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Water utilities as debt emitters: the commercialization of development funding and services provision in Kenya's water sector

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ABSTRACT

The encouragement of commercial financing approaches in international development has also targeted basic services sectors. In Kenya, where half of the population still lacks access to regulated water and even more to regulated sanitation services, several actors have worked to commercialise the water sector's development funding to mobilise private resources for rehabilitation and development of infrastructure and services provision. Water utilities, in other words, have been made into candidates to occupy a debt emitter position in the sector. Notwithstanding continuing non-success of commercial borrowing without public de-risking, such positioning as the sector's debt emitters has consolidated water utilities' ongoing commercialisation, the adoption of associated practices, and the endorsement of full cost recovery. This trend risks omitting to pursue 'non-bankable' projects and deepening uneven services provision in the country; positioning other organisations as the sector's debt emitters may allow for more equitable development of, and access to, water and sanitation services.

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Introduction

Public water and sanitation services provision has been further commercialized lately. After a wave of privatizations and private sector participation in the water sector (Bakker, 2010), corporatized and commercialized public utilities have more and more replaced private operators (Cumbers & Paul, 2022; Kishimoto et al., 2015; McDonald & Swyngedouw, 2019; Pigeon et al., 2012). This has often been a response to the retreat of private operators, public opposition and protests, or political difficulties (or unwillingness) to renew contracts (Bakker, 2010; Lobina, 2017). At the same time, however, the commercialization of public services provision has provided private capital with a different way to invest in infrastructure and basic services such as water and sanitation. Instead of investing in private operators, or acting as an 'investor-operator' (see Lawrence & Stapledon, 2008; Page et al., 2008) themselves, investors such as commercial banks, investment funds, or institutional investors have become lenders to public utilities. In Kenya's water and sanitation sector (henceforth referred to as water sector only), for instance, public utilities have recently experimented with borrowing from commercial banks and investors. The corporatization of services provision and associated creation of publicly owned

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water and sanitation companies (WASCOS) during the late 1990s had furnished these WASCOS with the right to borrow from commercial lenders. Now, faced with staggering and urgent investment needs – half of the country’s population still lacks access to regulated water services and even more to regulated sanitation services (WASREB, 2021) – the commercial financing of development and rehabilitation of infrastructure has been promoted by the Ministry of Water and especially the sector regulator WASREB (WASREB, 2021).

Few Kenyan water utilities have borrowed from commercial lenders, however. Despite their right to borrow, most have lacked the cash flows, the associated financials, and generally a business-like management and operation to gain the trust (or credit, see Douglas, 2015) of commercial lenders. Whereas public services provision had been corporatized, in other words, it has not yet been commercialized enough to attract commercial banks or private investors. A range of bi- and multilateral donors and finance institutions, cooperating with sector organizations such as the Water Sector Trust Fund (WSTF), have therefore worked to technically and financially support utilities’ commercial financing attempts by providing project preparation assistance, subsidies, and guarantees. To ‘fill’ the ‘finance gap’, i.e. to mobilize private resources to fill the gaps left by public funding of infrastructure and basic services development and rehabilitation, donors have worked to supplement and enhance utilities’ creditworthiness and commercialize development funding. Part of what has been called the ‘Wall Street Consensus’ (Gabor, 2021), donors and governments de-risk commercial financing transactions through subsidies, guarantees, and technical assistance to restore investment interest by private capital even when utilities are publicly owned and operated, creating a form of financialized development that can work similarly with private and public basic services providers.

But the work of donors, the Kenyan state (including key water sector organizations such as WASREB and WSTF as well as public utilities themselves), and a range of civil society organizations, has not merely de-risked transactions but actively fostered the further commercialization of public water and sanitation utilities. Williams (2021) described this ongoing commercialization of Kenya’s water sector as a necessary groundwork for a beginning financialization process. Behind this rendering investable and ‘arduous and long-winded process of transforming socio-natural relations in-line with financial motivations and creating the pre-conditions necessary for investment’ (Williams, 2021, p. 17) is, the paper will show, a process of replacing traditional development funding with more commercial forms of financing. This commercialization of development funding, in short, has consolidated the ongoing commercialization of water and sanitation services provision and opened up spaces for financialization in the sector. Building on Social Positioning Theory (Lawson, 2019, 2021), this commercialization of development funding in Kenya’s water sector is understood as a process of positioning some sector entities as debt emitters. Debt emission, here, is as an attempt to expand resource mobilization for the water sector’s development through borrowing from commercial sources, which, in Kenya, include many of the country’s commercial banks and potentially capital market actors such as (institutional) investors. To this end, donors, together with Kenyan central and county governments and water sector organizations, have started to make water utilities the sector’s prime entities to function as debt emitters to mobilize resources.

For Kenya’s water and sanitation companies (so called WASCOS) to successfully emit debt, however, has required utilities to acquire necessary capacities and adopt the practices needed to perform debt emissions. Next to their ongoing (and incomplete and to some degree contested) positioning as debt emitters, WASCOS have increasingly been positioned as professional and commercial water services providers (WSPs). Yet whereas this professionalization and commercialization has been fundamental to any debt emission attempts, it has not widely translated into

borrowing from commercial sources. WASCOs have so far used their agency in their remaking and positioning and opted in to, or out of, specific practices endorsed by donors, the government, or for instance the water sector regulator. Some utilities, for instance, have further commercialized their operations and aligned their management practices with promoted 'business-like' practices, but have yet to borrow commercially despite their increased 'bankability'. Instead, they have used their newly acquired creditworthiness to outcompete their peers and attract cheaper funding, including aid. While the commercialization of development funding has fostered the professionalization and commercialization of water services provision in order to turn WASCOs into debt emitters, utilities have yet to borrow commercially. The ongoing commercialization of development funding and associated attempts to make utilities emit debt, in other words, have so far primarily consolidated the Kenyan water sector's commercialization and have acted to further endorse the user-pays-principle for both water services delivery and their further development.

