Disordering Capital:
The Politics of Business in the Business of Water Provision

By

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Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Political Economy, Development and Planning

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

February 2022

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Abstract

This dissertation consists of three articles that together seek to deconstruct, or disorder, monolithic treatments of "private sector" participation in the delivery of urban water and sanitation services. The studies interrogate how variation in forms of business ownership and politics not only shape public-private collaboration for service delivery over time but also contribute to re-configuring the institutions that govern service provision markets in global South contexts. Drawing on historical and ethnographic research on the development of private participation in water and sanitation provision in Brazil, my work yields three central insights. First, it illuminates how shifts in business ownership away from family-owned construction business groups towards ownership by financial investors produced a "centralizing" organizational and institutional pull in the governance of private urban water and sanitation services. Once heavily embedded in local politics, private holdings reduced subsidiary autonomy, eschewed close relations with local politicians, and mobilized for regulatory centralization. This finding problematizes the tendency within scholarship on the financialization of urban development to position financial investors as capitalizing on local forms of entrepreneurial politics, suggesting the need to consider how different investors fluidly engage with shifting market contexts. I argue that financial investors perceived centralization as an effective strategy for ensuring stable returns across consolidated operations within otherwise unstable and fragmented local political environments. Second, my work challenges the tendency to portray infrastructure investors as passive onlookers searching for institutionally-stable investment geographies. I show that private investors in Brazil's water and sanitation sector were able to counter strong opposition and successfully lobby for a centralizing regulatory reform by constructing business power over time. This entailed learning from mistakes and adjusting mobilization strategies, revealing that infrastructure investors do not have fixed preferences, may learn and adapt, and can be key agents of institutional change. Finally, my research unsettles the assumption that profit maximization will override other service objectives. My comparative analysis of the long-term outcomes of different models of public-private collaboration shows that states can still shape service delivery priorities through the work of politically-appointed managers and state allies, what I call "political modulation." This finding not only problematizes policy advice that prescribes political insulation as a strategy for improving service delivery, it also suggests politics can play a positive role in promoting more equitable service outcomes.

Dissertation Supervisor: Gabriella Carolini
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Acknowledgements

Engaging in research and writing often feels like undertaking a long, adventurous journey. We go up and down mountains, we ride some storms, we get lost a few times. All of those who know me well know that I enjoy sports and adventure—if not practicing them, at least following the latest news or stories about them. And if I have learned anything from reading or watching documentaries about alpine climbing or extreme kayaking expeditions is that these kinds of journeys are often more about the people that travel with us or cheer from the sidelines than about the destination itself. I feel the same way about the years-long journey that culminated in this dissertation. Many wonderful people have travelled with me, made the journey possible, or encouraged me from afar. All of whom have contributed to making my time at MIT and on the field a more joyful and enriching experience.

I would like to begin by expressing my indebtedness and gratefulness to all those who made this dissertation work possible. Gabriella Carolini, my advisor, has been a source of support, guidance, and friendship from the very first time I set foot at MIT as a prospective masters' student. That I have been able to travel this far since then is in no small measure a reflection of her consistent encouragement and mentorship. Ben Ross Schneider and Jason Jackson, my other dissertation committee members, have also been along on the journey pretty much from the start, providing feedback and advice, opening doors, and offering words of wisdom, particularly when the paths ahead appeared cloudiest. I am incredibly thankful for their mentorship.

I am particularly grateful and indebted to all the individuals who shared their knowledge and experience with me through the course of my research. Each person I interviewed or interacted with contributed to making this dissertation a better work. I am thankful to Gesner Oliveira and Virginia Sodré for the many doors they opened for me while in the field, and to Jonatas Santos and Beatriz Margulies for their friendship and insight during my research in São Paulo. I would also like to thank Anurag Rai and Angeles Martinez Cuba for their help with figures and editing, and Fernanda Crispim for the fantastic research assistantship she provided while I was in the last few miles of dissertation writing. This research would also not have been possible without the generous funding I received from the Martin Society of Fellows for Sustainability, the Center for International Studies at MIT, the Harold Horowitz Student Research Fund from the School of Architecture and Planning, the William Emerson Graduate Fellowship Fund from DUSP, and from MIT Brazil and Rosabelli Coelho. I am very grateful for this support.

At MIT, I have learned much and benefitted greatly from the guidance, insight, and spirit of many faculty members, administrative staff, and colleagues. Amongst the faculty, I would especially like to acknowledge Amy Glasmeier, Balakrishnan Rajagopal, Bish Sanyal, Catherine D'Ignazio, Dayna Cunningham, Liz Reynolds, Janelle Knox-Hayes, and Larry Susskind. I am particularly grateful to Catherine and Liz for the opportunity to work with stellar research teams at the Data + Feminism Lab and the Industrial Performance Center, respectively, and to Amy Glasmeier for the unique opportunity to co-teach with her twice, enabling me to both grow as a teacher and to cement my passion for it. I also have nothing but gratitude for the fantastic support and care provided by DUSP staff over the years, especially by Sandy Wellford, our academic administrator.

I feel extremely lucky that I was able to pursue this journey alongside an inspiring group of fellow students—many of whom I now count as close friends. Asmaa Elgamal, Emilia Simison, and Rida Qadri have been with me through thick and thin, read and re-read my work, and were always ready to provide warmth and laughter. I can only hope to have been as generous a friend as they have been for me. To the "gang," as Sandy once called us, at office 9-265—Asmaa Elgamal, Jonars Spielberg, Madeleine Daepp, Rida Qadri, and Yonah Freemark—I owe some of the happiest moments of my time at MIT. I am confident no other PhD office will ever be as lively—or as loud. It has also been incredibly enriching and a great joy to experience this journey alongside Andrew Binet, Angeles Martinez Cuba, Anurag Rai, Ayan Meer, Chaewon Ahn, Dan Engelberg, Dan Traficonte, Dorothy Tang, Elise Harrington, Francesca Vaccaro, Guillermo Toral, Ignacio Puente, Juan Camilo Osorio, Kevin Lee, Laura Wainer, Mark Brennan, Patricia Cafferky, Prassanna Raman, and Yasmin Bijani.

Beyond MIT, I am thankful for the constructive comments and suggestions on my dissertation research I received along the way from many professionals and scholars, including at the MIT-Brown Doctoral Development Workshop, the Harvard-MIT Latin American Discussion Group, the Financial Geography Summer School organized by the Global Network on Financial Geography (FinGeo), the Household Water Insecurity Experiences (HWISE) research network, and the Privaqua research group coordinated by Professor Léo Heller at Fiocruz in Brazil. I am also grateful for the contributions of participants at conferences organized by the Association of Collegiate Schools of Planning (ACSP), the Red de Economía Política de América Latina (Repal), and the Effective States and Inclusive Development (ESID) Research Center. My work benefitted greatly from the insights and exchanges provided by those spaces.

And farther beyond the confines of academia—from Cambridge all the way to my home in Brazil—I owe much to my beloved friends and family who have always cheered me on, grounded me, held me accountable, offered support, and embarked with me on adventures other than intellectual pursuits. Jenna, Pri, Neto, Tai, Paula, Clóvis, Vanessa, Elsa, Cyril, Gabi, and Anthony: thank you for your deep friendship. Naza, my lovely grandmother, thank you for your words of wisdom, your prayers, and for always taking care of me. Gui, my brother, thank you for making me laugh at myself, for letting me spend time at your kitchen when I needed a break, and for pushing me to see the "real" world. Glória and Alex, my parents, have never failed to go above and beyond—including, at times, nearly being research assistants—to make sure we fulfilled our dreams and goals. That I have earned this PhD is as much a reflection of their effort and sacrifice over these many years as of my own. I am more grateful for them than I can express. And finally, my deepest gratitude to my husband, Cody, who embarked on this journey with me when the dissertation train was already moving and provided nothing but careful proofreading, comforting support, and love along the rest of the way.

