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Article

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The everyday construction of value: A Canadian investment fund, Chilean water infrastructure, and financial subordination

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Abstract

Infrastructure in several economies in the Global South has rapidly undergone financialization, aided and abetted by governments opening-up their infrastructure assets to global institutional investors in search of stable, predictable revenue streams. This account of financialization could be the end of the story were it not for the fact that Christophers (2015) and others have shown that institutional investors are not simply in the game of ‘finding’ value or ‘harvesting it’ from obliging states, rather they actively construct it. What often catches the eye, however, are the more overt forms of financial engineering (Ashton et al., 2012), whereas what tends to go unnoticed are the ways in which infrastructure assets are routinely ‘worked’ to generate value over time. Here, we draw attention to a slower-paced financialization of infrastructure assets where, following Chiapello (2015, 2020), investors are engaged in a continual process of evaluation and revaluation of their assets to add value over and above prevailing benchmarks. Taking the example of Canada’s Ontario Teachers’ Pension Plan (OTPP) and its extensive investments in Chilean water infrastructure, this article considers how a global investment fund draws on financial practices developed in the advanced economies to add value to long term infrastructure assets in the Global South. Such practices, we argue, enact a routine form of financial subordination which does not match the familiar image of wholly subservient and dominated dependent economies. Rather, the power asymmetries involved equate less to a zero-sum game and more to a game where the benefits are unequally shared between asset managers in the Global North and states in the Global South, where effectively the latter cooperate in their own submission in ways that are not always acknowledged as such.

Keywords

Valuation, evaluation, financialization, financial subordination, Global North, Global South

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Introduction

In accounts of the ‘financialization’ of infrastructure it is perhaps all too easy to pass over what is at play when investors from the ‘Global North’ invest in assets in the ‘Global South’. Our account of the financialization of Chilean water utility assets in this article seeks to weave the more subtle forms of financial subordination that accompany financialized links between the Northern and Southern hemispheres.

Financial subordination is a relational concept, which in the context of the relationship between the economies of the Global North and South suggests that the latter have little or no choice over the capture of financial value and profits by the former. The structural nature of that subordinate position is well known, with dominant actors in the international monetary system benefitting at the expense of developing and emerging economies (Bonizzi, Kaltenbrunner, and Powell 2020; Choi, 2020; Kaltenbrunner and Paineira, 2018; Powell, 2013). Less well documented, however, are the day-to-day practices of subordination, the routine financial techniques that construct value for investors in the Global North. Such practices have arguably become more significant as established actors such as banks and non-financial corporations have been accompanied by institutional actors and asset managers keen to exploit the development of new asset markets in the Global South (Bonizzi, 2017; Gabor, 2021; Musthaq, 2020). While both sets of investors, old and new, have been able to shape the terms of dependency that constrains the ability of developing economies to circumvent their subordinate position, the development by asset managers of routine financial techniques designed to realize greater total returns over the lifetime of an investment has, in our view, altered the form of that subjection. Such practices, we argue, are the conventional means by which pension funds, asset managers and other global investment funds are increasingly able to construct value from the Global South’s infrastructure assets.

Our focus on financial subordination as a *practice* is deliberate. It shifts the focus of attention from subordination as a structural characteristic to one that involves a pragmatic act, from an enduring noun, as it were, to an active verb. In doing so, it draws attention to the different ways in which developing economies can be ‘made’ subordinate; that is, the varied means by which global investment funds ‘work’ their assets to generate value, from refinancing and diversifying the sources of debt, for example, over the life span of an investment. Such financial practices also bring into question the usefulness of drawing binary distinctions that oppose the chasing of short-term yield to that of seeking stable, long-term returns, when such means of generating value require durable, low volatile financial environments within which to operate. Increasingly, present-day institutional investors are not simply in the business of ‘finding’ value; rather they actively construct it over the long term (Bryan et al., 2016; Christophers, 2015) within, we argue, a regulatory framework designed to enable rather than curtail the investment criteria of national and global investors.

In this article, we draw on fieldwork interviews conducted in New York, London and Toronto in 2015, an industry databank, Preqin, company accounts, rating agency reports and management consultancy transcripts, to consider how financial techniques developed elsewhere have been translated into the Chilean context by a Canadian investment fund, Ontario Teachers’ Pension Plan (OTPP), to ‘work’ its extensive direct investment in water infrastructure as part of its alternative investment strategy. Our aim throughout is to show how this process of value construction is enacted in Chile’s water sector. In the following section, we set out what it means for developing countries to be ‘made’ subordinate, how in opening their economies to global institutional investors they expose themselves to practices which are often barely recognizable as subservient mechanisms and leave themselves vulnerable in the

process. In the section after that, we look at Canada's OTPP and its extensive investments in Chilean water infrastructure to show how it draws upon financial practices developed in the Global North to add value to its infrastructure assets in a developing economy. Based on such practices, long term infrastructure deals are subject to a process of ongoing evaluation to construct returns over and above composite benchmarks, made possible by an enabling regulatory framework. We draw upon Michael Callon's (1998) conception of 'framing' to understand how a certain understanding of evaluation takes hold, before considering the process of financialized evaluation in greater depth through the work of Eve Chiapello (2015, 2019, 2020). Finally, we employ her insights to examine the financial restructuring of the companies acquired by OTPP in Chile's water sector and draw out from company accounts and rating reports the slow-paced practices of financialization that are used to restructure the fund's Chilean acquisitions. The conclusion summarizes the article's main arguments and draws attention to the consequences that a routine form of financial subordination and strategy of privatization has had upon Chile's control over its water resources and the less than positive outcomes this has had for the population as a whole.

Financial subordination and everyday value construction

The significance of global investment funds in a number of economies in the Global South has become evident as institutional investors such as pension funds have sought out higher returns to match their long-term obligations. The tilt towards global asset classes, to include infrastructure assets, in addition to fixed income and equities has been accentuated by the need to match rising liabilities against declining returns as balance sheet conditions deteriorate. The business of 'finding' value is seen to drive the overall process, in both the short and long term, as institutional investors have looked increasingly for new investment opportunities in 'emerging markets' (see for example Bonizzi, 2017).

Taking on greater risk from high yielding assets, however, in our view, is not the only way institutional investors have gone about trying to increase the return of their investments to match growing liabilities. Rather than 'finding' value, investment funds have actively sought to 'add value' to their portfolio by 'working' existing assets, not simply sitting on them to reap a predictable revenue stream. Managing assets is no longer the prerequisite of a separate asset management industry and nor are they the only ones driven by benchmarks to evaluate the investment performance of their assets.

