

OECD – GIZ Conference: Closing the gap for water in line with SDG ambitions: the role of blended finance

4 -5 October 2018, Eschborn, Germany

“A framework for expanding WASH finance”¹

(both conventional and innovative)

- **Louis Boorstin**

This note presents a framework for expanding finance for the WASH sector. The purpose of this framework is to provide a structure for discussions on expanded WASH finance so that we can have a common understanding of what different options offer and where they fit into the overall picture. It may also serve to provoke further thinking on new or better ways to expand WASH finance to accelerate progress towards SDG 6.

The note has been prompted by a perceived gap between how most stakeholders in the WASH sector think about finance and how potential financing sources think about the WASH sector. Each of these groups has its own perspective on the other. Further, the groups are internally diverse. The WASH sector includes a range of institutional stakeholders – governments, official donors, NGOs, social ventures, etc. – with their own objectives and motivations. There are also multiple potential sources of finance – governments, development finance institutions, commercial banks, MFIs, impact investors, etc. – with their own investment criteria.

For now, this note is aimed primarily at stakeholders in the WASH sector, with the goal of providing a realistic view of what finance can and cannot do. Getting a clearer idea of what’s possible should also help to identify where to prioritize our efforts for expanding WASH finance.

This note covers three topics:

- Finance basics, to provide a common set of terms for the discussion;
- A framework of the opportunities for increasing WASH finance to expand sustainable services for the poor; and,
- What’s working so far, and what can we learn from that experience.

This note is a work in progress. Feedback and comments are welcome.

This is the 2nd version of a note originally written on 29 August 2018 during Stockholm World Water Week. It has benefitted from comments by Gaia De Battista of Lion’s Head Global Partners, Rachel Cardone of Stanford University, and Patrick Moriarty of IRC. As much as I appreciate their input, and look forward to further comments on this version, I am solely responsible for the contents.

The basics

“Finance” is generally understood to mean the provision of funding that expects to be repaid. This is not a hard-and-fast definition, and sometimes the term finance also includes funding that does not need to be repaid, such as international aid or grants. For the purposes of this note, however, finance means repayable monies, and the broader term of “funding” is used to include both finance and non-repayable monies (and I’ll try to be consistent in that usage).

One consequence of defining finance this way is to limit the discussion in this note on non-repayable funds to those situations where non-repayable funds can affect the availability of finance. This matters because non-repayable funds currently provide the vast majority of resources for the WASH sector in the developing world. Future versions of this note might tackle that topic too, but for now it sticks primarily to repayable funding as there’s already considerable material on non repayable funding.

On a related topic, when WASH wonks get together to talk money, they usually start with the three main sources of funds, also known as the 3 Ts: tariffs (fees paid by users for WASH services), taxes (general government revenues that are allocated to the WASH sector), and transfers (foreign aid). The 3 Ts are current sources of funding, and they relate to finance in two ways: 1) When financing is initially made available (e.g., when a loan is disbursed), that adds to current funding, hence supplementing the resources coming from the 3 Ts. 2) When financing is repaid in the future, the only sources to do that are also the 3 Ts (unless new finance is available, which effectively extends the repayment obligation further into the future). Put another way, while finance can expand opportunities today, it does this by shifting payment obligations into the future.

Turning back to the basics of finance, the most fundamental question is this: What determines whether or not an activity can raise financing? At its core, the availability of conventional finance, such as a bank loan or an equity investment, depends on two factors:

- 1) Return – the amount and timing of the future cash flows being generated by the financing recipient to repay the original investment. In the case of a loan, the operations of the borrower will need to generate enough extra cash to repay the amount borrowed (the principal) plus compensation for use of the lender’s money (the interest). In the case of an equity investment, which is part-ownership in a company, the repayment comes from a combination of growth in the perceived value of the company (capital gains) and/or regular payments from operating cash flows (dividends).
- 2) Risk – the likelihood that those future cash flows will actually be available to make repayments. For a loan, will the borrower’s operations be large and regular enough to make the agreed principal and interest payments? For an equity investment, will somebody else be willing to buy your share of the company at a higher price when you want to sell it? And will the company generate enough surplus cash to pay dividends?

This is why when finance geeks get together, the talk eventually turns to “return” and “risk.”