Contents

Figures & Tables

Figures

Tables

List of Acronyms

ABAR	Associação Brasileira de Agências de Regulação (Brazilian Association of Regulatory Agencies)
ABCON	Associação Brasileira das Concessionárias Privadas de Serviços Públicos de Água e Esgoto (Brazilian Association of Private Water and Sewage Service Providers)
ABDIB	Associação Brasileira da Infraestrutura e Indústrias de Base (Brazilian Association of Infrastructure and Basic Industries)
ABES	Associação Brasileira de Engenharia Sanitária e Ambiental (Brazilian Association of Sanitation and Environmental Engineering)
AESBE	Associação Brasileira das Empresas Estaduais de Saneamento (Brazilian Association of State Sanitation Companies)
Agepar	Agência Reguladora de Serviços Públicos Delegados de Infraestrutura do Paraná (Public Infrastructure Services' Regulatory Agency of Paraná)
AIMCo	Alberta Investment Management Corporation
ANA	Agência Nacional de Águas e Saneamento Básico (National Water Agency)
ANEEL	Agência Nacional de Energia Elétrica (National Electricity Agency)
ARSAE	Agência Reguladora de Serviços de Abastecimento de Água e de Esgotamento Sanitário do Estado de Minas Gerais (Water and Sewage Regulatory Agency of Minas Gerais State)
Assemae	Associação Nacional dos Serviços Municipais de Saneamento (National Association of Municipal Sanitation Service Providers)
BCE	Brasil Central Engenharia (engineering firm)
BNDES	Banco Nacional de Desenvolvimento Econômico e Social (National Development Bank)
BNDESPar	BNDES Participações S.A.
BNH	Banco Nacional de Habitação (National Housing Bank)
CAPEX	Capital expenditures
Cedae	Companhia Estadual de Águas e Esgotos (Water and Sewage State Company, Rio de Janeiro state)
CEF	Caixa Econômica Federal
CESBs	Companhias Estaduais de Saneamento Básico (State Sanitation Companies)
CNI	Confederação Nacional da Indústria (National Confederation of Industry)
Copasa	Companhia de Saneamento de Minas Gerais (Sanitation Company of Minas Gerais)
CPPIB	Canada Pension Plan Investment Board
ESG	Environmental, Social, and Corporate Governance
ETF	Exchange Traded Fund
FGV	Fundação Getúlio Vargas (Getúlio Vargas Foundation)
FI-FGTS	Fundo de Investimento do Fundo de Garantia do Tempo de Serviço (Unemployment Guarantee Investment Fund)
FNP	Frente Nacional de Prefeitos (National Front of Mayors)

FNSA	Frente Nacional pelo Saneamento Ambiental (National Front for Environmental Sanitation)
FNU	Federação Nacional dos Urbanitários (National Federation of Urban Workers)
GIC	Government of Singapore Investment Corporation
GWI	Global Water Intelligence
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund
IPO	Initial Public Offering
MDB	Movimento Democrático do Brasil (Brazilian Democratic Movement Party)
MDR	Ministério do Desenvolvimento Regional (Ministry of Regional Development)
MP	Medida Provisória (provisional decree)
ODI	Overseas Development Institute
ONDAS	Observatório Nacional dos Direitos à Água e ao Saneamento (National Observatory of the Rights to Water and Sanitation)
OPEX	Operating expenses
PAC	Programa de Aceleração do Crescimento (Growth Acceleration Program)
PL	Projeto de Lei (legislative bill)
PLANASA	Plano Nacional de Saneamento Básico (National Sanitation Plan)
PPI	Programa de Parcerias de Investimentos (Investment Partnership Program)
PPPs	Public-Private Partnerships
PT	Partido dos Trabalhadores (Workers' Party)
Sabesp	Companhia de Saneamento Básico do Estado de São Paulo (Sanitation Company of São Paulo State)
Sanepar	Companhia de Saneamento do Paraná (Sanitation Company of Paraná)
SAAB	Saneamento Ambiental Águas do Brasil (private sanitation company, also known as Grupo Águas do Brasil)
SDG	Sustainable Development Goals
SINDCON	Sindicato Nacional das Concessionárias Privadas de Serviços Públicos de Água e Esgoto (National Union of Private Water and Sewage Service Providers)
SNIS	Sistema Nacional de Informações sobre Saneamento (National Information System on Sanitation)
SubÁGUA	Subcomissão Especial da Universalização do Saneamento Básico e do Uso Racional da Água (Special Subcommittee on the Universalization of Sanitation and Rational Water Use)
TCE	Tribunal Superior Eleitoral (Superior Electoral Court)
TCU	Tribunal de Contas da União (Federal Court of Accounts)
UNICEF	United Nations Children's Fund

Introduction

Residents of São Paulo city and its metropolitan region—one of the largest urban agglomerations in the world—experienced an unprecedented water supply crisis between 2014–2015. A long-lasting drought took a toll on the region's supply sources. As water reservoirs reached historically low levels, public officials scrambled to devise solutions, water shortage complaints mounted, and protests erupted (Cruxên, 2016). This context of apparent scarcity and upheaval provided the spark for this dissertation. In mid-2015, I made my way up and down the streets of São Paulo as part of my field research on emerging forms of social mobilization around the water crisis—a crisis that, in my view, encapsulated many of the challenges we currently confront globally: a changing climate, environmental degradation, and unreliable and unequitable water access. As I spoke to public officials and activists and attended public events, hearings, and organizing meetings, I saw a discursive battle over the causes of the crisis unfold. Public officials argued it was simply an unpredictable and atypical drought; environmental and social movements blamed poor planning and water resources management. Many pointed the finger at the water and sanitation utility, Sabesp, a mixed capital company with shares traded in stock markets in São Paulo and New York. They suggested that Sabesp, which managed some of the region's reservoirs, had sought to sell more water in other to increase returns to its shareholders, thus placing profits ahead of the public interest. My interest in probing this argument further, that is, in understanding how the ownership structures of water companies mattered for how they managed water resources or made decisions about service delivery motivated my subsequent research.

What I realized was that existing scholarship on the political economy of planning and international development offered very little insight into the forms of business organization, strategy, and politics that accompany different models of private investment in urban water and sanitation provision—or, for that matter, of other infrastructure services—in the global South. In fact, existing literature tended to treat all private participation as sort of the same, favoring comparisons with its "putative" other: public provision. To explore the socio-political and environmental ramifications of different models of private investment in water and sanitation, I realized we first needed to take a step back and move away from monolithic treatments of the "private sector." In other words, we needed to disaggregate, or "disorder," private capital. This is the overarching aim of this dissertation. Drawing on historical and ethnographic research on the development of private participation in water and sanitation provision in Brazil, the dissertation consists of three papers that together interrogate variation in forms of business ownership and politics, exploring not only how they shape public-private collaboration for service delivery over time but also contribute to re-configuring the institutions that govern service provision markets.

1. The task of disordering

We have, of course, learned quite a bit about private investment in infrastructure services such as water and sanitation during the last three decades. Propelled by the renewed faith in the power of markets over states that characterized policymaking at the turn of the century, private investment in infrastructure projects as a share of GDP grew steadily in emerging markets from 0.1% in 1991 to 1.1% in 1997, a trend led by Brazil, China, India, and Mexico (World Bank, 2016: 8). Although private investment declined after 1997, particularly following the East Asian financial crisis, it picked up again in the mid-2000s, when infrastructure public-private partnerships experienced a second wave of expansion, at varying paces, across the globe (World Bank, 2016; Bayliss and Van Waeyenberge, 2018).