The decrease in the outsourcing of funds by institutional investors of late, particularly pension funds, has been accompanied by a return to 'in-house' asset management and the 'evaluation' of asset performance on a regular basis to 'add value' over the lifetime of an investment. Rather than chasing returns to seek short-term gain, value is reaped from long term assets on an ongoing basis by routine financial practices designed to leverage greater returns.

In their modelling of financial returns from infrastructure deals, Ashton et al. (2012) draw attention to some of the more high-profile ways in which private investors construct value from an asset after the completion of a deal, focusing on the overall rate of return on an investment over time. Rather than simply focus on the revenue-generating potential of an infrastructure asset, in recent years private investors have increasingly developed elaborate techniques to financially reorganize an asset over the long term to add, or rather, create value. Chief among those techniques is the ability to reduce the cost of debt and defer its payment using interest rate derivatives and debt swaps, as well as the reorganization of debt repayment schedules. The ability to restructure debt liabilities from short to the long term, to raise the internal

valuation of portfolio values by reducing the cost of borrowing, can significantly increase the overall rate of return to investors. Value, here, refers not just to the cash flows generated by an infrastructure operation, but also to the returns achieved by using derivatives and refinancing options (see Christophers, 2015). The search for value, in this sense, has less to do with 'finding' new high-yielding assets and more with existing assets being 'worked' to extrapolate future returns. Securitization of a revenue stream is perhaps among the better-known financial techniques for capturing added value (Allen and Pryke, 2013), but as Ashton et al. (2012) have shown, there are other means by which financial actors can 'engineer' value from infrastructure.

The term, financial engineering, however, with its connotations of sharp practice, can divert attention from more prosaic ways in which added value may be generated. Working assets to gain future returns does not have to fall under the heading of financial chicanery. The continual valuing and evaluating of assets points to a more everyday process of value construction, one that suggest less a quick exercise in reaping gains and more a slower paced set of practices that contrast markedly to the eye-catching use of securitization techniques or that of derivatives and swaps. Following Chiapello, it is possible to work with a more subtle and helpful distinction between valuation and evaluation by seeking analytically to

... distinguish valuation as a process of worth attribution from evaluation involving a second level of judgment, i.e., comparison of this value with an objective to be achieved or the estimated value of something else (for example a benchmark), but empirically the two processes are often impossible to separate. (Chiapello, 2015: 16-17)

Though admittedly empirically difficult to separate, we nonetheless try to hold the two practices apart, as it were, in order to keep in focus not only what happens when the financial 'motives' and 'drivers' of investors in the Global North extend their investment interests into the Global South to construct value, but also to highlight how such practices serve to reproduce financial subordination, not least through the power asymmetries such practices make possible.

Asymmetries of power

With the shift to market-based finance and the greater involvement of institutional investors in the assets of the economies of the South, few would question that the relationship between the respective parties is far from equal. Quite simply, the capacities to act are not distributed symmetrically between Global North asset managers and developing economies. Enmeshed in a web of asymmetrical relationships, one side has a greater degree of influence over the conduct of others in so far as they are able to make it difficult for national policy makers in the Global South to do anything other than meet the interests of those in a dominant position. Gabor (2021), for instance, has spoken about the increased pressure that developing economies face to open their potentially tradeable assets to portfolio investors on terms that cede advantage to global investment funds, making it difficult for them to do other than modify their financial and regulatory systems to better serve the interests of the latter. That said, there is nothing about an asymmetrical view of power which says that the needs of the different sides are mutually exclusive.

The general characteristic of domination is that it involves some degree of imposition and constraint, in that formally free parties, in practice, have no choice but to submit to the dominant will. For developing economies, subservience to the interests of global finance is

often realistically the only option available (Lapavitsas, 2012), but, as is increasingly recognized (Alami et al., 2022), that does not render them powerless or without agency. Nor, for that matter, does it mean that developing economies are unable to derive some benefit from an asymmetrical relationship. It is, after all, a relationship, where external forces interact with internal institutional dynamics, even though the subordinate may cooperate in their own submission (Becker et al., 2010; Rethel, 2010). The terms of dependency, the room for maneuver available to domestic institutions in a bargaining context, are often skewed towards the interests of portfolio investors, for example in guaranteeing minimum levels of return on investments or the lowering of regulatory barriers, but there is no presumption that the pay-offs automatically sum to zero. The capacity of states in emerging economies to secure some negotiated benefits from private capital flows is not ruled out by the fact of unequal integration. It is just that those benefits are invariably outweighed by the gains made by investors, often by means that are not always readily apparent.

Where such power asymmetries occur on a day-to-day basis, the form of subservience rarely carries the obvious marks of domination and constraint. In opening their markets to institutional asset managers in the Global North, governments in developing economies may inadvertently expose themselves to a kind of subjection which leaves them with little or no ability to improve their position through their own capabilities. The information asymmetries that underpin the ability of institutional investors to financially restructure their assets over the longer term to add value is, we would argue, a more subtle form of domination which can leave states unaware as to the influence being exercised. In one sense, it is more an act of asset manipulation than asset management, where private investors gain advantage through dissimulation; that is, holding back what is fully at stake with the express purpose of taking governments in a particular direction that is not wholly in their best interests. Moreover, it is a form of subordination that works on the level of the everyday, distinct from moments of crisis or overt domination, under the radar as it were because it forms parts of the financial playbook for liability-driven investors.

The playbook of financial techniques is essentially what is drawn upon by institutional asset managers to 'make' developing economies subordinate on a day-to-day basis. The financial practices involved, the ongoing 'work' performed to create value from the infrastructure assets of the Global South, is an active process, not a structural set of circumstances which make submission the only realistic choice possible. While such practices may serve to reproduce structural constraints over time, that does not mean to say that the everyday actions of asset managers can simply be 'read off' from an enduring structural script. Financial and currency constraints, and more generally the restraints of the international money markets, are obviously critical to an understanding of the global financial system as a hierarchical arrangement of economies, but so too are the practical financial measures by which developing economies are often unknowingly placed in a subservient position. A focus on financial practices offers a contextual, more concrete means of studying the nature and consequences of financial subordination, whereas a structuralist perspective affords a broader, more abstract entry point into to what are effectively different aspects of the same phenomenon.

Translated from their advanced economy context, the practical measures of valuation and evaluation are put to 'work' by institutional investors to construct value, framing and translating what is necessary to deliver a value-added performance. OTPP's move into an underfunded Chilean water sector, as part of the channeling of investment funds from the Global North to the South, offers an insight as to the nature of the 'work' required to furnish such a performance.