The following sections look in more detail at the ongoing commercialization process in Kenya's water sector given the commercialization of development funding endorsed by donors, the Kenyan central and county governments, and key sector organizations such as the water sector regulator WASREB. The section following this introduction explores the changes in resource mobilization promoted by international organizations such as the Development Committee or World Bank, and considers existing explanations for the transformation of Kenya's water sector. Making use of social positioning theory, the section thereafter then proposes to understand current changes in Kenya's water sector as a process of reorganizing the sector's resource mobilization and specifically its resource mobilization through borrowing from commercial lenders, i.e. the sector's debt emission, by positioning public utilities as the sector's debt emitters. This is followed by a section that looks at the associated changes in public utilities, including the introduction of business-like management practices and several key debt emission practices, as a widely endorsed transformation of Kenya's public water utilities into increasingly commercialized water utilities. The paper concludes by highlighting the prospective unevenness of basic services provision in a water sector that aims to rely on debt emission at the utility level to mobilize resources for its development, and by (briefly) sketching alternatives that promise more even development funding, which, paradoxically, had already been considered in Kenya.

Commercializing basic services by commercializing development funding

Kenya's ongoing commercialization of its water services provision has been underpinned by a shift in development funding. Donors have turned to funding approaches that include commercial finance (in so-called 'blended finance' approaches) or to de-risking approaches that facilitate commercial financing transactions by providing guarantees, subsidies, or other support such as project preparation. On the one hand, this has been a response to the country's new classification as (lower) middle-income country in Kenya. On the other hand, the commercialization of development funding in Kenya follows a larger trend to re-focus 'traditional' international development on economic growth (Mawdsley, 2015), to promote private sector participation (Savelli et al., 2018), and to repurpose donor and government funds to 'unlock' private commercial capital – to move from 'billions to trillions' in mobilized resources for development (Development Committee, 2015) and 'maximize finance for development' (World Bank, 2018). The World Bank has reiterated their preference for private sector participation in their 'Cascade' approach to investment decision making (World Bank, 2018), which prioritizes the mobilization of private commercial financing over any public funding. This includes, if such financing is not forthcoming, first a range of policy,

regulatory, and technical interventions to aid the mobilization of private commercial finance and to construct the right conditions through ‘upstream reforms’, and second the use of public resources to de-risk private investments (World Bank, 2017, p. 6). Only as a last resort, ‘scarce public financing’ (World Bank, 2017, p. 6) such as public finance or concessional financing from multilateral development banks (MDBs) or development finance institutions (DFIs) may be used. The World Bank has promoted this approach among other MDBs (including through the G20 Investment and Infrastructure Working Group), and donors have increasingly followed it by developing ‘credit enhancements’ or de-risking private investment (OECD, 2018b), including in the water sector (OECD, 2018a). The Dutch policy change ‘from aid to trade’, for instance, has aimed to grow private sector participation in Kenya’s water sector (Savelli et al., 2018).

The donor endorsement of private sector participation to mobilize private commercial financing has renewed earlier attempts to privatize basic services provision by adjusting the environment to enable the private sector to participate, including through PPPs, through supportive policies, regulations, and capacity building. In the water sector, for instance, this continues earlier ideologically driven advocacy of formal private sector participation (Budds & McGranahan, 2003; Leigland, 2020) premised on claims of improved governance, equitable outcomes, and scaled funding. Water privatizations, however, peaked by the late 1990s despite continued promotion by governments, international finance institutions (IFIs), and bilateral donors (Bakker, 2010) and notwithstanding a (temporary) re-conceptualization of water as an economic good (ICWE, 1992; later affirmed as human right, Human Rights Council, 2010). Instead of improving services and coverage, companies ‘cherry-picked’ (Budds & McGranahan, 2003) spaces of profitability and later, after realizing that complexity and currency risks of water projects were higher, and returns lower, than expected, abandoned the water sector in what Bakker (2010) called a ‘calculated retreat’. Public services providers have since taken over terminated contracts and re-municipalizations have increased (Cumbers & Paul, 2022; Kishimoto et al., 2015; Pigeon et al., 2012; also other sectors, cf. Kishimoto & Petijean, 2017), in spite of earlier and ongoing promotion of water privatizations (Lobina, 2017).

In Kenya, water services provision was never privatized, although a new sector policy aimed to prepare the sector for a more ‘liberalised’ approach and to encourage ‘more active involvement of the private sector in the development and management of the water resources’ (Ministry of Water Resources, 1999, v–vi). The subsequent 2002 sector reform (Republic of Kenya, 2002) created two new kinds of entities in the sector. On the one hand the Water Services Boards (WSBs) that developed, owned, and operated larger water infrastructure; and on the other hand the Water Services Providers (WSPs), the public water and sanitation companies (WASCOs) created by corporatizing municipal water departments, that obtained licences from the WSBs and provided water services to end users. While this was first and foremost a corporatization instead of privatization process, this separation of WSBs from WSPs was introduced to enable private sector participation in services provision. Privately owned organizations could henceforth operate as WSPs, too, while the ownership and operation of large assets remained public. In practice, however, few private utilities have been established, and virtually all Kenyan WSPs have since been publicly owned water and sanitation companies. Still, the corporatization of water services provision has, similar to re-municipalizations based on corporatization (McDonald & Swyngedouw, 2019), significantly changed how services are provided and aligned operations with commercial principles typically found in private operators. That is, whereas private sector participation in water services provision has remained minimal in Kenya, these publicly owned utilities have increasingly commercialized their operations (cf. Bakker, 2010; Lobina, 2017) and, lately, their financing.

The ongoing commercialization of development funding has buttressed this commercialization of public water utility operations and financing. By turning to de-risking commercial financing instead of directly funding infrastructure and water services development, donors, MDBs, and DFIs have started to effectively promote commercial financing and in extension commercial operation of public water utilities. The Development Committee, IMF, World Bank, G20, as well as various donors, in other words, have begun to re-imagine their role in (infrastructure) development funding (Development Committee, 2015; G20, 2018b, 2018a; G8, 2007; World Bank, 2018). Gabor (2021, p. 5) conceptualizes this new “development as de-risking” paradigm’ as the ‘Wall Street Consensus’ (WSC), whose key tenet is to reorient the state to cushion and ease private financing of privatized infrastructure by de-risking investments and opening up local financial systems (cf. Gabor, 2018). The WSC re-makes the state into a de-risker that, together with backing organizations, reduces various risks (such as demand risks, political risks, or currency risks) to promote and sponsor private sector participation in developing countries as a vehicle to “escort” global (North) institutional investors and the managers of their trillions into development asset classes’ (Gabor, 2021, p. 1). Turning infrastructure development and rehabilitation backlogs into attractive investment opportunities, or financializing infrastructure development (G20, 2018b; O’Brien et al., 2019), has become central to governments’ and donors’ efforts to mobilize domestic or international resources, including in Kenya’s water sector (Williams, 2021).