Such private investment trends have often been accompanied by normative arguments for private engagement that extoll the private sector's capacity to "correct" rampant failures in public service provision in developing countries. These include capital shortages, deficient operational practices, corrupt management, and political interference (Idelovitch and Ringskog, 1995; Boada, 2011). Experience has shown, however, that such arguments are, at best, exaggerated, and, at worst, misguided.[1] In the water and sanitation sector, the focus of this dissertation, some studies have found that private participation had positive effects on productivity, cost recovery, and coverage expansion, while others found no significant improvements relative to public provision.[2] Crucially, scholars have pointed to the potentially high social and environmental costs of private participation in service delivery, underscoring the tendency for privatized[3] providers to prioritize economic efficiency and financial returns to the detriment of affordability for the poor or sustainable water resources management (Bakker, 2000; Loftus and McDonald, 2001; Swyngedouw, 2005). Reinforcing these findings, the former Special Rapporteur on the human rights to safe drinking water and sanitation, Léo Heller, argued in a 2020 report for the United Nations that private water and sanitation provision was antithetical to the realization of those rights.[4]

Contending with the mixed outcomes of privatization experiences, many political economy scholars and development experts concluded that the problem was not one of ownership but of governance (Kessides, 2004). This view sparked a wave of research centered on understanding what kinds of governance arrangements support—or, perhaps, more accurately, inhibit—private participation, placing emphasis on factors such as contractual design and the quality of the legal and regulatory environment. Institutional analyses in this vein have been motivated by concerns with risk mitigation for investors (Marzouk and Ali, 2018; Chambouleyron, 2014; Mahalingam et al., 2011) as well as with reducing opportunities for corruption and rent-seeking (Guasch and Straub, 2009; Auriol

[1] For a comprehensive review of the literature on the outcomes of private participation across infrastructure sectors, see Trebilcock and Rosenstock (2015). For reviews focused on water and sanitation, see Lobina and Hall (2000), Budds and McGranahan (2003), Davis (2005), Bakker and Kooy (2008), Bakker (2010).

[2] For example, Marin's (2009) review of 65 water public-private partnerships across different countries found that private participation improved operational efficiency in terms of water loss reduction, more reliable water access, and more effective billing practices. However, there was little evidence that service expansion was more effectively delivered by the private sector. Likewise, in the Latin American context, Clarke et al. (2004) showed that while private participation improved the share of households with access to piped water and sewage in cities in Brazil, Argentina, and Bolivia between the 1990s-2000s, connection rates also improved in control cities, suggesting private investment was not decisive for improvements to service access.

[3] Privatization has served as an umbrella term covering a range of distinct service delivery reforms (Bakker, 2007). These include commercialization, deregulation, corporatization, and privatization itself (the complete transfer of assets to a private operator).

[4] Léo Heller, "Direitos Humanos e a privatização dos serviços de água e esgotamento sanitário – Relatório do Relator Especial sobre os direitos humanos à água potável e ao esgotamento sanitário," A/75/208, 21 July 2020.

and Blanc, 2009; Takano, 2017). To attract and promote effective private participation, broad-based institutional reforms have been advocated as necessary for strengthening regulatory and judiciary institutions, protecting property rights, and minimizing the breach of contractual commitments (Savedoff and Spiller, 1999; Henisz and Zelner, 2005).

One blind spot of this body of work, as I have suggested, has been its monolithic treatment of the "private sector." Ironically, in the quest to probe the merits of private participation in infrastructure provision, we seem to have learned much less about private actors themselves. The analytical interest in comparing private to public service delivery has often slipped towards aggregation. This dichotomous approach is, in my view, a misleading analytic that tends to essentialize both sides, ignore variation within each, and neglect the increasingly "mixed" nature of service provision (Bakker, 2010). Extant political economy approaches to explaining private sector behavior suffer from a similar handicap. On the one hand, the institutional perspective I discussed above posits that private actors respond to institutional incentives; the key is to design these well. On the other hand, critical perspectives tend to situate private participation in relation to broader processes of capitalist accumulation and development, reading the behavior of private actors chiefly—if not solely—in relation to logics of profit maximization.[5]

It is hardly disputable that private infrastructure providers will seek profits. The more interesting question, in my view, concerns how companies organize themselves and make political decisions about how to secure the returns they seek. High-level lenses centered on macro institutional arrangements or on capitalist development do not really help us to understand how private capital is variously organized—and, ultimately, how this heterogeneity matters for service provision on the ground. They cannot fully explain, for example, why Molinos-Senante et al. (2018) have found that the quality and efficiency of services varied across private providers in Chile, despite the fact that they operate within the same institutional environment, or why Post (2014) found that water concession contracts owned by domestic business groups were more likely to persist over time in Argentina than contracts held by foreign multinationals. Both examples suggest we stand to gain a better understanding of private participation by "disordering" monolithic treatments of the private sector and, in particular, by paying greater heed to business organization and politics.

This has precisely been my sentiment during my research in Brazil. I have encountered not only distinct models of private investment in urban water and sanitation delivery but a multitude of private actors engaged in this space. In São Paulo, as I have noted, the ownership of the water and sanitation utility, Sabesp, was mixed: the state government owned a little over half of the company's shares while the rest were traded on stock exchanges. Given how fluid stock market trading is, private investors often eluded clear identification. Yet, some of Sabesp's largest investors have included global

[5] In "Dispossessing H2O", for example, Swyngedouw (2005) argues that the short-term dynamic of market transactions compels private water companies to only invest in productivity-enhancing activities as opposed to long-term capital investments that provide fewer immediate rewards. He associates such dynamics with "tactics of accumulation by dispossession" that are pivotal to capitalist development (Swyngedouw 2005: 81). Britto and Rezende (2017) and Alves and de Campos Júnior (2018) apply a similar analytic for examining private participation in the Brazilian water and sanitation market, noting how public-private partnerships in the sector serve a capitalist logic that commodifies urban space and natural resources and runs counter the achievement of socially desirable goals.

asset management firms such as The Vanguard Group and investment banks like Goldman Sachs.[6] In contrast, in Teresina, a city of less than a million residents in the North of Brazil, the private investor chain was easier to identify. Services were provided by a local private operator, Águas de Teresina, controlled by Aegea, one of the largest private water and sanitation holdings in the country. Aegea, in turn, was owned by a family-owned domestic construction group, Grupo Equipav, in conjunction with two minority investors: GIC, the Singaporean sovereign wealth fund, and, until 2019, the International Finance Corporation (IFC), the investment arm of the World Bank. If your head is spinning trying to retain all these names, so was mine. It felt necessary to unpack what different ownership structures and investor heterogeneity mean for organizational decision-making, for service priorities, and for the political and regulatory relationships that govern service delivery.

While this unpacking is, in essence, the task of disordering, my use of the notion of "disorder" extends beyond it. It is a nod to the exploration of agency and change—and of the tensions that changes inevitably provoke—in the contextual development of private models of water and sanitation provision over time. It is also a reference to the ways in which new or different private investors might seek to re-structure service provision or disrupt inherited socio-political ways of doing business. Perhaps more fundamentally, it is a play on the concern with "ordering" markets that has characterized much of the political economy scholarship and policy advice on what developing countries need to do to attract private investment. We expect investors to flock to markets where there is regulatory stability and legal certainty. Markets perceived as fragmented or unruly tend to deter investors—not just in the infrastructure space but in other sectors.[7] Often, such expectations are organized around geographical markers: markets in advanced economies are considered to be relatively safer and more predictable than developing markets in the "South," portrayed as opaque and volatile. To attract private investment, then, policy-makers in "disordered" markets are encouraged to pursue institutional reforms designed to introduce more stability and regularity to these environments. As I hope to show in this dissertation, however, new market configurations and institutions of market governance may very well emerge from moments of apparent disorder and tension. Moreover, what "order" means is both contextual and very much in the eye of the beholder.

2. The stakes

> *Mobilizing financing is key to implementing the 2030 Agenda for Sustainable Development. But finance is not an end in itself – it is a means to improve people's lives and achieve the Sustainable Development Goals.*
>
> – Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs, United Nations, 2020[8]

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[6] GO Associados, "Relatório Executivo Saneamento," July-August 2019.

[7] Examining food markets in India, for example, Cohen and Jackson (2020) offer an insightful analysis of the problem of market fragmentation and opaqueness in relation to foreign direct investment.

[8] United Nations, Inter-agency Task Force on Financing for Development, "Financing for Sustainable Development Report," 2020, New York: United Nations.

The World Bank Group views local capital markets as critical to accelerating the sustainable economic growth needed to broaden prosperity and reduce poverty. (…) Looking ahead, capital markets need to play an even bigger role by mobilizing more private capital for key sectors with financing needs, including infrastructure, housing, SME and climate action projects.