OTPP's 'value-added performance' work

The Canadian fund, Ontario Teachers' Pension Plan, was established in 1990. On its web site, OTPP defines success as the "ability to pay pensions for generations to come" and at the end of 2020 the fund had nearly 226 million Canadian dollars of assets under management to help meet that aim. Table 1 illustrates how this the fund was distributed across the different asset classes. From this it is clear that OTPP actively invests in all the main asset classes, including infrastructure.

Asset class	Investing	Current allocation (mn)	Current allocation (%)	Target allocation (mn)	Target allocation (%)
Private equity	Investing	45,227	19.86	-	-
Real estate	Investing	26,171	11.49	-	-
Hedge funds	Investing	13,986	6.1	-	-
Infrastructure	Investing	20,858	9.16	-	-
Private debt	Investing	18,705	8.21	-	-
Natural resources	Investing	8,117	3.56	-	-
Equities	-	38,484	16.9	68,315–91,086	30–40
Fixed income	-	57,863	25.41	Up to 152,570	0–67
Cash	-	-35,592	-15.63	Up to 22,772	0–10
Other	-	32,859	14.43	34,157–72,869	15–32

Table 1. OTPP's current allocations across main asset classes. *Source:* Prequin specially commissioned data, accessed January 2022.

OTPP's portfolio is diversified by geography, development stage and industry, with assets 'segmented' by volume-driven businesses and returns linked to throughput and macroeconomic conditions. Infrastructure is part of OTPP's alternative investment strategy and currently the fund allocates just over nine per cent or 20.85 million Canadian dollars of its total investment portfolio to this asset class. The fund gains exposure to infrastructure via direct investment, which is the focus of this article, as well as through greenfield investment and unlisted infrastructure funds, of which OTPP is involved in seven known funds, five of which are dedicated to infrastructure in North America, Europe, and most recently Asia, with one 'multi-regional fund'. Of OTPP's 90 direct infrastructure deals, 86 are secondary stage investments, that is, fully operational, generating cash flows and returns. Of the total, 28 are located in Latin America and the Caribbean, 30 in North America, 21 in Europe, 8 in Australasia, 2 in Asia and 1 in the Middle east. Transport, utilities, and energy account for well over half of these deals, 38, 27 and 14 respectively (Prequin, 2021).

OTPP looks to invest across virtually every continent and works through investment teams organized into regional groups, with each team responsible for acquiring and managing assets. It has offices in UK, US, Hong Kong and Singapore and, more recently, has expanded

its office is Singapore to coordinate and increase its direct investments across India, Australia-New Zealand (ANZ), and the Association of Southeast Asian Nations (ASEAN). The remit for each investment team is straightforward: to ‘find growth opportunities for long term growth’ (OTPP interview, 2015; Preqin database).

How that remit is delivered in terms of its direct investment opportunities has been expressed forcefully. It’s an approach that’s “not simply about acquiring and holding and then going for a long lunch” (OTPP interview, 2015). As the then Head of OTPP’s Infrastructure Portfolio told *Latin Finance* in 2009, “Unlike the fund's equity strategy, which focuses on minority stakes, *control over the asset is critical for infrastructure investment ... This is not a portfolio where we're flipping assets. We're looking at the long-term cash flow profile*” (Shirai, 2009). As this suggests, the approach is all about *active* management, with the emphasis placed on the measurement of performance. OTPP measure their

... investment performance on an actual basis and against a range of benchmarks. Benchmarking allows board members, plan members and employees to evaluate the effectiveness of our investment strategies and activities relative to the risks taken. On a total-fund basis and for each asset group, we work to surpass the relevant benchmarks, and when we do we describe that as ‘value-added’ performance.¹

The reference to benchmarks reinforces the fund’s approach as well as how the ‘value-added’ performance is assessed, and how and why sustaining value is an active, ongoing set of practices. A quote from OTPP’s web site and linked Table 2 elaborates the point clearly:

On a total-fund basis and for each asset group, we work to surpass the relevant benchmarks, and when we do we describe that as ‘value-added’ performance ... in addition to providing one-year returns, we also track four- and 10-year net returns along with net returns since 1990 – when we began our investment program – all on an actual basis and against the benchmark.²

	2020	2019	4 year	5 year	10 year	Since inception
Total-fund net return	8.6	10.4	7.8	7.0	9.3	9.6
Benchmark return	10.7	12.2	7.9	7.0	8.5	7.9
Return above benchmark	(2.1)	(1.8)	(0.1)	0.0	0.8	1.7

Table 2. OTPP’s investment approach: Adding value and benchmarking. *Source:* OTPP; see note 2.

Each asset class, and sub-category within each class, has its own benchmark. For example, equity investment would be measured against the composite benchmarks S&P/TSX 60, S&P 500, MSCI All Country World ex Canada ex Tobacco, MSCI China, MSCI Europe, MSCI Japan. Fixed income investments would be judged against a similar basket of benchmarks. For infrastructure (as a subset of Real Assets), the benchmark is the local CPI plus three per cent plus country risk premium.

A more precise way to detail OTPP’s approach, summed up in the above quote and reflected in the associated Table, with its explicit goal to track four- and 10-year net returns,

along with net returns since it began investing, following Chiapello (2015), is to say that OTPP's approach blends valuation, a once off 'worth attribution', with a continual evaluation; that is, valuing against a relevant benchmark or composite benchmark, to assess how that initial valuation can be actively secured or indeed improved upon over the longer term, which for investment in infrastructure is essential.

Central to both practices of valuation and evaluation, however, and indeed to ensure the relative predictability of investors' calculations, is the regulatory and political environment where an asset is located. In that respect, the establishment of an enabling regulatory framework in Chile was key to OTPP's investment in its water sector, with the framework emerging in an international investment context where the pressure to protect profits from political risks and guarantee property rights was absorbed by states in developing economies like Chile to attract inward investment.

An enabling regulatory framework

Although Chile set up formally semi-independent agencies to regulate the delivery of its privatized water services, institutional investors and asset managers like OTPP influenced and indirectly helped to shape the terms on which global investment funds entered the sector. As Bauer (2004: 2) has commented, the standout feature of the Chilean model is that almost uniquely its Water Code "is so laissez-faire that the overall legal and institutional framework has been built in the image of the free market, with strong private property rights, broad private economic freedoms, and weak government regulation" (see also Budds, 2004, for political history of the Water Code; Budds, 2020, for latest on Water Code). Whilst the 1981 Water Code has been subject to continual and heated debate, and some reform, overall, the Chilean neo-liberal approach enabled water to be managed as an 'economic good' with the Chilean water rights model legally enforcing private property rights to encourage private investment in water. On that basis, Chile fast became "the textbook case of treating water rights not merely as private property but also as a fully marketable commodity" (Bauer, 2004: 1). As such, water sector regulation placed the calculative criteria of the investor, particularly the international investor, central to its formation.