Kenya’s water sector, however, has shown the difficulties faced by governments and donors in escorting these alleged (Northern) trillions into water sector investments. Two Dutch initiatives, for instance, have attempted to ‘unlock’ capital markets and make private commercial finance available to the water sector in Kenya (see Williams, 2021). The Kenya Innovative Finance Facility for Water (KIFFWA) has offered de-risking to, as KIFFWA staff put it, ‘any water related [private] project’ by providing subsidies for project preparation. These water related projects explicitly include ports, water transport, hydro power, or irrigation projects, that is projects typically associated with sectors other than the water sector. Additionally, the Kenya Pooled Water Fund (KPWF) has specifically targeted the country’s water sector. By pooling several public water utility loans into larger bond issuances, the KPWF has, so far unsuccessfully, attempted to attract investments from Kenya’s domestic capital market for water services development. The establishment of KPWF was financed by KIFFWA, making it KIFFWA’s primary vehicle to facilitate investment into actual water services provision projects. These initiatives have yet to facilitate private commercial financing of water services development, however. Of the few public utilities that have been offered KPWF loans, none have ultimately committed to such financing despite KPWF’s promotion of the approach and their year-long work on linking Kenya’s water sector with private investors through careful legal and financial structuring of financing transactions.

Reorganization of Kenya’s water sector debt emission

Regardless of actual private financing transactions in Kenya’s water sector, however, these and other initiatives of commercializing development funding, together with government reforms, sector regulation, and sector guidelines, have further strengthened the commercialization of water utilities and water services provision. Traditional development funding has been negotiated between donors and the Kenyan government or treasury, who not only guaranteed repayment but also decided how to forward funds to, for instance, water utilities. Recent forms of commercialized development funding, however, have instead facilitated and de-risked direct financing relations between water utilities and private commercial lenders. This change has not only brought water

utilities, some for the first time, into contact with private commercial lenders but also with a strict repayment enforcement. To mobilize resources for the rehabilitation and further development of Kenya's water sector, donors and the Kenyan government and sector organizations have increasingly endorsed and supported public utilities' borrowing from private lenders on commercial terms. This commercialization of development funding has begun to fundamentally reorganize the sector's borrowing by making water utilities, the publicly owned water and sanitation companies, the central entities in the sector to borrow.

This paper understands such borrowing from commercial lenders by water utilities as a process of debt emission, in which water and sanitation companies (WASCOs) produce trustworthy promises of their ability and commitment to repay lenders. Furthermore, it uses Social Positioning Theory (Lawson, 2019, 2021) to understand the reorganization of the sector's borrowing as a positioning process, where, in this case, WASCOs come to occupy the central debt emitter position in the water sector. Crucially, this reorganization of development funding in the sector and associated debt emitter position occupancy by WASCOs has changed these companies and obligated them to emit debt, i.e. to produce, by themselves, convincing repayment promises that (private) creditors trust enough to purchase (see Douglas, 2015). This production of debt, however, is new to most utilities and neither straightforward nor automatic. Whereas previously the government or treasury emitted debt on behalf of the sector by signing financing agreements and guaranteeing repayment, utilities have now been tasked with borrowing from commercial lenders on their own. This has included preparing 'bankable' project proposals, finding commercial lenders interested in financing such proposed projects, and negotiating financing agreements with these lenders. Most importantly, debt emission by utilities has required utilities to become creditworthy, which has introduced to utilities a range of new practices, or changed some of their existing ones in ways, that have consolidated the ongoing commercialization of water services provision.

Social positioning is useful here to see the preparatory processes as well as endorsing or enforcing actors behind the reorganization of Kenya's water sector and the associated changes in utilities. In short, the theory holds that social systems emerge through the organization of its elements, and that key to this organization is the occupancy of social positions by these elements. Through such position occupancy, elements become components of the emergent social systems that perform clearly defined functions for the social systems they are relationally organized in. Social positions are sets of rights and obligations, which position occupants may exercise and should fulfil; these rights and obligations are matched by other rights and obligations of a different position in the social system or community. Components are irreducible to the underlying elements and are 'both enabled [...] and] oriented to performing in ways that contribute to the working of the wider system'; they perform, in other words, 'certain positional or component functions' (Lawson, 2021, p. 19). An often used example is that of an academic and a librarian: a person *qua* academic, that is a person occupying an academic position at a university, has a right to borrow a book from this university's library and go to a librarian and request that book; this is matched by an obligation of a person *qua* librarian to fetch the book and hand it over to the academic. This may also be the same person being positioned both as librarian and academic, say a person working part-time as librarian and academic. In Kenya's water sector, for instance, the ongoing commercialization of development funding has meant that the right of utilities *qua* water services providers to use repayable finance to rehabilitate or develop infrastructure has increasingly been matched by the obligation of utilities *qua* debt emitters to borrow that capital.

Two additional points are important for the purpose of this paper. First, the positioning process depends on (viable) candidates, may take different forms such as application or authoritative

allocation, and may be fallible or contested. In most cases, position occupants pre-exist their positioning but may still require further development of their capacities or commitment to become viable candidates (Lawson, 2021). For instance, water utilities have been singled out as the primary candidates for occupying the debt emitter position in Kenya's water sector to mobilize more resources from commercial sources for rehabilitation and development of infrastructure. Given that past corporatization and commercialization of water services provision as well as the legal and regulatory framework have made water and sanitation companies the owners of the water sector's revenues, the idea goes that the utilities can secure commercial loans and supplement (or eventually replace) traditional funding that has relied on guarantees from the government or treasury. In other words, Kenya's water and sanitation companies have been reimagined by the government, regulator, and donors as central sector entities to emit debt next to their existing mandate of providing water services. But few utilities have been *viable*, and even less so *committed*, candidates, making the positioning process difficult if not impossible. Most of Kenya's public water and sanitation companies either continue to struggle with recovering costs (let alone recovering also financing costs, WASREB, 2021) or continue to seek and choose traditional and cheaper ways to finance over commercial and more expensive ones.