– Anshula Kant, Chief Financial Officer, World Bank, 2020[9]

"The cohesive, cooperative success [for] us here is going to be based on PPPs, but on the right PPPs: public-private partnerships. If we focus on that, we're going to win. If we focus on power, patronage, and politics, we're going to lose."

– Mauricio Claver-Carone, President, Inter-American Development Bank, 2020[10]

Now, more than ever, the task of disordering the private sector appears crucial. The mobilization of private capital—and especially financial capital—with which to fund the pursuit of various development goals is a hot topic. As the quotes above illustrate, development institutions are coalescing around the view that tapping into capital markets, promoting financial inclusion, and encouraging public-private collaboration is paramount for reducing poverty, supporting climate action, and, more broadly, promoting sustainable development (Mader, 2018; Mawdsley, 2018). The economist Daniela Gabor has recently equated this credo with the emergence of a "Wall Street Consensus" or an "elaborate effort to reorganize development interventions around partnerships with global finance" (Gabor, 2020: 1)

Infrastructures are a key part of this agenda. Climate change, environmental degradation, and growing inequality have raised not only the stakes but the costs of addressing mounting infrastructure needs. In the water and sanitation sector, the World Bank and the United Nations Children's Fund (UNICEF) have estimated that achieving the water-related Sustainable Development Goals (SDGs) by 2030 would require nearly US$115 billion per year in overall global investment (World Bank and UNICEF, 2017: vii). These goals include achieving universal, equitable, and adequate access to clean water and sanitation, as well as restoring and protecting water resources. Currently, two billion people across the globe lack access to safe drinking water, while nearly half of the global population (3.6 billion) lack access to safe sanitation.[11]

Granted, water and sewage have generally been the "ugly duck" of infrastructure sectors, attracting much less interest in the past few decades than areas such as energy and telecommunications

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[9] Anshula Kant, "Capital Market Driven Development and the Role of the World Bank Group," Speech made at the 2020 Capital Markets Conference: Investing in Growth, 10 February 2020, Cote d'Ivoire. Available at https://www.worldbank.org/en/news/speech/2020/02/10/capital-market-driven-development-and-the-role-of-the-world-bank-group (Accessed 30 October 2021).

[10] Larry Luxner, "IDB President Mauricio Claver-Carone: Latin America wants greater US involvement and consensus," Atlantic Council, 24 November 2020. Available at: https://www.atlanticcouncil.org/blogs/new-atlanticist/idb-president-mauricio-claver-carone-latin-america-wants-greater-us-involvement-and-consensus/ (Accessed 03 November 2021).

[11] UN Water, "Water, Sanitation and Hygiene – Water Facts." Available at: https://www.unwater.org/water-facts/water-sanitation-and-hygiene/ (Accessed 04 November 2021).

(Calderón and Servén, 2010; Carolini and Cruxên, 2021). According to World Bank data, between 2007 and 2017, private investment in water and sewage accounted, on average, for only three percent of total private investment in infrastructure projects globally (World Bank, 2018). However, the water sector is increasingly becoming a potential "golden goose."[12] Growing urbanization and climate change are placing a premium on the value of water as a scarce resource.[13] Moreover, lagging service coverage numbers offer potentially profitable market opportunities for investors looking to expand their frontiers. The emergence of exchange traded funds (ETFs) such as the S&P Global Water Index (Bayliss, 2014) or the creation of futures markets in water have signaled, as Buiter (2021) recently put it, that "water as an asset class is here."

Brazil offers a particularly fertile ground for exploring models of private investment in water and sanitation provision. Since the 1990s, the country has been a leader in terms of attracting private investment to water and sewage projects. Brazil accounted for nearly 50% of 342 projects with private investment in the Latin American and Caribbean region between 1991 and 2017 (World Bank, 2017). Globally, it attracted 38% of the share of private investment in water and sewage services—topping all other countries—between 2007 and 2017 (World Bank, 2018). As I will discuss further in the dissertation, in 2020 Brazil also passed a broad-ranging legal and regulatory reform designed to attract even greater private investment to the sector. Brazil's current Minister for the Economy, Paulo Guedes, commented in one interview in 2019 that of every ten questions the government received from foreign and domestic private investors, "six or seven" were about water and sanitation.[14] In good Brazilian soccer speak, the water and sanitation sector was "*a bola da vez*"—in other words, it was the next big thing.

Confronting the financial challenge of addressing infrastructure gaps, however, is daunting, especially within a global context of slowing rates of economic growth and increasing fiscal constraints. Enter finance. Countries are increasingly being encouraged to tap into a "large pool of global savings" by attracting institutional investors such as pension funds or private equity funds to infrastructure investments (Arezki et al., 2016). A 2015 report published by the Inter-American Development Bank (IDB) on infrastructure financing in Latin America, for example, argued that public investment was not enough to improve "the stock and quality" of infrastructure in the region; rather, what was needed was increasing private investment, particularly by "developing infrastructure as an asset class to channel private savings to infrastructure" (Serebrisky et al., 2015: 17). This can occur either through direct equity investments in infrastructure projects or companies, or through debt mechanisms such as debentures and other kinds of loans. At face value, this appears to be a win-win proposition. Institutional investors manage trillions of dollars in assets.[15] This money could

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[12] To some extent due to the very saturation of other infrastructure markets.
[13] MarketWatch, "How to Invest in Water: A Long-Term Bet on an Essential Commodity with Limited Supply," 22 April 2018. Available at: https://www.marketwatch.com/story/a-long-term-bet-on-an-essential-commodity-with-a-limited-supplyand-its-liquid-2018-03-22 (Accessed January 28, 2020).
[14] O Globo, "Guedes: Entrada de Investimento Privado No Setor de Saneamento é Uma Revolução Para o País'," 09 December 9 2019.
[15] See, for example, Boston Consulting Group, "The $100 Trillion Machine," 08 July 2021. The analysis conducted by the consultancy group found that the institutional investment industry reached $61 trillion dollars under management in 2020,

productively be invested in infrastructure projects that, in turn, promise to yield stable, inflation-adjusted, long-term returns for those investors (Inderst and Stewart, 2014). The devil, as always, is in the details.

3. The octopus: finance

It is perhaps fitting, that, in pursuing my interest in unpacking "the private sector," I was confronted with the need to also unpack the black box of finance. As financial investors[16] have become more relevant to investments tied to urban development and infrastructures, including water and sanitation, a secondary objective of this dissertation is to interrogate how financial capital, in particular, influences the governance of urban infrastructure provision. If there is anything we have learned about finance, however, is that it is difficult to pin it down. The very lexicon of modifiers—expanding, increasing, deepening, growing—scholars have often used to speak about the "rise of finance" in the past few decades invokes the image of an octopus, ever stretching its arms into new realms. Indeed, in an article titled the "The Capitalization of Almost Everything," Leyshon and Thrift (2007: 98) argue that "financial capitalism is dependent on the constant searching out, or the construction of, new asset streams, usually through a process of aggregation."

The notion of "financialization" has become a fashionable—and equally indeterminate—concept for capturing this process of aggregation.[17] While the concept gained greater popularity after the global financial crisis in 2008,[18] scholars have typically spoken of financialization in relation to a series of events dating back to the mid-20th century that contributed to enlarging the role of the financial sector in the economy (Epstein, 2005). Beginning in the 1960s–1970s, technological innovations, economic liberalization, and changes to monetary frameworks (such as the adoption of floating exchange rates) encouraged capital mobility and asset diversification. Regulatory reforms further enabled financial investors to "go global." States had a rather visible—even if at times unintentional (Krippner, 2011)—hand in fostering financial activity through the elimination of capital controls and deregulation of domestic financial markets (Helleiner, 1994).

At its broadest, financialization has been defined as "the increasing role of financial motives, financial markets, financial actors, and financial institutions in the operation of the domestic and international economies" (Epstein, 2005: 3). More narrowly, the concept has been used to describe the ascendancy of shareholder value as a mode of corporate governance, the economic dominance of a "rentier class," or regimes of accumulation "in which profits accrue primarily through financial channels" (Krippner, 2005: 175). Growing literature on the "financialization of everyday life" points

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corresponding to 59% of the global market. Available at: https://www.bcg.com/publications/2021/global-asset-management-industry-report (Accessed 04 November 2021).