Key to the emerging regulatory framework was, and is, the role played by the so-called 'model company' in water regulation, which reflects the interests of both international investor and market-orientated domestic institutions.

The tariff system is based on hypothetical models of a perfectly efficient company, rather than on trying to cost in actually existing inefficiencies. Both the regulator and the company produce estimates based on their own models, using complex formulae that are laid down by the legislative framework, and public terms of reference for the models. (Morgan, 2008: 24)

The Chilean model in that sense can be seen as the outcome of both external pressures exerted by the international financial community and the internal institutional dynamics of a neo-liberal, Chilean state seeking to attract private capital, although not in an investment context of its own making. As Morgan (2008) has noted about such arrangements, they are never purely a story of external moulding, but rather one in which the agency of states like Chile is circumscribed by the conditional investments of an international financial community, of which global investment funds like OTPP are increasingly an active part. Bilateral investment treaties, for instance, she points out have the potential to shape national regulatory frameworks for water service delivery, injecting an element of international hard law into the

relationship that introduces legally enforceable rights and entitlements for global funds investing in water assets. The terms of dependency, whilst not zero-sum, are nonetheless not equal-sum, with the politics of investment treaties disproportionately weighted towards Global North asset managers and institutional investors (Morgan, 2006).

The attraction of Chile's legal and political framework and the quality of regulation to an external investor like OTPP manifests itself in the relative predictability established by the 'right' regulation which, in practice, is likely be deducted from the country risk premium to provide, in the case of Chile, investment returns graded higher than an equivalent investment in the USA. Such a regulatory framework offers an investor the relative predictability of income flows and, crucially, makes possible an ongoing evaluation of how the promise of those income flows can be best matched with corporate financial structures most appropriate to maximizing the value of those flows to the investor.

Moreover, the establishment of an enabling regulatory framework, one in which the centrality of the 'model company' is key to its operation, limits what is possible for national policy makers to extract in the way of advantage from international investors. The potential for information asymmetries to arise in the negotiations between foreign investors and, in this case, the Chilean government, make it difficult for the latter not to cede advantage to external investment funds able to frame their investments in such a way that their valuations shape and distort the financial distributions in their favour.

The financialization of valuation

The framing and translating of what is necessary to create value from infrastructure assets are key elements in the 'work' that enables investors to generate future returns that play to their advantage. The establishment of a playbook of financial practices is not something imposed by external investors, but rather one that is put in place over time through a series of routine financial practices and techniques that 'fix' a collective orientation to the process of valuation that appears to all involved as both indispensable and irreversible. It is, in the vocabulary of Michel Callon (1986) and the Socio-Technical Studies school, akin to an 'obligatory passage point', through which once passed makes it difficult to see valuation in any way other than that set down in the calculations and inferences drawn.

Eve Chiapello (2015, 2020) borrows from this school of thought to offer a productive way of combining key insights of the literatures on assetization (Birch and Muniesa, 2020), capitalization (Muniesa, 2017) and valuation (Muniesa, 2011) to think about the "operations required to financialize" (Muniesa, 2020: 85) and, specifically, the 'work' required to financialize valuation. She breaks down this financial work into three related stages: problematization, tangibilization and financial structuring. In effect, these are the stages or operations required not simply to turn things into assets, as she argues, but also, we stress, required for the value of assets to be *sustained* over time to match or exceed relevant benchmarks (something key to OTPP's approach to appraising investments as we have noted). Chiapello outlines the 'work' involved in each of the three stages as follows:

Problematization: operations through which things and activities are redefined as questions of investment, which requires categorizing and interpreting the world using the words and perspectives of an investor.

Tangibilization: operations through which ideas, expectations or promises take on an existence enabling them to be included in accounts or contracts.

Financial structuring: operations which organize monetary flows, such that the doors are open to money managed by profit-seeking financial investors. Private finance professionals play two roles in these circuits: either they act as professional service providers who receive fees for managing them (as fund managers) and servicing them (as accountants, lawyers or consultants); or they act as the target financial investors who are to be attracted and convinced to invest. (Chiapello, 2020: 85, emphasis in original)

Central to Chiapello's practice-based approach are the financial actors who introduce a set of operations that twist and distort financial circuits so that the overall shape of financial distributions works in their favour. Such processes involve a

... very large number of actors, expert assessments, technical and legal inventions, and public intervention needed to twist existing financing circuits and make more room for financial actors and their demands for returns. The construct of value to the benefit of finance is only possible because these new assemblies hold and are cemented by laws, information systems, and networks of contracts. Close monitoring of these socio-technical processes enables us to follow the money, and also to better describe how, and how far, these arrangements are reshaping a whole range of activities, and the consequences that is having. (Chiapello, 2020: 90)

It is the assembly of this diverse group of actors that perform the 'work' required to fulfil each of the three stages that lie behind the process of financialization, establishing a collective orientation through which others are enrolled by translating what they want in such a way that it becomes difficult to see things any other way (Callon and Latour, 1981).

Problematization, Chiapello notes, is the first step in the process of translation whereby certain actors consciously set out to frame the process of investment as one in which valuation takes centre stage, as something to be improved upon and constantly evaluated. Thus, financial actors, such as OTPP, intentionally re-label the question of investment in terms of sustainable returns, risk management and value creation so that something like water infrastructure can only really be talked about in terms of its monetary value if the whole process of external investment is to make sense. And through *tangibilization*, these same actors use their 'expertise' to show how objects like water infrastructure have expanded potential as objects of investment. The objects, as assets, become entities that "generate returns in the future which involves clarifying and quantifying the type of return" (Chiapello, 2019: 86) so that they can be incorporated into calculations that meet investor's expectations; a process that requires 'explication' to show how values should be assigned and structured. Yet, significantly, as outlined in the previous section, for these operations to work requires an accommodating framework, both in a political and regulatory sense, so that monetary flows – the staggering of debt, the organization of cash flows, the distribution of revenues – can be *financially structured* to meet investors' demands for sustainable returns, low risk and liquidity.

On the back of an enabling regulatory system, OTPP gradually went about constructing a collective orientation to asset valuation – framing added value, translating risk, quantifying returns, and structuring revenue and distribution flows – as it moved into the Chilean water sector through the initial acquisition of two water companies, Essbio and Esval.