That’s it ... and it’s not, of course, because there are many elements affecting return and risk, some relating directly to the *entity being financed* (revenue generation, cost control, quality of management, etc.) and others to the sector and location in which it operates (regulatory environment, country governance, stability of currency, etc.). Both types of factors are important, as a great business model in a lousy operating environment will fail just as surely as a bad entrepreneur working in a great business climate will lose your money. (For a useful framework on how to assess challenges from the company level up to the macroeconomic level, see the [Beyond the Pioneer](#) report).

In addition, the type of financing provided affects the risk of an investment. As examples: a) longer term financing is almost always riskier than shorter term financing because there is less visibility over the distant future than there is over what will happen next year; b) loans to stand-alone projects are usually riskier than loans to whole organizations because they rely on a single set of cashflows rather than a diversified set of cashflows; and, c) loans backed by assets, such as a property or a piece of equipment, typically carry less risk than those relying just on cash flows because the investor can have claim to these assets in the case where the borrower cannot make good on their debt.

It’s important to note that finance is a tool that can facilitate the growth and operations of an entity, but it cannot “fix” a business model that does not work or a regulatory environment that undermines the value of a venture. Simply put, the fundamentals matter most, which is why the availability of finance depends largely on the underlying elements related to the organization and its operating environment – assured revenues, controlled costs, high quality management, good regulatory climate, reasonable national and local governance, etc. If you get enough of these elements together, you have a creditworthy borrower, which is an organization or project that has a reasonable expectation of repaying a loan. If you don’t, then it’s very hard to raise finance *unless* you can find investors who also have non-commercial interests and/or providers of non-repayable funding who are willing to subsidize the returns or reduce the risks of a financing.

For example, “impact investors” are funders that want to generate both a financial return and a social/environmental return. How willing investors are to sacrifice the financial return for the social return varies widely, with some impact investors still expecting a commercial rate of return but wanting their money to be used in beneficial sectors (what used to be called ‘socially responsible investing’) to others that are willing to take very large, early stage financial risks because the potential upside of the social return is so great (e.g., Osprey Foundation).

Or consider the case of “blended finance”, which means combining finance with non-repayable funding in situations where the returns are too low and/or the risks are too high to attract purely commercial finance. For example, if an innovative sanitation service provider has a good business model with reasonable returns but is too risky for commercial investors, then a government, DFI, or foundation with an interest in developing new sanitation models could step in to say that they will guarantee part of the commercial investment.

A framework for expanding WASH finance

Bearing those basics in mind, there are at least 5 broad approaches to increasing the amount of finance in the WASH sector (or any sector for that matter). Some of these mechanisms can be funded solely with repayable finance (except possibly to structure them initially), whereas others will require support from non-repayable funding in order to catalyze more finance over time (these are marked below with an *).

1. *Improve the basic creditworthiness of potential borrowers by addressing the underlying operational or environmental elements that affect return and/or risk. As noted above, this can take one or both of the following approaches:

- a) Strengthen the business fundamentals of the entity being financed through advice that increases revenues, reduces costs, improves management, upgrades technology, etc.
- b) Improve the operating environment, including political stability, regulatory climate, quality of infrastructure, etc. The advantage of addressing these systemic factors, some of which affect multiple sectors and others of which are specific to WASH, is that it should benefit numerous entities not just a single service provider.

(This is a point that Joel Kolker of the World Bank has been making very clearly.)

2. *Support innovative models that fundamentally change the underlying cash flows and/or risks that are needed to generate the same outcomes as conventional approaches. Examples of this include distributed service providers such as safe water enterprises instead of conventional utilities or container based sanitation instead of flush toilets and sewers.

3. *Take more risk by funding organizations that are not yet creditworthy but have the potential to get there. For example, make a grant or a loan to a service provider to help them escape the cycle of low customer payment for poor services. We know that customers, even relatively poor ones, will pay more for better services. However, the service provider needs funding to start improving those service before they can raise tariffs. So take a risk by providing some funding to promising service providers and then only provide further funding if they meet certain performance criteria (e.g., strengthening governance, starting to increase tariffs, reducing non-revenue water) within a year or two.

4. Use financial mechanisms to expand the availability of financing under the existing set of operating and enabling conditions. (NOTE: As indicated above, these mechanisms will only work if at least some of the fundamentals are already in place, i.e. if the returns are there but the risk is too high. Finance alone will not make a business work.)