[16] Financial investors can be understood as investors whose primary business activity is to invest capital with the expectation of financial gain.

[17] For a review of the concept of financialization, see Aalbers (2019).

[18] According to one recent systematic literature review, the number of published studies on financialization increased 11% per year, on average, following the stock market crash in 2008, going from around 20 publications that year to 326 by 2017 (Palludeto and Felipini, 2019).

to how individuals and households are increasingly enmeshed in the web of finance through the diffusion of consumer credit, student debt, home mortgages, and financial holdings such as pensions (Montgomerie, 2020). Within urban studies, the concept has been used in reference to myriad processes through which infrastructures (Pike et al., 2019; O'Brien and Pike, 2017; Torrance, 2008), real estate (Shatkin, 2019; Halbert and Rouanet, 2014), housing (Rolnik, 2013; Aalbers, 2017; Beswick and Penny, 2018), and natural resources (Ouma et al., 2018) are being transformed into financial assets and products—thus giving spatial materiality to financial interests.

While the multiple uses of "financialization" have led some to question the concept's theoretical value (Christophers, 2015), perhaps some insights to emerge from this definitional challenge are that financialization does not possess a universal form, occur through a single pathway, or have a particular global, national, or local scale. Financial geographers have actually made a point of noting that financialization is a variegated, uneven, and selective process (Pike and Pollard, 2009). Global finance looks everywhere but does not go everywhere. Perhaps as a reflection of this selective nature, the existing literature on financialization is heavily skewed towards experiences from countries with highly developed capital markets such as the United States and the United Kingdom (Pike and Pollard, 2009). In Southern economies, financialization has often been discussed as a more contingent process, not only shaped by fluctuations in the global economy but also requiring intermediation from multilateral institutions and other "territorial" networks of actors who help to "de-risk" projects for investors (Mawdsley 2018; Halbert and Rouanet, 2014). In fact, some scholars have argued that financialization in the global South is marked by a "subordinate" or "peripheral" character that reflects the unequal standing of these countries in the global economy (Powell, 2013; Pereira, 2017).

Selectivity and unevenness in the circulation of financial capital pose a challenge for development institutions and developing countries eager to tap into financial markets. A 2019 report by the Overseas Development Institute (ODI) found, for example, that multilateral development institutions have largely failed in their ambition to mobilize private finance for development projects in low-income countries, with most funds going to middle-income countries and lower risk projects (ODI, 2019). Hopes to leverage private finance for infrastructure projects in the South are also often crushed, as Carolini and Cruxên (2020: 235) observe, by "the lack of risk data and historical financial records from public sector partners, (…) the variation in contracts and financial regulation across geographies, [and] perceived political and economic instabilities." According to Inderst and Stewart (2014: 5–6), a key bottleneck for institutional investment in infrastructure in emerging markets is the lack of "suitable" projects from investors' point of view, meaning "steady, inflation-adjusted income streams" coming from "mature, operating assets with proven, predictable cash flow."

Pervading debates on financialization is the question of whether we should want more finance at all. Finance, the octopus, sits at the intersection of competing discourses about what it does, especially with regard to its distributional implications. Mainstream economists and international institutions have argued that financial deepening can support economic growth (Levine, 2005) and, if the World Bank is to believed, reduce poverty, promote sustainability, and "broaden prosperity." A large chunk of the business community believes that firms can be more efficient and productive if abiding to the principle of shareholder value maximization (Lazonick and O'Sullivan, 2000). But optimism around finance is largely dwarfed by the charges levelled against it. While financial actors claim to create value, many critics have argued that they are actually rentiers who extract value, concentrate wealth, and stifle innovation (Mazzucato 2018; Christophers, 2020; Lapavitsas, 2013). Shaxson (2019) has suggested that finance is a "curse:" it increases inequality, distorts markets, erodes public services, and presents a threat to democracy. Still others have warned that financialization can distort social policies and reinforce spatial and racial inequalities (Lavinas, 2018; Taylor, 2019; Jenkins, 2021). In a joint statement issued in October 2021, a group of independent United Nations human rights experts joined the chorus of critics denouncing "the serious negative impact that financialisation has on the enjoyment of the human rights to safe drinking water and sanitation, as well as a range of other human rights, including the rights to food, adequate housing, development and a healthy and sustainable environment, among others."[19]

Part of the problem with disentangling the multiple arms and ramifications of financialization is the challenge of understanding how finance itself works. Opaqueness and complexity are some of the distinguishing qualities—or faults—commonly associated with finance (Leyshon and Thrift, 2007). The financial industry is reportedly governed by a "code of silence" that protects its dealings from external scrutiny (Luyendijk, 2015). Some scholars have sought to get behind this wall of mystery by becoming insiders: "taking the floor" (Beunza, 2019), dissecting financial models (MacKenzie, 2008), and examining the shared values and norms that inform how financial workers approach their trade (Ho, 2009). However, the broader literature on financialization is still confronted with the challenge of demonstrating precisely what it is that finance does, why, and with what effects across the various socio-economic and political spheres of activity in which it engages. Christophers (2015: 230) provocatively argues that extant scholarship on financialization has fallen short in this regard: "Financialization has been so vigorously denominated as the growing influence *of* finance—in capitalism, in boardrooms, in people's everyday lives—that little is being thought or said about the finance that is seemingly 'doing' the financializing."

A similar inquietude motivates my interest in understanding the insertion of financial investors into urban water and sanitation provision. Within urban studies, we have learned much about how the use of debt instruments and public-private partnerships by local governments to raise capital or spur growth encourages the financialization of urban development (see Aalbers, 2020). Peck and Whiteside (2016) have actually suggested that urban politics, particularly in North-Atlantic cities, is being recentered around "debt machine" dynamics. Within development studies, there is growing attention to the role of multilateral institutions, international organizations, and central states in promoting financialization as a mode of development (Mawdsley, 2018; Gabor, 2020). Across the board, however, one is left with the feeling that finance is largely a bystander, relatively removed from the on-the-ground politics of making financialization happen. I take a different approach in this dissertation. I seek to explore the very agency of financial actors in shaping how urban infrastructure

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[19] "Joint Statement by independent United Nations human rights experts warning of the threat that financial speculation poses to the enjoyment of a range of human rights," 19 October 2021. Available at: https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=27671&LangID=E (Accessed 19 October 2021).

services are provided and regulated—particularly in Southern contexts considered opaque by opaque financial investors.

In line with my interest in unpacking private participation in service provision, to explore finance, I place the lens on firms. Specifically, I examine the acquisition of ownership stakes in water and sanitation companies by financial investors such as private equity groups and other institutional investors. For short, I refer to this as *financialized ownership*.[20] This is one modality among others—such as ETFs or water trading markets—through which financial investors can engage in the water infrastructure space. The meso-level study of how non-financial firms[21] become entangled with finance has been one of the main strands of research on financialization alongside macro analyses at the level of the global economy or national states, and micro analyses at the level of individuals and households. In the water and sanitation sector, some scholars have examined how financial insertion into the ownership of water utilities affects the financing practices and decision-making rationales of service providers (Allen and Pryke, 2013; Klink et al., 2019). My work shares with these studies a sensibility towards unpacking the organizational pathways through which financial interests are politically negotiated and translated into service delivery strategies on the ground.

In contrast to these analyses, however, I focus on how financialized ownership shapes relations with the state. As Torrance (2009: 805) has observed, "while institutional investors are expending capital and time purchasing infrastructure assets in cities around the world, the changes in the management of urban infrastructure networks are under researched." I am interested in how financialized ownership reconfigures the political and regulatory relationships that are constitutive of service delivery. I start from the assumption that politics is intrinsic to private engagement in urban infrastructure provision and not—as implied in the above statement by Mauricio Claver-Carone, president of the Inter-American Development Bank—something that can and should be evaded.