OTPP's valuation of Chile's water

In August 2007, OTPP bought a fifty-one per cent stake in Essbio, then held by the Argentine Investment Fund, Southern Cross, together with the same Fund's hundred per cent of Aguas Nuevo Sur del Maule. This was OTPP's first infrastructure investment in South America.

Southern Cross had bought its interests in these two companies from UK's largest water company, Thames Water, in 2006, when the German energy company, RWE (Rhenish-Westphalian Power Plant) exited the water sector (Ducci, 2007: 133-35). And in August of the same year, OTPP announced that it was to buy nearly fifty per cent of Esval shares for US\$ 365 million, which would also allow OTPP to acquire Esval's subsidiary Aguas del Valle (see Ducci, 2007, for background ownership, including involvement of Anglia water).

OTPP declared that "the investment is well suited to the pension plan's objective of providing stable, long-term returns to help pay teachers' pensions up to 70 years from now" (OTPP, 2007). Both Essbio and Esval were expected to "provide stable low-risk returns, and they have a very long economic shelf life consistent with our long-term investment goals" (see Ducci, 2007; Labina and Hall, 2007: 33-35). The account of OTPP's acquisition of Essbio and Esval could be stated simply as: "the companies are perfect; we're here for the long-term" (OTPP, 2007). However, the backstory to this series of conventional statements is revealing and useful to recap, not least as it helps us to pull out some of the thinking behind the Canadian fund's investment; that is, how this particular investor framed both financially and legally its conception of 'long-term' value.

Selectively working through the accounts of the companies acquired by OTPP we aim to show how, moving at its own strategic pace, the investor was involved to varying degrees in all three operations highlighted by Chiapello – those of problematization, tangibilization, and financial structuring and, we would add, financial *restructuring*, as it quietly assembled its interests in these companies within Chile's established regulatory set-up. Chiapello's reminders are taken up and developed through our case study analysis below.

In an interview with the management consultants. Price Waterhouse Coopers (PWC) some years after OTPP acquired interests in Essbio and Esval, the investor's Portfolio Manager Stacey Purcell reflected on the acquisitions and underlying thinking about how OTPP wanted to run and operate its new acquisitions. The remarks by both Purcell and by PWC reveal OTPP's financial intent, style of ownership and control, and how the fund quietly positioned itself as an 'obligatory passage point'.

First, it is noticeable how the acquisition was 'problematized', in OTPP's attempt to enrol their Chilean counterparts as to what needed to be interpreted differently and what the companies now under its influence should make central

OTPP Portfolio Manager Stacey Purcell says that on making the investments, OTPP could see two key opportunities for improvement in the companies it had acquired. The first was governance: "We wanted to deepen the dialogue on valuation creation and strategy while at the same time letting management run the day-to-day business". "The second area", according to Purcell, "that OTPP set about improving was long-term planning: traditionally, the companies had been quite reactive with limited long-term planning – so we pushed them to change the way they worked". (PWC, 2017: 20)

In the words of PWC (2017: 20), "Taking a long-term view and thinking about sustainable investment, risk management and continuous improvement were big steps forward", adding that what OTPP brought to the table was also "access to insight from a network of world class commercial operators to help drive innovation and leading edge thinking on financing".

Yet it is important to note that the drive for added value and longer-term financial planning was not simply at the expense of improving water supply. This was not a zero-sum arrangement that only benefited OTPP. Both sides derived some benefit, although skewed more to one side than the other. Purcell was keen to note that "In recent years we've cut back our distributions to increase the level of investment as the companies needed it. Ultimately, we see that what is good for the companies in the long term is also good for us as

investors” (PWC, 2017: 20). The dovetailing of financial investment and operational improvement is nurtured by the regulatory framework, specifically the ‘model company’ approach, applied, as the PWC commentary noted, by the Chilean industry regulator, the Superintendencia de Servicios Sanitarios (SISS). “This approach means both OTTP and the water companies’ management are constantly seeking innovation to deliver better services at a lower cost” (PWC, 2017: 20).

In that respect, an enabling regulatory approach provided an opportunity for the explication work required to make the new direction tangible for the Chilean managers: “Purcell says OTTP seeks to align the management incentives with this focus on innovation through a balanced scorecard “that includes operational performance, strategy and risk measures rather than financial-only metrics” (PWC, 2017: 20). The new organizational arrangement set up by OTTP to link best practice in the Global North and South, as well as between its new companies in Chile, reveals the significance of the movement of ideas through the company structures. The strategic thinking and dissemination of ideas covers not simply how to improve procurement and water quality, but also to facilitate the movement of new financial expectations and financing techniques in ways that would benefit OTTP’s longer-term investment, although as noted not wholly at the expense of the water companies’ interests and their customers in Chile.

The key to the success of this new organizational arrangement turns on the ability of the likes of Purcell and others to ‘hook up’ Chilean management to an overall orientation or direction, enabled in this case by OTTP’s own management team in Chile. As the PWC report also pointed out: “A further factor in the success of OTTP’s investments in the Chilean water industry has been the role played by AndesCan (its Chilean-based asset management team) in helping to manage and coordinate the investments on the ground. AndesCan’s Rodrigo Montes says this role includes helping the companies share process innovations and best practices, as well as realize economies of scale in areas like procurement. As Montes comments: “An important part of AndesCan’s value is to act as a coordinator between the companies to ensure that good ideas, whether from Toronto or the companies themselves, are understood by all of them, helping to promote best practices across the board” (PWC, 2017: 20-21).

Financially restructuring the asset

The above quotes, and the reference to AndesCan’s role in enabling OTTP to assemble its financial interests in the Chilean water sector, serve as a reminder of the importance of the legal and financial operations required to restructure the water companies and their inter- and intra-relationships to facilitate the assembly of the new techniques of financialized valuation. Active management, the measurement of performance, the rolling out of new strategic thinking on value creation, the dissemination of best practice referred to, also require the financial restructuring of company arrangements, as these are central to the flow of financing, investment, and dividend payments between Esval and Essbio and their related companies in Chile, and ultimately to OTTP in Canada. In our view, financial restructuring is inseparable from understanding financialization as an ongoing process. That is, as noted, a set of financial and accounting practices enacted to sustain value through the duration an asset is held, with the asset holder, OTTP here, only too wary of the need to match the relevant benchmark and the continuous performance rhythm such markers establish. The role that financial restructuring plays should thus be viewed as an integral part of how an investor assesses and measures or evaluates an asset’s performance against its own organizational and industry benchmarking

practices and criteria. As such, it is core to the process of subjection mentioned earlier, where a seemingly innocuous financial practice enables one side to gain advantage over another without it appearing to be the case.