- a) **Aggregate borrowers** to reduce the overall risk to the lender. When you have a large portfolio of borrowers that are basically creditworthy, you are relatively more likely to get your money back than lending to a single creditworthy entity because you've spread the risk of operating problems. Examples of this include the basic microfinance model (which aggregates many small household borrowers with the knowledge that a small percentage of them will default on their payments) and pooled bond funds (which aggregate a number of municipal service providers).
- b) **Cross subsidize** weaker borrowers with stronger borrowers. This is relatively common and is, for example, what Manila Water has used to reach poorer customers who otherwise couldn't get service.
- c) **Bundle WASH** finance with other areas such as housing finance or agriculture finance. This is essentially a subset of cross subsidization on is it's typically easier to obtain financing for those other areas.
- d) ***Nudge the market** by sharing some of the risk and/or increasing the flow of information to encourage commercial investors to enter a new field or expand their lending in that field. Instruments such as partial risk guarantees, which will cover part of a bank's loss if a borrower defaults, can catalyze commercial lenders to try investing in new sectors. Once the bank learns the business and has a track record of successful lending, the external guarantees are withdrawn and the bank continues to lend solely with its own resources.
- e) ***Boost returns** through government subsidies such as 'top up' tariffs, nothing that this should only be done when its clear that the service provider is operating in a highly efficient manner.
- f) ***Disaggregate risks** so that different funders play different roles. An example of this is a development impact bond, where impact investors are willing to take the up-front risk that pre-agreed social benefits will be delivered (e.g., households served with safe water; tons of fecal matter removed from the environment) and institutional grant-makers are prepared to pay-on-performance for delivering those pre-agreed benefits.

5. *Get the most of conventional WASH funding by supporting sustainable service delivery instead of funding hardware. The major conventional funders of WASH, including governments and international aid agencies, should say, "We want to get X number of people fully sustainable WASH services for 20 years" instead of "We want to invest in Y number of water points or toilets to serve Z number of people." This would cause major changes in the decisions made by government ministries and implementing partners, which in turn would accelerate the opportunities for the increased use of finance in the sector.

Given the enormous need for additional financing in the WASH sector, the best choice among these five alternatives is clearly “all of the above.” Having said that, the financial mechanisms (#4) are unlikely to unlock very large flows of financing unless there are major financial market failures (e.g., very weak domestic and international capital markets, basic misunderstanding of potential returns/risks from WASH lending by commercial investors). If we want to get really significant additional investment into the sector, we need to consider options 1, 2, 3 and 5: strengthening weak service providers and/or enabling environments, supporting game-changing new models, taking bigger risks, and focusing on sustainable service delivery.

(Note that this framework focuses on how to deploy greater amounts of financing for WASH. If a credible case can be made for doing this, then the funds could be raised by expanding flows from existing sources – governments, IFIs, bilateral agencies, etc. – and/or developing new sources, such as a ‘global fund’ or ‘solidarity levy’ being explored in the GIZ-funded study and, in the latter case, envisioned by the Global Investment Fund for Water.)

What's been working and why

Several WWW sessions and side meetings have highlighted success stories involving commercial financing, ranging from Water.org's use of microfinance to fund household water connections and toilet construction to urban utilities in Africa that have broken the cycle of poor service/low tariffs to expand water coverage to large numbers of the poor. What can we learn from these successes? Here are some initial thoughts:

- **Approach:** Microfinance for household connections and toilets (Water.org, iDE Cambodia, et al.)
- **Framework fit:** Financial mechanism that aggregates borrowers (4,e)
- **Description:** These are short-term loans, typically repaid within 18 months, that fund hard assets. However, they're not asset-based loans because the lenders can't readily repossess the connections or toilets. A key innovation was getting microfinance lenders to see WASH loans as a viable lending opportunity, whereas microfinance is usually used for income-generating assets.
- **Observations:** 1) These are relatively short term loans; 2) these are adaptations of existing financial instrument to a new sector, not a new financial instrument. Both of these factors made it more likely to attract commercial financing. So, looking for more of these shorter term financing opportunities could make sense, but only if it's appropriate to the cash flows of the potential borrower.

[more to come on this with profiles of CRS' Azure initiative, utility reform programs in Africa, preventive maintenance approaches, etc.]

Louis Boorstin is the Managing Director of the Osprey Foundation.