My exploration of the relationship between finance and the politics of water and sanitation delivery in Brazil transpires in the dissertation papers in two ways. First, I compare how relations between private investors and the state unfolded over time within different mixed ownership water and sanitation companies. These are companies in which state and private actors jointly own assets. In one of the cases I examine, financialized ownership occurs through a model in which a portion of the company's shares are traded on the stock market. This analysis is part of the article "The Limits of Insulation" (Chapter 2).[22] Second, I examine transitions to financialized ownership among fully private water and sanitation companies in Brazil to understand how these changes influenced the way those firms approached relationships with local states across different concessions and public-private partnerships (PPPs). This analysis is at the heart of the article "Against the 'Local' Grain" (Chapter 3) and serves as the backstory for the article "No Investors, No Reform" (Chapter 4), in which I explore

[20] This concept is introduced mainly in my second article (see Chapter 3).
[21] Non-financial firms can be understood as firms whose primary activity is to produce or deliver goods and services for the market. This is in contrast to firms who provide financial services such as insurance companies, asset management firms, and so forth.
[22] This article is not framed explicitly in terms of the analysis of financialized ownership or financialization. My interest in these issues actually emerged during the research that informed that paper.

how private investors were able to successfully push for the aforementioned sweeping regulatory reform of sanitation delivery that passed in 2020.

4. The papers

The dissertation is organized around three distinct articles. The first, "The Limits of Insulation" (Chapter 2) examines how relations between state and private investors develop over time—and, by extension, how they affect service delivery—in different models of public-private collaboration. Conventional political economy scholarship and development policy advice emphasize the role of institutional rules in governing public-private relations and improving service delivery, particularly by insulating service provision from politics. Through a comparative historical analysis of two large-scale, mixed-ownership water and sanitation companies in Brazil, I argue this perspective fails to adequately explain the changing temporal dynamics of public-private collaboration. Drawing on document analysis, in-depth interviews, and data on service outcomes, I show that varying relationships between state and private investors (for instance, whether symbiotic or conflictual) and service outcomes (more or less market-oriented) in each case reflected not so much the rules in place but rather a) the type of private participation in ownership structure and b) the political approach to service provision advanced by different state administrations and enacted by bureaucratic appointees within the companies—what I call *political modulation*.

This analysis yields two central insights. First, it shows that private investors are more likely to exercise influence over service priorities and company activities when private participation is concentrated as opposed to dispersed among multiple investors in the stock market. Second, contrary to the assumption that profit maximization overrides other service objectives, it shows that states retain an important role in shaping the direction of service delivery. This finding not only problematizes policy prescriptions that seek to improve service delivery by insulating it from political interference, it also reveals a positive role for politics in orienting service delivery towards more equitable outcomes. This article has been published in *International Development Planning Review* (Cruxên 2021a or Chapter 2) and is reproduced here as the final version of the article as it was when accepted for publication.[23]

The second article, "Against the 'Local' Grain" (Cruxên 2021b or Chapter 3), converses more directly with scholarship on the financialization of urban development. It explores the pathways for and political ramifications of the insertion of financial capital into the provision of urban sanitation services in Brazil via the acquisition of ownership stakes in private sanitation providers. Retracing the historical development of the private market for sanitation delivery in Brazil, I first show that the destabilization of existing domestic market structures can open avenues for the greater insertion of financial investors. Specifically, in Brazil financial investors capitalized on the ramifications of a broad corruption scandal, Lava Jato, for the organization of the private market for sanitation delivery. The scandal destabilized deep-rooted forms of state-business relation and pushed out the investors who

[23] The exceptions are small adjustments to the numbering of tables, figures, and appendices to comply with dissertation formatting.

had historically dominated private sanitation provision: domestic, family-owned construction business groups. Second, I demonstrate that the insertion of financial capital entailed changes to the very political logic of private participation. Family-owned construction business groups had fostered a politically embedded model of service delivery governance as a way to handle political instability across their consolidated operations. While we might have expected financial actors to also capitalize on local politics—much like their predecessors had done—I find instead that once financial investors such as private equity groups stepped in, they propelled what I call *centripetal politics*. Both organizationally and institutionally, private sanitation companies sought to "escape" local politics and push for regulatory centralization as strategies for enhancing asset monitoring, increasing regulatory legibility, and ensuring stable returns in unstable and fragmented local political environments.

The final article, "No Investors, No Reform" (Cruxên 2021c or Chapter 4), expands on my analysis of the financialization of private sanitation provision to examine how private investors were able to successfully push for regulatory change in the sector even though the deck seemed stacked against them. In 2020, the Brazilian government passed a new law (n. 14.026) that fundamentally altered the institutional architecture of the sector and undermined the long-standing market power of state government-owned sanitation companies, the largest service providers in the country. A central aim of the legislation was to increase private participation in sanitation delivery. The reform faced strong opposition from sectoral groups, who succeeded in blocking its approval twice before eventually losing out. Existing scholarship on the politics of market reforms, particularly in Latin America, has typically emphasized the role of international pressures and executives in driving change in hard contexts for reform. Tracing the four-year long legislative battle around the sanitation reform in Brazil, I show instead that existing private investors were the ones to drive the reform forward. They did so by building business power in motion. That is, by weaving together instrumental, discursive, and structural sources of business power through a fluid process of business mobilization that entailed learning from drawbacks and responding strategically to contextual shifts. This study both (1) upends the conventional expectation within scholarship on the political economy of development that we need "good governance" *before* we can have private investment, and (2) challenges the tendency to portray infrastructure investors as passive onlookers searching for institutionally-stable investment geographies. It reveals instead how investors can be key agents of institutional change.

A note on methodology and positionality

This dissertation draws on six years of empirical engagement with the political economy of water and sanitation delivery in Brazil. The project effectively started with questions that emerged during my fieldwork in 2015 for my master's thesis on social mobilization around a water supply crisis in São Paulo city (Cruxên, 2016). Taken together, the dissertation articles integrate comparative case studies of water and sanitation companies, ethnographic fieldwork, document analysis, and more than 100 in-depth interviews. I also built a novel dataset on public-private contracts in the water and sanitation sector for a period of 25 years (1994–2019) (see Appendix B).

All three papers share a temporal sensibility, that is, a concern with looking into the past to understand how things came to be, and with exploring how socio-political relations or events unfold through time. This kind of sensibility is crucial, as Woolcock et al. (2011: 79) have noted, for paying "more than lip service to the importance of 'context'." It is also fundamental, I suggest, for understanding the issues at the core of this dissertation. Time is at the heart of how we think about infrastructures and public-private partnerships. As an asset class, infrastructures are defined by the fact that they can yield *long-term* stable returns. The idea of stability being somewhat ironic in that it projects into the future the expectation of a fixed present. Due to the large fixed costs of investing in infrastructure, concessions and public-private partnerships also tend to have a long duration (from 20 to more than 30 years). This means that to understand the politics of private participation in infrastructure delivery we need to look at public-private collaboration over time, not simply as one-time contracts. This is the essence of my first article, "The Limits of Insulation."

The notion of financialization contains in itself an implicit evocation of change. This does not mean finance is something new; we know it has been around for centuries (Arrighi, 1994). Rather, it means there is something novel, different, or perhaps amplified about the role of finance in the world. This begs the question of explaining precisely what changes and why relative to some prior "de-financialized" or "under-financialized" conjuncture. This is a particularly important consideration in my second article, "Against the 'Local' Grain." This paper is, in essence, an abridged history of the formation and development of the private market for water and sanitation delivery in Brazil, exploring the conditions that enabled the "rise of finance" within it.

Time is also at the heart of the study of institutional change (Mahoney and Thelen, 2010). In my third article, "No Investors, No Reform," I treat the legislative process around the regulatory reform of the sanitation sector in Brazil as an extended temporality of contention. I examine how private investors in the sanitation sector were able to get what they wanted by developing "business power in time" (Bril-Mascarenhas and Maillet, 2019) through a fluid process of mobilization.

Engaging with history is a form of bricolage. It requires piecing together different points of view, recollections, documents, data, fragments of information, and—if possible—observable events into a story that is also, in itself, a viewpoint. My research was essentially this form of bricolage. To minimize biases, I sought to triangulate across different sources as well as cross-check—and double-check— information provided by interviewees, particularly when these referred to events long past. Any errors, of course, remain my own.