Second, and similar to aforementioned point, component performance relies on either pre-existing or newly acquired capacities as well as the commitment of position occupants to reliably perform the component function. Reliable component function performance takes the form of specific practices, i.e. the '(collectively) accepted way[s] of proceeding within a community' (Lawson, 2019, p. 47), which may need to be learned by potential position occupants prior to their positioning to effectively occupy a position. Kenya's water and sanitation companies, to effectively perform the component function of debt mission on behalf of the water sector, have begun to acquire a range of new practices or change several existing ones. Next to adopting new practices related to debt emission itself such as packaging projects into bankable project proposals, preparing project documentations and financial statements, or negotiation transactions with commercial lenders, this has crucially included water and sanitation companies adopting new, or changing existing, practices of commercially operating water services provision to convince potential lenders of their ability and willingness to repay. WASCOs' occupancy of the sector's debt emitter position, in other words, has tended to entrench practices of commercialized water services provision in their performance of the sector's water services provider function *qua* water services providers.

A key process behind this positioning of Kenya's water and sanitation companies as debt emitters and the associated entrenchment of commercial water services provision practices has been the commercialization of development funding by primarily donors but also the Kenyan government. Donors have strongly promoted a debt emitter position occupancy by utilities and the commercial financing of water utility projects. The World Bank, for instance, when looking for ways to upscale its community micro-finance programme at the end of the 2000s, endorsed commercial borrowing by utilities and persuaded the Kenyan government to enable and endorse it, too. More recently, the Kenya Pooled Water Fund has promoted water utility financing through the Kenyan capital market, *inter alia* by acting as an intermediary pooling different loans to utilities into bonds issued at the Nairobi Securities Exchange. Furthermore, donors and the government have worked to produce viable candidates for debt emitter position occupancy by instilling and entrenching practices conducive to debt emission. Realizing that enabling utilities to commercially borrow was not enough, donors such as the World Bank or USAID and others including the Ministry of Water or the sector's regulator, have fashioned and trained (or supported the fashioning and training of) selected public water and sanitation companies in practices required for effective and reliable

debt emission. Moreover, where WASCOs have actually been positioned as debt emitters, donors have supported debt emissions through various de-risking approaches including financial, technical, or reputational support through subsidies or guarantees, transaction services, or transaction endorsement.

Seeing the commercialization of development funding in Kenya's water sector as a particular relational (re)organization and social positioning of particular sector entities helps to see how donors and the Kenyan government and sector regulator have attempted to position the same sector entities – the public water and sanitation companies created through an earlier corporatization process – as both water services providers and debt emitters. While the Kenyan government has pursued other options such as infrastructure bonds issued by the treasury, WASCOs, which have long already occupied the water services provider position, have become the main candidates to occupy the debt emitter position regardless of their (current) unviability. This approach inevitably ties (commercial) borrowing to revenue generation inside the sector: instead of government or treasury guarantees, WASCOs as debt emitters secure commercial loans by credibly demonstrating their ability and commitment to recovering borrowed sums and financing costs from commercial operation of water services provision, i.e. by ultimately charging and collecting fully cost-recovering user fees. It also links WASCOs with commercial lenders or their intermediaries (such as KPWF), and aligns the former's debt emission with the latter's requirements and terms. Mobilizing private commercial resources for Kenya's water sector at this level, in other words, depends solely on the bankability of proposed projects and ultimately utilities' creditworthiness rating. The de-risking developmentalism or Wall Street Consensus (Gabor, 2021) has aimed to support this by improving the bankability of projects with subsidies, providing guarantees and other credit enhancements, or facilitating project preparation and implementation. Two successful results-based financing programmes funded by the World Bank and German development bank KfW, for instance, substantially subsidized commercially pre-financed projects by Kenyan water utilities if agreed-upon milestones and results were reached.

Such de-risking is transient, or planned to be transient, however: the World Bank and KfW funded programmes ended or will end soon, and initiatives such as the KPWF have worked on financing approaches that include much less or no credit enhancements or subsidies. While the KPWF received seed-funding through KIFFWA from Dutch development funds, the initiative has planned to charge utilities a premium on its own financing rates to recover the fund's costs. This premium in the range of 2–3 per cent points is expected to not only cover the fund's own operations but also any commercial guarantees that may be still needed. Moreover, KIFFWA has considered the KPWF as one of their investments and expects the KPWF to repay once it becomes successful. Despite their non-success, the KPWF points to a form of mobilizing private resources for Kenya's water sector through reliable and self-reliant debt emission by public water and sanitation companies without external de-risking. The commercialization of development funding in Kenya's water sector, in other words, has not simply de-risked private investments but instead has aimed to consolidate the commercialization of water services provision to position water and sanitation companies as reliable and self-reliant debt emitters.

Making and consolidating the commercial public utility

Over the last two decades, the Government of Kenya and a number of donor programmes have advanced the commercialization of development funding in Kenya's water sector. This has

included USAID's completed *Sustainable Water and Sanitation in Africa* (SUWASA, USAID, 2015) and ongoing *Water, Sanitation and Hygiene Finance* (WASH-FIN, USAID, 2019) programmes, German development agency GIZ's involvement in implementing principal sector reforms (see also Blume et al., 2015), and German development bank KfW's and the World Bank's results-based financing programmes *Aid on Delivery* and *Output-based Aid* (AoD and OBA, WSTF, 2018). More recently, the *Kenya Pooled Water Fund* (KPFW) has been set up and has worked on making capital market-based financing available to the sector. The KPFW is a pilot project of the Dutch-supported *Water Finance Facility* (WFF, see OECD, 2018c) that attempts to worldwide tap into financial markets by pooling loans to water utilities and financing them through bond issuances. Building on each other, these earlier donor programmes and more recent KPFW (as well as other smaller NGO programmes) have worked to make Kenya's water and sanitation companies into more and more viable candidates for occupying the sector's debt emitter position and to facilitate actual debt emissions, i.e. facilitate actual performance of the debt emitter function.