Because of its central significance to our overall argument about financial subordination, we want to spell out in some detail exactly how the process of restructuring played out over time. We begin with Figure 1, by looking at the initial company structure that linked OTPP with Essbio and Esval. At the centre of the figure is a company called Southwater, which as a Chilean rating agency, remarked, “...is the investment vehicle through which OTPPB controls the utilities Esval, and Essbio” (ICR, 2010). Southwater also maintains a significant investment in Nuevosur. These three companies are among the largest service companies in the country, which has significance in terms of the organization of monetary flows between the companies.

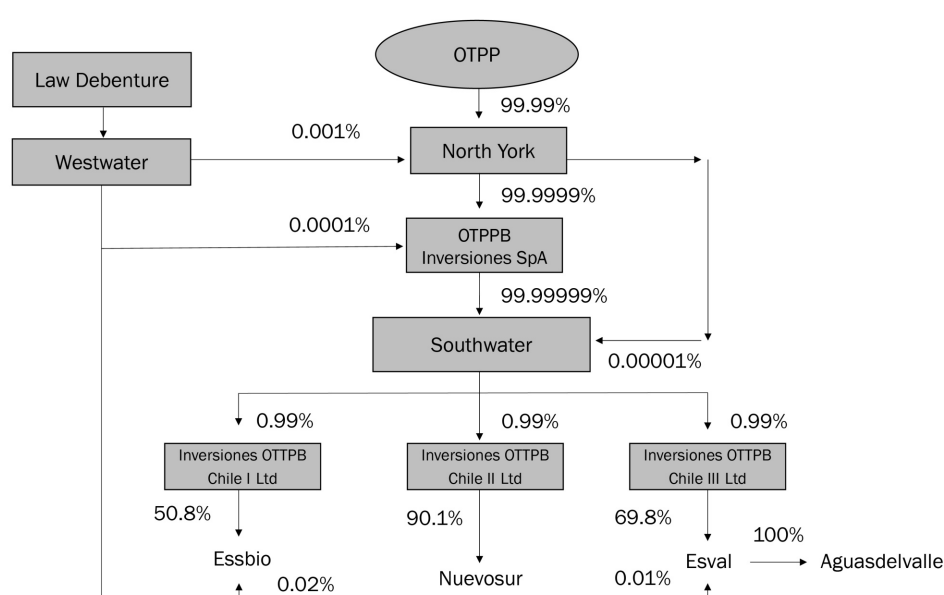


Figure 1. The initial company structure 2007. *Source:* ICR, 2010.

The lines joining the companies not only indicate ownership patterns, but crucially also the direction of control, the dissemination of ideas and financial flows, as well as signalling in some cases shareholder agreements. OTPP's stake in Esval was undertaken jointly by its licensed company in Chile, OTTPB Chile, and Westwater in 2007 which led to the share capital being divided into three new series of shares, called Series A, B and C (Esval Memoria, 2007: 11) with all shares linking Southwater ultimately to cash flows from three companies, Esval, Essbio and Nuevosur. This was intended to provide financial stability from an “industry with natural monopoly characteristics that has decreasing average costs and faces a stable and predictable demand over time” (ICR, 2010).

The relationship between Southwater, ultimately controlled by OTPP, and the three companies Essbio, Esval and Nuevosur is best illustrated by the links between it and Esval shown in Figure 1. At the time of OTPP's acquisition of Esval on December 2007, OTTP Chile III owned both series A shares and C series shares in Esval. And, as Figure 1 also shows, the related parties are Southwater's parent, OTTPB Chile, the North York Global Investments Company Inc., OTTPB Chile I and OTTPB Chile II.

Also shown in Figure 1 are Westwater Investments Limited, owner as of December 2007 of series A shares of Esval and Southwater's ultimate controller OTPP, and The Law Debenture

Corporation (and in turn, its parent The Law Debenture Trust Corporation [Channel Island] Limited, which is not shown in Figure 1).

As will be apparent, the evolving corporate structure is instructive not least as it extends the techniques of financialization to include value sustenance rather than more straightforward value creation, which may be interpreted as a one off, process. Corporate restructuring, as exercised by OTPP, is undertaken with the long-term evaluation of value in mind and to achieve that requires not just continual agitation and re-thinking of financial structures, but the movement of ideas from the Global North parent to the Global South investment offspring. Southwater's role in coordinating and managing the financial flows through the above structure is illustrative of how OTPP organized the financial restructuring of its Chilean investment. An example from 2009 serves to illustrate the nature of this financial work and its role in organizing monetary flows that enable the parent company to benefit disproportionately. Southwater worked with the investment bank Santander to restructure debt by issuing bonds. Its sale of inflation-linked A+ rated bonds in the domestic market at favourable yields, amortized over the years to 2034, enabled the proceeds to be used to repay the more expensive debt tied to the acquisition of Essbio, Esval, Nuevosur and Aguas del Valle, the four operating companies, thus increasing the margin between the cost of debt and revenue streams, and by virtue of that the ability of the Group to pay dividends to OTPP.

By 2011, just over four-fifths of the financial debt was concentrated in the non-current portion of Southwater's accounts, which corresponds to the long-term financing needs and investment plans of the subsidiary companies. At that date, Southwater's total financial liabilities amounted to nearly 637 million Chilean pesos and represented just over seventy per cent of total liabilities. The financial structuring reflected, as one rating agency put it, "the favorable payment capacity given the characteristics of the business in which its subsidiaries operate" (ICR, 2013). The Net Financial Debt/Ebitda (the measure of a company's operating profit as a percentage of its revenue) ratio was nearly that of six times reflecting the sustained growth in income, something almost assured due to the monopoly position of the companies and the favorable regulatory frame. To put it crudely, the changed and more favorable ratios increase the investment grade of the company's debt.

By 2015, the structuring of the group had changed again. Ontario Teachers' Pension Plan Board (OTPPB) remained the indirect controller of Southwater through the companies AndesCan and AndesCan II. AndesCan and AndesCan II, in turn, belong to the company Castlefrank Investments Limited, which was controlled directly at that time by OTPPB. The corporate purpose of Southwater continued to be that of coordinator of Group investment strategy, such as investment in commercial paper, transferable securities, credit instruments, through to issuance of shares, bonds, debentures.

From revenue streams...

