be relatively simple to develop into a bankable project, this does not necessarily make the water utility business commercially viable. Bankability depends on the investor(s) involved in the project and their willingness to accept risk and various requirements for returns. For many projects in the water sector, even though it is certainly possible to structure bankable projects, creating projects that are commercially viable for the full spectrum of investors remains a larger challenge (see also Alaerts 2019). Simply put, water-related projects and businesses must compete for private capital with other investment options such as profitable technology or energy companies. Many factors, but primarily the inconsistent financial return, still push private capital away from the water sector. For these reasons, the term 'bankability' has become a word often repeated and almost treated as an enigma.

Ultimately, ensuring sustainable universal service coverage requires the business of water projects, businesses, and utilities to be sustainable. Creating the ideal balance between financial, social, and environmental sustainability is the collective task of all parties involved in supplying this critical resource and must be treated as such. However, this balance remains elusive and the contribution of blended finance for making this happen is likely to be limited. More examples are still needed to show that blended finance has the catalytic potential in the water sector that many of its promotors claim it can have.

The central dilemma in structuring projects is the fusion of financial profit with the water sector's significant environmental and socioeconomic implications; this has been discussed at the utility level but not yet the project level (Leflaive & Hjort 2020). In this scenario, financial profit in a water project or business likely comes at the cost of its ESG returns. Likewise, initiatives that will have the greatest ESG impact typically experience the greatest difficulty in becoming 'bankable', let alone commercially viable for every investor type. For these reasons, a more dynamic understanding of bankability and what it means for different investors is crucial to understand the complexity of structuring water projects and the role blended finance can play in the space.

5. CONCLUSION

With global water stress increasingly driven by growing populations among a myriad of other factors, enabling water initiatives access to the capital they need is more crucial than ever. In an ideal world, investors would realize the socioeconomic benefits of investing in the water sector and have a greater willingness to invest in water projects discussed here, yet this change is slow moving. The framework for bankable water projects and discussions in this paper illustrate that structuring such projects is challenging. Ultimately, the bankability of a project depends on the risk/return profile that a particular investor is willing to accept. Until many of the enabling environment factors and risks are addressed by governments, few projects will become bankable as the risk/return profiles are not acceptable to most investors, and public finance will remain the central source of capital for the water sector. Blended finance will then remain limited to a few types of assets, project phases and geographical locations. Its contribution to ensuring universal access to safely managed services will then remain marginal at best. Alignment among investors, water entrepreneurs, and governmental policies, and research on drivers of private finance is still desperately needed to bridge the financing gap and ultimately achieve water-related UN SDGs.

DATA AVAILABILITY STATEMENT

Data cannot be made publicly available; readers should contact the corresponding author for details.

CONFLICT OF INTEREST

The authors declare there is no conflict.

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