As one of the first programmes to explore commercial financing in Kenya's water sector, SUWASA started by working with commercial banks and explaining the water sector to them; its successor WASH-FIN has since focused on developing capacities in public utilities to increase their creditworthiness. The AoD and OBA programmes subsidized projects commercially financed by utilities by awarding grants of 50-60% after successful implementation according to previously agreed designs and milestones. By significantly reducing risks and project costs, these two programmes made commercial financing transactions possible, for many participating utilities for the first time at this scale. Most recently, the KPFW has attempted to pool loans to utilities into bond issuances. While the KPFW has offered neither de-risking nor capacity-building on its own, the initiative has employed external organizations to develop capacities of utilities and support them in preparing bankable project proposals. All of these efforts, especially the KPFW, have concentrated on a small sub-set of mainly urban water and sanitation companies, and have had limited material effects so far both in terms of mobilizing resources and extending services. Nevertheless, by supporting and training utilities and by facilitating actual financing transactions and exposing utilities to commercial lenders, these programmes have changed utilities and their practices of providing services and mobilizing resources.

A range of Kenyan government and state organizations have supported these initiatives. Based on changes of policy (Ministry of Water Resources, 1999) and legislation (Republic of Kenya, 2002; cf. Ombogo, 2009) in 1999 and 2002, the Ministry of Water reorganized the water sector by taking water services provision out of municipal departments and the Ministry, and handing over mandates to newly created local, regional, and national organizations. This included the creation of Kenya's water and sanitation companies that entered into service agreements with regional asset holders and developers (at this time called WSBs, the Water Services Boards) and have since been regulated by the newly created sector regulator WASREB (the Water Services Regulatory Board). Additionally, the Water Services Trust Fund (WSTF) was set up to concentrate funding of underserved areas in a single state corporation. This re-organization of the sector was later adjusted (Republic of Kenya, 2016) to account for the new Constitution (Republic of Kenya, 2010), which had devolved water and sanitation to newly created sub-national County Governments that now became the sole shareholders of water and sanitation companies. Importantly, utilities, incorporated as water and sanitation companies under Kenya's Companies Act, became the owners of water user fee collections, and acquired the right to borrow from commercial lenders to finance infrastructure rehabilitation and development. Corporatization, in other words, enabled utilities to become candidates for occupying debt emitter and subsequently debtor positions.

At the same time, the water sector regulator WASREB acquired the right to license utilities, which has entailed tariff guidance and approval. This has allowed the regulator to recommend and approve tariff adjustments that ensure full cost-recovery, including the cost of infrastructure development, its financing, and consumer price index (CPI) rises. While WASREB typically recommends no adjustments in the lowest tariff segment to ensure affordability and compliance with the country's constitution that established water as a basic right (WASREB, 2020), the regulator has otherwise strongly endorsed tariffs that allow for commercial financing in tariff guidelines and the annual performance reports (WASREB, 2020, 2021, n.d.). Commercial lenders have welcomed this regulatory clarity and endorsement as well as the work by WASREB and the World Bank on a 'revenue-backed lending structure, through which utilities would be able to borrow against future surplus revenues' (WASREB, 2020, p. 11), which made it possible for commercial lenders to create and offer financial products to water utilities. This includes the KPWF or similar initiatives that have been permitted by Kenya's capital market regulations to buy such revenue-backed debt from several water utilities, pool and securitize it, and issue bonds at the Nairobi Stock Exchange to finance this utility debt purchase. The annual report on utility performance based on a standardized and transparent methodology by WASREB has further reassured lenders, simplified their (initial) assessment of utilities, and therefore promoted lender interest in the sector. These 'Impact' reports (e.g. WASREB, 2021) have also included a creditworthiness rating and ranking based on an automated computation developed after an initial comprehensive and expensive creditworthiness rating in 2015 (Gakubia et al., 2015).

These sector reforms, growing government and regulator endorsement, and the commercialization of development funding by various donor organizations have promoted and facilitated the making of viable debt emitter candidates of utilities and ultimately their occupancy of the position. Despite a range of financial, technical, or reputational de-risking by the Ministry, regulator, and donors, the central idea has been self-reliant mobilization of resources by water and sanitation companies. Utilities have been imagined as professionally run, fully cost-recovering, and self-financing corporations that efficiently and effectively provide water services to satisfied and promptly paying consumers (who also report any issues including illegal connections). Most utilities, however, have been far from this imagined ideal. Water loss (non-revenue water) stood at 47% in 2019/2020, urban water coverage at 57%, and sewerage coverage at 15%. On average, utilities have merely recovered O&M costs, and have been far from cost-recovery levels that would allow servicing existing debt or thinking about new investments (WASREB, 2021). The (non-)success of commercial financing initiatives underlines this state of the sector: while the KfW and World Bank funded AoD and OBA programmes were successful, they achieved this success only through substantial subsidies and de-risking. The KPWF that offers much less (and aims at offering no) de-risking, has struggled to find utilities for and commit them to its financing approach. Nevertheless, some water and sanitation companies have been open to a 'change of mindset', as some utility staff called the promoted changes in utilities during a workshop hosted by WASREB and organized and funded by USAID's WASH-FIN programme.

Practices of commercially financed services provision

This 'change of mindset' has been, first and foremost, a continuation and deepening of ongoing professionalization and commercialization processes. Utilities, if they are to perform as debt emitters, need to become active agents that seek 'alternative financing' instead of being passive receivers of public funding, and active agents that reach out to and engage consumers instead of simply

providing water services to citizens in their mandated area. Initiatives to promote self-reliant and reliable debt emission by utilities have therefore focused on building capacities in water and sanitation companies. A range of new practices, formerly unknown to, unperformed by, or simply unneeded by public utilities, have been introduced to them, including practices such as business planning, financing planning and debt assessment, or bankable project preparation. These are practices that directly underpin debt emissions that require assessing maintenance and development needs, planning investments and projects, evaluating the company's debt capacity and projects' feasibility, and packaging these plans, assessments, and projections into financing proposals that are readable and trusted by commercial lenders.