One particular challenge of conducting this research was navigating the ideological differences that exist within the water and sanitation space. The public *versus* private division is still very much a part of public debate about water and sanitation and infrastructure more broadly, in Brazil and elsewhere. My research thus straddled contentious battle lines, engaging with several people within both the "private sector" and groups of actors critical of private participation in infrastructure provision. To be able to conduct my fieldwork, I worked as an intern for a private consultancy firm in São Paulo during two months in 2019, which gave me important access to private sector actors in the water and sanitation space. Based on my prior work on social mobilization around water, I already had connections to actors who were critical of private water and sanitation delivery. My position as a doctoral student at MIT and my native understanding of the Brazilian context further contributed to my ability to access different interviewees and carry out the research. On both sides of the public-private divide, the people I met, interviewed, or otherwise interacted with are people whose opinions I respect and whom I believe seek, in their own way, to build what they consider to be a better world. I cannot thank them enough for their collaboration and willingness to share their perspectives and experiences with me. How I positioned myself in this space and to my interviewees was the same position that I articulate in this dissertation: that I wanted to dig deeper into private participation and get beyond the public *versus* private chasm. While this dichotomy may be normatively useful, it appears practically unhelpful for understanding how service delivery works on the ground, particularly when ostensibly public companies often operate according to market rationales or private companies continuously contract with public ones.

This dissertation was also an adventure in moving across disciplinary lines. The papers constitute a journey from development studies and business literature on the governance of public-private relations within mixed firms, to planning and geography scholarship on the relationship between global financial capital and urban development, to political economy work on business power and the politics of market reforms. Undertaking this journey felt like traveling through and engaging with a variety of cultures and languages. It both broadened my intellectual lenses and strengthened my belief in the need for more cross-disciplinary research that bridges often siloed but surprisingly overlapping conversations. This work is, I hope, a step in this direction.

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Chapter 2

The Limits of Insulation: The Long-Term Political Dynamics of Public-Private Service Delivery[24]

1. Introduction

Public-private collaboration lies at the core of much of the current policy advice on how governments in the South can more effectively and sustainably provide infrastructure services to their citizens.[25] Granted, private participation is no longer touted as a panacea—the 1990s yielded important lessons about its equity and accountability challenges (Jomo et al., 2016). Nonetheless, leveraging resources and expertise from the private sector via public-private partnerships (PPPs), for example, remains considered critical for overcoming capital shortfalls, enhancing operations, and meeting the Sustainable Development Goals (SDGs) (Mohieldin, 2018; Garcia-Kilroy and Rudolph, 2017). Attracting long-term financial capital, specifically, is a seductive option for cash-strapped governments seeking to address infrastructure gaps by tapping into a large 'pool of global savings' (Arezki et al., 2016)—potentially contributing to what Mawdsley (2018) has called 'financialization-as-development.'[26]

Unsurprisingly, a number of donor-led programs have emerged focused on 'best-practices' for how governments can create an attractive environment for investors (Bayliss and Van Waeyenberge, 2018). Often, this advice reflects the New Institutional Economics' development playbook, emphasizing well-designed contractual arrangements, governance rules, independent regulation, and judicial support for property rights (Trebilcock and Rosenstock, 2015; Guasch et al., 2014; Farquharson et al., 2011). The main concern is with structuring rules and incentives so as to reduce transaction costs and risks for investors related to the breach of contractual commitments, particularly due to 'governmental opportunism' (Savedoff and Spiller, 1999). Insulating service delivery arrangements from political interference is, in fact, a crucial concern.

This article is motivated by two important shortcomings of this dominant policy lens. The first concerns the lack of attention to the temporal and relational character of public-private arrangements. Despite the long life-cycle of these collaborations (usually between 20–30 years), little attention has been dedicated to examining how relations between state and private actors actually unfold over time—and, by extension, how they affect service delivery. The normative expectation is that

[24] This paper has been published in *International Development Planning Review* and is available at: https://doi.org/10.3828/idpr.2021.12.

[25] I define public-private collaboration as an ensemble of partnership models—including concessions, lease or affermage contracts, build-operate-transfer (BOT) agreements, and mixed-ownership—in which state and private actors work together towards goals such as the provision of infrastructure services.

[26] Financialization, here, broadly refers to the increasing imbrication of 'financial logics, instruments, and actors' into international development projects (Mawdsley, 2018).

institutional incentives such as contracts will govern these relationships and balance the goals of both parties. In practice, however, institutional design has proven to be a difficult—if not elusive—art to master (Sclar, 2015; Miraftab, 2004). Rampant problems with contractual incompleteness, asymmetric resources between partners, trust-building, and regulatory weakness have called attention to the limitations of thinking of public-private collaboration simply in terms of rules (Warsen et al., 2019; Post, 2014). Rather than treat public-private partnership models as static institutional arrangements, I propose we treat them as relations between non-fixed actors, examining the socio-political and organizational factors that may impact how state and private actors relate to each other and influence service provision over time.

The second limitation concerns the tendency to treat private participation generically, without greater scrutiny of how different forms of private participation shape the market pressures service providers face. Critical studies of the global geography of private infrastructure investment have pushed this boundary by unpacking capital flows and financial arrangements (Siemiatycki, 2013; Torrance, 2008) that 'splinter' infrastructures (Graham and Marvin, 2001). Political economy scholars have also shown that variation in investors' portfolio strategies may influence contractual and regulatory outcomes (Post and Murillo, 2016). Yet, I argue we also need to understand the concrete organisational dynamics—including ownership and corporate governance structures—through which private investors and financial interests may influence decision-making and affect service provision (Klink et al., 2019; Allen and Pryke, 2013).

This article develops these lines of inquiry through a comparative historical analysis of mixed-ownership utilities, that is, utilities in which assets are jointly owned by state and private actors. I compare the trajectories of two of the largest water and sanitation utilities in Brazil, Copasa (*Companhia de Saneamento de Minas Gerais*) and Sanepar (*Companhia de Saneamento do Paraná*), over nearly twenty years (1998–2016) to examine how relations between the state and private investors unfolded following the transition to mixed models and how these, in turn, shaped utility decision-making and service outcomes. Sanepar transitioned to mixed-ownership in 1998, when the privately-held company Dominó Holding became its main minority shareholder—a model I refer to as concentrated private participation.[27] In contrast, Copasa adopted a dispersed model, listing shares on the Brazilian stock market in 2006. State governments remained the controlling shareholders in both companies. The variation in form of private participation allows for unflattening generic treatments of private engagement in service delivery, while the temporal sensibility reveals how public-private relations are (re-)constituted historically through political processes that infuse into the state different planning rationalities, that is, value systems and policy commitments.

Defying the prescriptions of dominant institutional frameworks, the cases demonstrate that contractual agreements and governance rules were neither able to fully disrupt historical service delivery practices nor capable of insulating service provision from politics. Rather, I argue that observed temporal variation in public-private relations and the direction of service delivery in each case reflected intersecting organizational and political dynamics. I find that the type of private

[27] I constrain the comparison to 1998—2016 because in late 2016 Sanepar went public and moved to a model closer to Copasa's, with dispersed private participation.

participation in *ownership structure* shaped the nature of relations between partners and the opportunity space for investors to influence company activities. However, whether service provision became more or less market-oriented depended crucially on the political approaches to service provision adopted by different state government administrations over time and translated into the day-to-day activities of utilities through the work of political appointees and allied managers—what I call *political modulation*.

The article is organized as follows. In the next section, I engage critically with economic frameworks that have been influential for thinking about how public and private actors behave in collaborative arrangements such as mixed-ownership companies and situate how my own approach departs from conventional analytical schemes. The third section explains the case selection and research methods, while the fourth and fifth sections develop, respectively, the empirical analysis of ownership structure and political modulation in both cases. Finally, I consider the implications of the study for international planning debates on forms of public-private collaboration for the provision of infrastructure services in the global South. Specifically, I discuss the importance of recovering the analysis of organizations as spaces in which the politics of service delivery takes place and problematize depoliticizing policy solutions and institutional reforms that attempt to 'improve' the effectiveness of public-private collaborations by attempting to remove politics from the equation.