The earlier quote from a Chilean rating agency, ICR, that Southwater shows a 'favorable payment capacity given the characteristics of the business in which its subsidiaries operate' is a reminder, if needed, that financial structuring is not an abstract activity, but relates directly to how OTPP structured its investments in Chilean water to feed dividend payments from the Global South to the Global North. The characteristics of privatized Chilean water and sewage enabled Southwater to focus financial structuring around relatively predictable income streams set for periods of five years, where rates are set following negotiation between the regulator and the company. The 'rate study' is an instance where information asymmetries play out in favour of the investor (see Molinos-Senante and Farias, 2018). The rate study seeks

to assess companies' long-term marginal costs assessed against management efficiency as applied to a 'model company' and those same companies' expansion plans projected over at least fifteen years, and in doing so the relative strengths of the parties involved allow asymmetries to play out to the advantage of those in control of the investment. As Molinos-Senante and Farias note, it is a process where companies try to state costs as high as can be justified with little that a regulator can do query the validity of long-term expansion plans.

Yet, whilst the regulator may face uncertainty in assessing water companies' investment plans, Southwater's financial restructuring work produces far more certainty for the Group and for OTPP. Such certainty assists the long-term evaluation of the collective worth of OTPP's Chilean water holding and the projected value of its income streams. In 2014, for instance, Southwater revenues were just over Ch\$ 80 million, rising by nearly five per cent on the previous quarter, whereas by subsidiary, Essbio's income grew by just over fifteen per cent and Esval's increased by nearly nine per cent. The same pattern of restructuring around regulated revenue streams was seen in subsequent years too. Between December 2010 and December 2014, the company registered a growth rate of just over eight per cent compounded annual income (ICR, 2015) and due to Southwater's financial restructuring, particularly 2009's debt restructuring which saw most of the debt correspond to bond issues (series C, E and I), that stability of income (indeed rising income) was underpinned by the stability of debt payments over the much longer-term.

The relationship between Southwater and its subsidiaries is important in another respect, which is the generation and flow of dividends from its revenue streams orchestrated through the active relationship between the subsidiaries and the holding company. Though Southwater has relatively high levels of individual indebtedness, the generation of cash flows by its subsidiaries allows it to receive a favorable flow of dividends relative to its levels of debt, enabling its financial obligations to be comfortably covered. A significant increase in dividends from its subsidiaries or a reduction in debt levels would also benefit the company's rating. Moreover, Southwater, as the parent company, has a policy of independence from its subsidiaries, both operationally and financially, in the sense that each subsidiary maintains its own lines of financing with no cross guarantees between subsidiaries or between parent-subsidiary. Southwater, historically, finances its investments through dividends received from its subsidiaries, in addition to credits granted by AndesCan, its controller, and the issuance of bonds.

The degree of financial 'clearance' Southwater is able to achieve between the cash flows from its subsidiaries and the level, term and cost of debt it can attain, that is, the size of the clearance between the two figures, determines the magnitude of dividend payments through to OTPP. It is, we would stress, one of the principal ways in which OTPP is able create and extract value from its infrastructure assets in Chile. It also highlights why the core focus of Southwater's work is the successful financial restructuring of the Group; an often overlooked, commonplace financial activity, yet one central to the flow of dividends through the corporate structure.

...to dividend payments

To illustrate this structuring of monetary flows, Figure 2 below shows the circulation of dividends through the evolving Group structure from December 2011 to December 2015. Rising dividends shown for December 2015 largely reflect an increase in regulated income due to a higher average tariff and higher volumes of sale of drinking water and sewerage registered by Essbio and Esval. There was also an increase in non-regulated income from the

indirect subsidiary Biodiversa. During the first quarter of 2016, the Group recorded an EBITDA2 of just over Ch\$ 52 million, an increase of twenty per cent compared to March 2015, mainly due to the increase in income received.

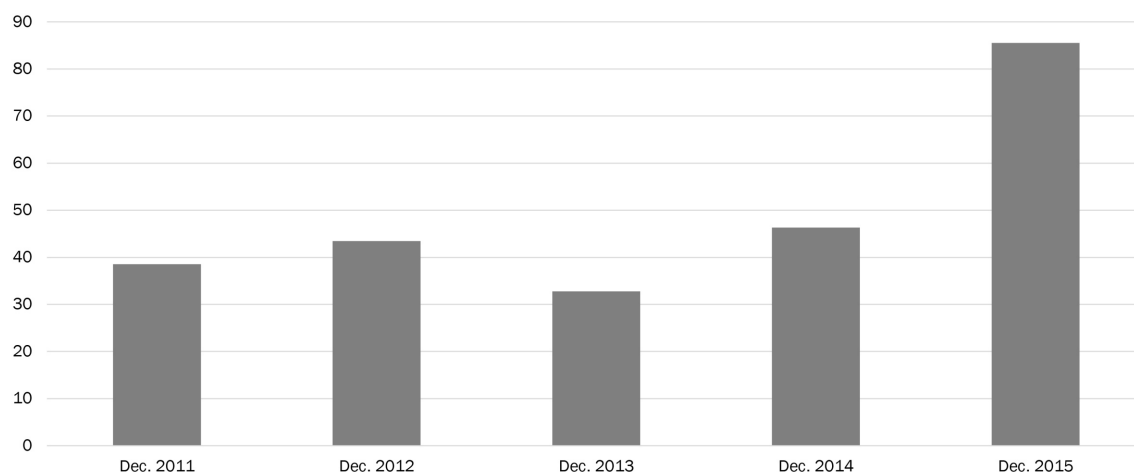


Figure 2. Southwater dividends, 2011-2015 ('Dividends received' in CH\$ [mns]). Source: ICR, 2016.

For Southwater, the relevance of adding value to the companies in which it invests lies in the capacity of these companies to generate cash flows and, in turn, to distribute these as dividends to their parent company, OTPP. Southwater's unwritten role, as it were, within the Group structure was to help construct value to the advantage of OTPP. As Figure 2 shows, in December 2015 Southwater received dividends of just over Ch\$ 85 million, an increase of over eighty per cent compared to the previous year, and at the time an 'all-time high', although it should be noted that in 2014 OTPPB Chile II did not distribute a hundred per cent of the dividends received from its operating subsidiaries. Of the dividends received as of December 2015, thirty-four per cent came from Essbio, followed by Esval and Nuevosur with twenty-eight per cent and thirteen per cent, respectively (ICR, 2016). As these dividend figures suggest, the involvement of OTPP in the provision and upgrading of Chilean water infrastructure did not result in an 'equal sum game', with the financial rewards disproportionately skewed towards the interests of the global investment fund.