The central element in the transformation of public utilities has been business planning. In 2019, WASREB issued a guideline (WASREB, 2019) that explains step by step purpose, content, and creation of a business plan as well as its main sections, providing sample formulations to ease and speed up the process for water and sanitation companies. Supported by WASH-FIN and associated consultants, staff of Mavoko Water and Sewerage Company and Nakuru Rural Water and Sanitation Company had trialled the new guideline during its finalization and drafted and submitted to WASREB business plans for their companies. They described the guidelines to other utilities that learned about it at the WASREB workshop mentioned above as helpful to understanding 'what is required' and to actually writing and compiling a business plan. They also remarked, however, that business planning was 'something new' and a 'tough and long exercise' that needed top management endorsement, leadership, and coordination: collating necessary information was a utility-wide effort, involved external stakeholders, and required adjusting collected data to the WASREB required format. Nevertheless, the two utilities stated that the process 'opened their mind' to the usefulness of business planning to focus operations, achieve cost-recovery, and support expansion. Moreover, they underlined the importance of scoping the market landscape through assessing 'consumers' and their composition, the 'competitive landscape or substitutes' to utilities' services (e.g. rainwater harvesting), and the 'problem [...] or market gap that the company is addressing' (WASREB, 2019, pp. 11–12). As a result, management staff of one of the two utilities said they now felt 'ready to go out and shop around for financing of bankable projects'.

Business and investment planning have since become a regulatory requirement as part of license renewals and tariff adjustment proposal approvals; WASREB can deny both if business and investment plans are not part of applications or for instance fail to justify tariffs. Next to enabling effective and efficient management of utilities and communicating company objectives and plans to stakeholders and operational partners such as 'development partners, local financial institutions [...], and private partners' (WASREB, 2019, p. 1), one declared objective of business planning is to help water and sanitation companies to access private finance. The guideline is clear that without 'alternative financing models' that use public resources to mobilize private resources the sector will not meet its investment goals and fail to achieve universal access by 2030 (see Republic of Kenya, 2013), and that business and investment planning are 'critical tools' (WASREB, 2019, p. 2) to this end and part of a set of practices of how utilities should be run. Specifically, the guideline reminds utilities and their owners of their obligation 'to review the efficiency and commercial viability of their existing licensed water utilities', and that

one of the key measures at [their] disposal and specifically for the urban [...] utilities] is to enforce the use of basic commercially oriented management instruments such as business and investment plans in order to improve commercial viability to enable them deliver services efficiently and effectively to their customers. (WASREB, 2019, p. 1)

As a central practice being introduced to water and sanitation companies, business planning has oriented them to full cost-recovery and furthered the commercialization of utilities as water services providers. The sample section on ‘Project(s) for Investment’ for instance highlights that utilities need to describe and justify specific projects and their merit to achieve utilities’ plans, show how performance improvement will be realized through these projects, and demonstrate that projects will not ‘generate operational and maintenance costs which cannot be covered with revenues’ (WASREB, 2019, p. 16). Furthermore, business plans have been an important instrument for utilities to understand their areas of development and plan concrete investments as well as a crucial ‘standard tool’ to communicate their goals and associated financing needs to commercial lenders in a way that is well understood by them and that ‘facilitates a quicker evaluation of [... their] business model and growth strategy’ (WASREB, 2019, p. 3). Business plans have been promoted by the regulator as useful in two ways then: to make utility management effective and efficient, and to effectively communicate improved management and to make the company readable to lenders. Business plans, in other words, professionalize water and sanitation companies, commercialize water services provision, and enable debt emission.

The enablement of debt emission has been further supported by newly introduced practices such as debt capacity assessments. Utilities have been provided with a spreadsheet-based tool that takes as input historical financial statements, some general assumptions, and more specific loan assumptions to generate initial projections that can inform decision making about achievable commercial financing levels and models. The idea is to generate a quick assessment of utilities’ upper commercial borrowing limit under currently existing revenue conditions and produce an early indication of the optimal amount and kind of debt a utility can service and repay; to estimate, in other words, a utility’s capacity to emit debt. This adds precision and depth to the creditworthiness rating computed by WASREB and helps utilities to ‘play out’ different scenarios, such as different kinds and sources of finance, different project sizes and connections numbers, or different tariff adjustments. During the WASREB workshop, management staff of attending utilities were handed out the tool, explained its use, and asked to test it with one of their planned investments and realistic numbers. Next to such general introductions to the tool, WASH-FIN funded trainings have further built utilities’ capacities to generate such debt capacity assessments in a more targeted way.

Critically, however, debt emission requires what have been called ‘bankable’ projects. New practices such as business planning and debt capacity assessment (as part of financial management) have put utilities into a position to ‘shop around for financing’. Any commercial financing transaction is based, however, in the ‘bankability’ of planned projects and the cost-recovering revenue streams they generate. To this end, ‘bankable’ project proposals need to be prepared in a form readable to potential lenders. These include detailed project descriptions, calculations of project costs, and plausible estimations of associated revenue streams. Commercial borrowing, in short, depends on utilities’ capacities to prepare not merely technically but also commercially and financially viable projects. Given that many utilities have struggled with this, donors have supported utilities in preparing proposals through trainings, backstopping, or contracting of NGOs that have prepared them in parts or full. A proposal for a project to expand coverage, for instance, needs to establish through surveys and evaluations the ability and willingness of communities to connect and pay for connections and services according to the (possibly newly adjusted) tariff. While network extension projects have generally been seen as excellent opportunities for utilities to grow their businesses (and fulfilling their mandate), establishing the commercial viability of such growth by understanding under-served areas and communities, designing projects accordingly, and structuring finance consistently has required external support.

Furthermore, few projects have been bankable based on estimated revenue streams alone. Mobilizing private resources has therefore often taken the form of subsidized or (partially) guaranteed loans that ‘blend’ public funds with commercial finance. Next to technical de-risking of transactions by supporting the preparation of business plans, project proposals (including technical and commercial viability studies), and negotiations with lenders, such financial de-risking has crucially enabled utilities to borrow from commercial lenders despite their inadequate creditworthiness. Donors and the Government of Kenya, directly or through sector organizations, have provided results-based grants, strongly endorsed cost-recovering tariffs, set up reserve funds, or promised junior investments that take losses first. While much of the structuring work has been done by donor-funded initiatives, utilities have been shown how to consider different forms of financing for different project proposals dependent on their respective commercial viabilities. Similar to sector-wide discussions of reserving public funds for projects in most need of grants or cheap funding, utilities have been asked to use commercial finance as much as possible to ‘free up’ public funds for ‘pro-poor’ projects such as network extensions to under-served areas. So far, however, utilities have been slow to finance any projects fully on commercial terms. The KPWF, for instance, which has attempted to provide commercial finance with few credit enhancements and no subsidies, has struggled to find network extension projects and focused instead on efficiency projects such as water loss or energy cost reduction, which are more predictable in terms of their cost savings that can be used to repay commercial loans.

The two most successful commercial financing programmes to date, KfW’s Aid on Delivery (AoD) and the World Bank’s Output-based Aid (OBA), blended public monies with commercial loans, however. Both were run through the Water Sector Trust Fund (WSTF) and featured substantial post-implementation grants of 40% (AoD) and 60% (OBA) of project costs, respectively. Additionally, up to 90% of technical project preparation and supervision costs (e.g. feasibility studies, implementation supervision) could be covered by the scheme (WSTF, 2015, 2018). The condition was, however, that utilities had to pre-finance the whole project commercially, implement it on time according to designs, and achieve agreed results. Utilities were free to choose any commercial bank to finance their project, yet some banks were additionally part of USAID’s Development Credit Authority (USAID, 2018) that provided 50% guarantees on non-payments to banks in addition to the grants. This effectively reduced banks’ risk to virtually zero, as long as project implementations qualified for the subsidy. Unsurprisingly, several staff of both utilities and banks expressed their content with these programmes and found they were successful. Some utilities even mentioned that the size of the grants received through these programmes has helped them to de-risk (i.e. subsidize) other commercial loans as well.

From de-risking to debt emission by utilities

Ultimately, however, the commercialization of development funding has aimed to move from de-risking and supporting utilities’ borrowing to self-reliant debt emission by utilities. The aim of capacity building programmes such as USAID’s WASH-FIN programme has been to put (some) utilities in a place where they can perform themselves or pay contracted third parties for most de-risking activities currently still performed by donors or other organizations. Donors, given their changing support of the sector since Kenya was recategorized as lower middle-income country, have been clear about their goal to end utilities’ dependency on external concessional or free technical or financial support. This has also been the goal of a Kenyan initiative of five municipalities that works towards issuing local government bonds to finance infrastructure and basic

services development. A representative of the initiative noted that ending aid dependency was one of their motivations to explore and develop commercial financing options for sub-national governments that have owned the water and sanitation companies since the 2016 reform. Donors' current funding and de-risking activities, in other words, have remained important but have also been imagined to be transient and a stepping stone to positioning water and sanitation companies as debt emitters. This positioning as debt emitters process has occurred next to and based on the further promotion of a redefinition of the water services provider position as an increasingly *commercial* water services provider position. The changes in utilities' practices, in short, are part of making viable candidates out of WASCOs for occupying both a commercial WSP position as well as a debt emitter position, to ultimately reduce their aid dependency.

The government and regulator have supported this, too, hoping for overall performance improvements of the sector when its funding has to be recovered. As debt emitters, utilities have to engage with commercial lenders, which has exposed them to lenders' terms and conditions, their requirements of readability of company financials and bankability of proposed projects, and their disciplinary mechanisms. Commercial lenders, or intermediaries such as the KPWF, have begun to act as crucial endorsers or sometimes enforcers of utilities' newly adopted commercial practices that promise more efficient and more effective operations. This has supported the government's and regulator's efforts to improve the sector's overall performance and achieve the sector's goals of universal coverage. Utilities that have borrowed through OBA or AoD programmes or prepared project proposals for the KPWF noted that commercial financing changed the way they looked at projects and their 'business' since they knew they had to repay the loans. Debt emitter positioning has created a dynamic that promotes performance improvements and utilities' commercialization process increasingly regardless of donors' or other organizations' programmes by creating financing relations between utilities and commercial lenders.

This hand-over of external de-risking to utilities has been a choice made by donors and the Kenyan government. Commercial lenders have been mostly indifferent to how risks have been reduced, whether by utilities themselves or by donors and the government through guaranties or subsidies. Even if debt emission to mobilize resources for the sector's development from private commercial sources is accepted as inevitable, alternative approaches to the one currently promoted that attempts to position water and sanitation companies as self-reliant debt emitters are imaginable. This has included ideas to position a different sector entity such as a sector specific and state supported development bank as the main debt emitter. Debt emission by utilities has seen broad support, however, given that it has not only promised resource mobilization but also additional external endorsement or enforcement of commercial practices and performance improvements. The commercialization of development funding, including through its various de-risking approaches, has been an attempt to remake utilities into commercial utilities that operate water services as a business and finance their development purely based on the generation and prudent management of their own revenue streams.

Whereas utilities own the sector's revenues that can back any debt emissions once services provision fully recovers costs, making utilities the sector's debt emitter has effectively reduced options for cross-subsidization of infrastructure development and maintenance. Revenues generated by a utility can only be used by that utility towards backing any commercial financing. This has created a sector that can turn commercial service delivery unevenly and disparately into resource mobilization, depending on water users' consumption and payments as well as geographical conditions. Urban utilities, for instance, have found it easier to charge and collect fully cost-recovering

tariffs and borrow commercially. Similarly, utilities with lower costs of producing water, for instance due to the topography of their mandated area requiring less pumping, have found it easier to pay the premiums charged by commercial lenders. Making utilities the water sector's borrowing entities has created a tendency to segment water services provision in Kenya into 'creditworthy' water and sanitation companies and 'non-creditworthy' ones. The increasing dependence on commercial finance to rehabilitate or develop infrastructure turns this segmentation into a divergence: while it opens spaces of development for the few more or less 'creditworthy' water and sanitation companies, it closes spaces of development for others. Technical assistance programmes have therefore aimed to make more utilities 'creditworthy' and 'turn them around', including further commercializing their operations.