The relationship between financial restructuring and dividend payments is helpfully captured in a 2018 rating agency report, and serves to show how routine debt arrangements can work to the long-term advantage of institutional funds over and above those returned to the utilities operator:

In terms of the amortization schedule, the company has a maturity profile concentrated mainly towards the long term. Until 2031, Southwater must only cover the interest payments associated with the series of bonds placed. Since 2032, the company has scheduled amortizations for series E, while for series I, the capital payment begins in 2035. Considering the dividends received from its subsidiaries, the company would cover its obligations for the next twelve months. (ICR, 2018)

Debt restructuring provides a predictable level rate of repayments to the end of 2031. As Southwater's financial debt is composed solely of bonds (series E and series I) (ICR, 2019) with their predictable repayment profiles, rising cash flows from its subsidiaries, particularly from Essbio and Esval, should by then be rendered into rising dividend payments passing through the Group structure to Southwater and ultimately to OTPP.

Figure 3 below, shows not only the original companies acquired by OTPP in 2007, but also the more recent acquisitions such as Nuevosur and Biodiverse brought into the Group in the intervening years up to 2019. All now contribute to overall cash flow and dividend payments to Southwater and then to its parent, OTPP. The figure underlines earlier points about restructuring work, both financial and legal, undertaken by Southwater as the Group has evolved from 2007 to 2019, where one of the two interacting parties is able to exploit the corporate restructuring in such a way that leaves the Chilean water management unable to circumvent their subordinate position.

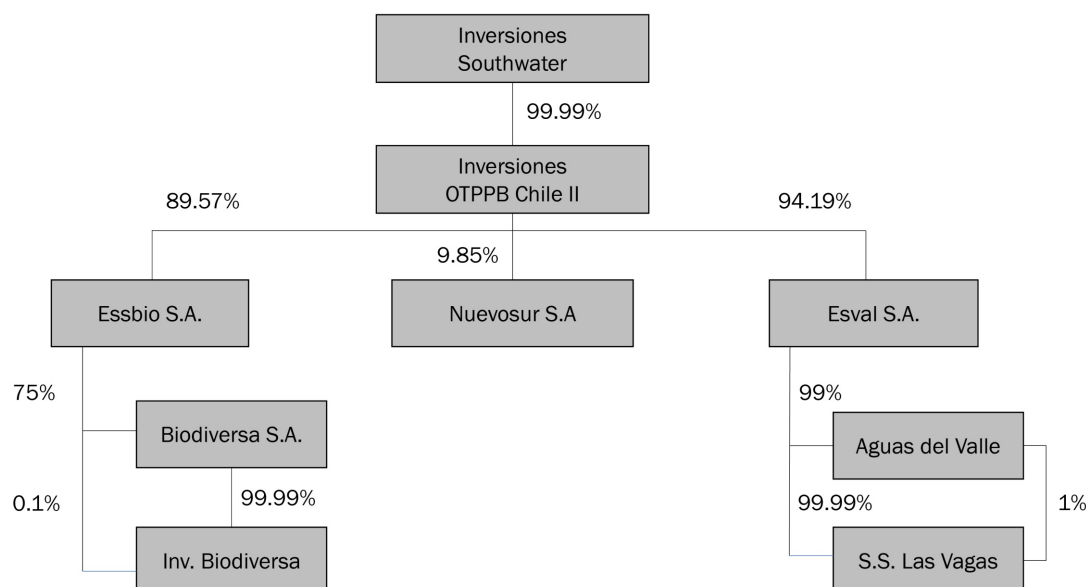


Figure 3. The evolved company structure, 2007-2019. *Source:* ICR, 2020.

Conclusion

In this article, we have avoided a rather simplistic view of financialization as an eye-catching form of financial engineering or chicanery. What we have hopefully demonstrated by working through OTPP's investment in water companies in Chile is not a headline act of predatory financialization. Rather, what we have seen unfold since OTPP's 2007 acquisition is a quieter, slow-paced financialization, one which highlights the interplay between a routine set of financial practices and an enabling regulatory framework to achieve the long-term capture of value. In doing so, we drew on the work of Eve Chiapello, in particular her distinction between valuation and evaluation, to show how both practices – one a more immediate 'worth attribution', the other a longer-term act of 'comparing value' – help in interpreting the actions of an investor such as OTPP as it sought to generate value from its infrastructure assets over time. With 'in house' asset management on the rise, such financial practices are more likely to shape the terms of subservience between global infrastructure investors and developing economies.

Set in the wider context of investment flows between the Global North and South, the routine evaluation of assets, as witnessed in OTPP's investment and management of water companies in Chile, is, we believe, inseparable from a more subtle form of financial subordination. Hence, in the discussion of financial subordination and the unpacking of the motives of OTPP, we resisted seeing the outcome as either a zero-sum game or a positive sum

game. What is played out, though, is clearly not an equal sum game. Chile has not lost out completely as the result of OTPP's investment and neither has the latter syphoned off every last peso through a burst of clever financial practices and then departed the scene. OTPP has, however, benefitted disproportionately from the working of its Chilean water assets.

In large part, OTPP was able to do so by making itself an 'obligatory passage point', as much needed private sector investment was channelled from the international investor community (read this as the Global North) to an underfunded Chilean water sector in need of infrastructure improvement. It effectively framed and translated a set of financial practices on the process of asset valuation which were made to appear indispensable for all involved. On the back of such a collective orientation, OTPP was then able to undertake a financial restructuring geared around first, enabling, and then, second, moving revenue streams from its main subsidiary companies to Southwater and ultimately to the parent. It is through such carefully nurtured financial links that dividends travelled both within the group and, significantly, from the Global South to the Global North.

For the Chilean people and their access to drinking water the advantages of privatization and financialization are perhaps less clear cut, given that their water tariffs are among the highest in Latin America. Although the near-universality of water coverage in Chile is often claimed as one of the benefits of privatization, much of this was achieved before the sector was privatized, with inward investors reaping the benefits. Moreover, as the impact of climate change unfold, the situation in Chile continues to raise questions about the quality of OTPP's investments in infrastructure upgrades and its maintenance with all three of its main water companies investing below the recommended government minimum levels.

Chilean water justice groups, like Modatima, Fundacion Terram and Chile Sustentable, continue to campaign to end privatization, alongside Chilean environmental groups and community organizations, highlighting OTPP's role in Chile's water crisis. But the step from privatization to public ownership, involving the unpicking of complex financial deals and long-term concessions, as well as the bilateral investment treaties and free trade deals, will need both time and fresh political will to overcome the tacit day-to-day power asymmetries between the Global North and South.

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Notes

1. <<https://www.otpp.com/investments/performance/investment-strategy>>.
2. <<https://www.otpp.com/investments/performance/benchmarks>>.

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