Such 'turn around' has focused on water and sanitation companies' management and their practices, including the capacity and commitment of utility leadership and staff to commercialize service provision. Yet despite their monopoly as the only licenced water service providers, few water utilities in Kenya operate in a market where revenue generation from commercialized services provision can back commercial financing. Furthermore, few utilities have provided services everywhere in their mandated area, leaving wide services provision gaps especially in rural and peri-urban areas that are filled by private (unlicensed) services providers, private boreholes, water harvesting, or surface water collection. In these contexts, few projects are 'bankable', making debt emission by utilities difficult even after 'turn around'. Donors and the government have acknowledged this and have started to work on formalizing and institutionalizing the segmentation of the sector into creditworthy, near-creditworthy, and non-creditworthy utilities. This would allow them to continue de-risking the funding of those utilities and areas that need it most, while mandating commercial financing for creditworthy ones. Development by de-risking and by debt emission, in short, coexist, and occur according to the markets utilities find themselves in and utilities' capacities and commitment to turn these markets into profitable and predictable revenue streams. The commercialization of development funding has not only consolidated the ongoing commercialization process in Kenya's water sector, but also created two development approaches in the sector based on individual utilities' viability to be positioned as debt emitters.

Conclusion

The commercialization of development funding has used a range of de-risking techniques such as guarantees or blended finance to 'escort' (Gabor, 2021, p. 1) private investors into riskier geographies and sectors, and make commercial finance interested in and available to development projects. Kenya's water sector has been at the forefront of this. Over the last two decades, the country has seen a range of donor programmes working on de-risking commercial financing transactions and promoting private investment to rehabilitate and develop the country's water infrastructure and improve water services provision. Such de-risking has been imagined temporary, however: neither donors nor the Kenyan state have shown interest in perpetually supporting commercial financing transactions. Whereas earlier programmes such as KfW's Aid on Delivery or the World Bank's Output Based Aid provided substantial subsidies and guarantees, the more recent Dutch-initiated and funded Kenya Pooled Water Fund has attempted to reduce such de-risking elements to near zero. The aim of donors and the government, including the sector regulator WASREB, has been to make the water sector self-reliant and end its dependence on aid or public funding. To this end, de-risking has been regarded the transition from resource mobilization from

public funds (aid or government funding) to utilities' self-reliant borrowing from private commercial sources.

The commercialization of development funding in Kenya's water sector has aimed, therefore, to turn the country's publicly owned and operated water and sanitation companies into entities that can commercially finance their investment needs. Using social positioning theory, this paper understood this process as a positioning process where some sector entities are positioned as debt emitters, i.e. as sector components that emit debt (and mobilize commercial resources) on behalf of, and for, the rehabilitation and development of the country's water sector. In Kenya, the entities selected as, and fashioned into, debt emitter position occupants have been the water and sanitation companies, mainly because since their incorporation these companies have been the generators and owners of sector revenues. To prepare these companies for position occupancy (i.e. make them into viable candidates for position occupancy) and to facilitate their positioning, de-risking has been a crucial device that has helped to foster WASCOs' engagement with commercial lenders and align their practices with debt emission. To emit debt, that is to produce trustworthy promises of ability and commitment to repay, public utilities have, for instance, adopted a range of practices such as business planning or bankable project proposal preparation. This has been widely supported and promoted by donors, the government, and the sector regulator given that these practices have not only promised to enable debt emission but also to further professionalize and improve the management of utilities.

Utilities, however, have also adopted practices that underpin their occupancy of an increasingly commercial services provider position. Self-reliant debt emission has required from water and sanitation companies to generate the revenues needed to back their borrowing from private commercial lenders. These revenues have been generated through their occupancy of the water services provider (WSP) position: utilities as WSPs have begun to charge and collect adjusted tariffs that recover not only their operation and maintenance costs, but also the cost of commercial financing. This continued commercialization of water services provision, too, has seen broad endorsement by donors, the government, and the sector regulator, since it has promised to truly make utilities self-reliant and independent from public funding such as aid or government grants. Yet ending such dependency has been difficult for many utilities, especially for those operating in contexts where cost-recovery has remained impossible given that water users have struggled to afford connections, or since necessary works and investments have remained unfeasible. Whereas efficiency projects and expansion projects in urban areas have been shortlisted for commercial financing, projects in peri-urban or rural areas, which arguable help most immediately to provide water services to the many Kenyans still under-served by public utilities, have proven unfeasible. The commercialization of development funding and its uneven positioning of some (mostly urban) water and sanitation companies as debt emitters has created different development prospects depending on water users' ability and willingness to pay for the commercial financing rates charged by private commercial lenders. Without mechanisms to redistribute collections across regions and utilities, and to direct subsidized funding to non-creditworthy utilities, commercialized development funding risks deepening existing unevenness.

Turning to social positioning theory and understanding the commercialization of development funding as a positioning process helps to see Kenya's public water and sanitation companies as occupying two sector positions: the water services provider and debt emitter position. This furthermore helps to analytically separate the two: similar to how various entities including privately owned companies may occupy the water services provider position, entities other than the water and sanitation companies may occupy the debt emitter position. This could include entities that

can produce trustworthy repayment promises and emit debt based not on recovering costs but other means. In the Netherlands, for instance, the national ‘promotional bank’ Nederlandse Waterschapsbank (see NWB, 2022), occupies the Dutch water sector’s debt emitter position. While debt repayment ultimately still comes from utilities, such debt is emitted based on the bank’s excellent creditworthiness rating given its state guarantees. Furthermore, a single sector-wide debt emitter could cross-subsidize resource mobilization for utilities that will continue to struggle with full cost recovery and help prioritize funding of those furthest behind. Paradoxically, the Dutch Waterschapsbank was the model that shaped the creation of the Kenya Pooled Water Fund: the KPWF started with the same idea – to become a public ‘MajiBank’ – but has since been implemented as a private fund that pools loans to creditworthy utilities.

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