2. 'Best of two worlds' or 'two-headed monsters'?

To examine the temporal dynamics of public-private relations, I deploy an interdisciplinary lens that bridges economic theories of business ownership and governance with debates about the politics of service delivery and the role of the state in development. From an economic standpoint, mixed-ownership models have mainly been examined through the lens of agency theory. From this perspective, corporate governance—or the rules and structures that organize firm activity—is about aligning the behaviour of firm actors to reduce transaction costs and maximise returns for owners (Jensen and Meckling, 1976). In the case of mixed companies, the concern is with economically inefficient outcomes derived from so-called 'principal-principal' problems, that is, from potentially divergent interests between the state and private shareholders (Musacchio and Lazzarini, 2014; Vining et al., 2014; Young et al., 2008).

Agency theory suggests relations between public and private partners in mixed-ownership companies will lean towards one of two main scenarios. In a 'best of two worlds' scenario, public and private actors discipline one another: the private sector reins in unwarranted government intervention that hurts economic efficiency; the state restrains the private sector's thirst for profits and directs its ability to generate capital to socially desirable goals (Castro and Janssens, 2008). In contrast, a less hopeful scenario suggests that state and private actors have disparate goals that cannot be easily reconciled (Vining and Weimar, 2016). Rather, mixed models are more likely to become 'two-headed monsters,' with state and private investors disagreeing over service objectives. In the water sector, such tensions may emerge when utilities undertake investments that fall outside their business strategy or price services below cost to support extraneous policy or electoral goals (Boada, 2011). A third scenario is also possible: Vining et al. (2014) call attention to a 'profit collusion' model, wherein the state acts in a self-interested manner and supports profit-maximisation in order to increase political benefits or rent extraction.

However, as I will discuss, none of these scenarios fully capture the changing dynamics of public-private relations at Sanepar and Copasa over time. This is because agency theory suffers from important limitations for understanding complex, on-the-ground political dynamics (White, 2020). First, this framework treats the private sector and the state generically, as undifferentiated and coherent actors whose preferences can be deduced *a priori*, without greater scrutiny of the changing organisational, political, and historical contexts in which these actors operate and interact. Corporate governance is thus often reduced to 'a structured and sanitised exchange' among principals or between principals and managers (Soederberg, 2010: 4), tending to neglect how power asymmetries and political processes affect decision-making and firm performance (Zingales, 2017). Importantly, ownership and governance structures shape power dynamics. Shareholders may not only have different objectives, but also differ 'in how likely it is that they can realise their objectives' (Kang and Sørensen, 1999: 135). Power imbalances may be especially salient when concentrated ownership is coupled with governance arrangements that grant certain shareholders strategic positions within management or other decision-making bodies within companies.

Second, the agency view depoliticizes the analysis of service delivery outcomes by privileging concerns with efficiency and neglecting the social and environmental ramifications of ownership and governance. In the water sector, critical studies have shown that private participation may generate perverse incentives for utilities to prioritise profits over equitable service delivery and sustainable management of water resources (Bakker, 2010, 2000; Hall et al., 2005; Swyngedouw, 2005). In particular, private engagement may generate pressures for utilities to augment tariffs and discontinue service to non-payers, adversely impacting low-income citizens for whom affordability is a central concern.

My analysis aims to depart from generic readings of public-private collaboration within mixed models by calling attention to intersecting market and political logics. First, I examine variation in the structure of private minority ownership—that is, whether it is dispersed or concentrated. Most analyses of mixed enterprises focus on assessing their performance relative to fully public or private firms, thus failing to account for differences in ownership structure that exist among mixed companies themselves. Here, I build on insights from scholarship suggesting that the extent to which ownership is fragmented has important repercussions for corporate governance and firm performance (Young et al., 2008; Kang and Sørensen, 1999; Shleifer and Vishny, 1997) as well as durability of partnerships (Colli, 2013). Specifically, I suggest ownership concentration impacts the degree to which investors can exert decision-making influence over companies as well as the potential for tension between shareholders.

Second, I take issue with how the state is often conceptualised as a coherent actor that either operates according to pre-established goals—a common depiction in economic frameworks—or has been co-opted under the perverse logic of the market—a recurrent portrayal in critiques of water privatization. Instead, I explore the mediating role of politics in shaping how the state relates to private investors and approaches service provision at different points in time. By politics, I do not mean simply electoral behaviour or partisan ideology. The fragmentary and personalistic nature of Brazil's political system often makes it difficult to draw clear distinctions between the ideological programmes of different parties. Moreover, as Abers and Keck (2006: 604) have noted, Brazilian politics—like elsewhere in the global South—is perhaps better understood as a 'hybrid' culture in which 'formalism coexists with informality, and patronage-based standards of authority with meritocratic ones.' This hybridity is particularly relevant at the level of bureaucratic politics and makes salient the role of political appointees in shaping policy-making (Abers and Keck, 2006).

Politically, then, I am interested in the planning rationalities guiding state action and the processes through which these rationalities are translated into the day-to-day activities of utilities. I argue this occurs through a two-stage process of political modulation. First, newly elected governments may pursue distinct political approaches to service provision. I broadly distinguish between two approaches: a market-oriented one that encourages efficiency and financial gains, and a society-oriented one that is more attentive to social equity concerns. Second, rather than assume these approaches automatically shape service delivery outcomes, I draw attention to the translation role performed by bureaucratic political appointees. I highlight how the state is not a monolithic entity, but rather acts through 'specific sets of politicians and state officials' (Jessop, 2016: 247) as well as company allies (such as appointed managers) who infuse into state agencies and organizations different planning rationalities. While in some instances these conform to techno-managerial, market rationalities (Watson 2009), in others they reflect commitments to forms of redistributive politics.

3. Design and methods

Brazil offers a fertile empirical terrain for this analysis. Although water and sanitation services are mostly publicly-owned, closer inspection blurs the boundaries between public and private. Since the 1970s, state-owned companies have dominated service provision, currently providing water services to nearly 75% of Brazil's urban population (AESBE, 2020). Legally, however, most of these enterprises have adopted mixed-ownership models in which state and private investors may share ownership of assets. This article builds on a comparative historical analysis of two of the largest mixed water and sanitation companies in Brazil: Sanepar and Copasa—located in the states of Paraná and Minas Gerais, respectively.

Following a 'diverse' case study strategy (Seawright and Gerring, 2008), the two companies were selected to explore both variation in forms of private participation across companies and political changes across time.[28] Table 2.1 summarises relevant information for each company along these two dimensions. Both companies were relatively similar in size and total population served.[29] They also

[28] In 2016, when the study was designed, 30 water and sanitation utilities were legally classified as mixed-ownership companies in the National Information System on Sanitation (SNIS)—23 of which were state-owned companies that provided services to several municipalities. Despite their legal form, not all companies featured substantive private participation in their ownership structure. My selection focused on companies in which private investors owned a non-trivial percentage of shares.

[29] Copasa and Sanepar provided water to 11.2 million and 9.6 million people, and sewerage services to 7.5 million and 6.8 million people, respectively (Ministério das Cidades, 2015).

ranked highly among Brazilian water utilities in terms of operational performance (Albuquerque, 2011). It is worth noting that, throughout the period analysed, regulation was either lacking or patchy. In Minas Gerais, the state government created a regulatory agency, ARSAE (*Agência Reguladora de Serviços de Abastecimento de Água e de Esgotamento Sanitário do Estado de Minas Gerais*), in 2009, two years after the enactment of the national Sanitation Law (Law nº 11.445/2007), which required the creation of regulatory agencies to monitor operations and regulate prices. Nonetheless, as I will discuss, for several years Copasa sought to keep ARSAE at bay, limiting the regulator's ability to oversee its activities. In Paraná, the regulatory agency, Agepar (*Agência Reguladora de Serviços Públicos Delegados de Infraestrutura do Paraná*), was only created in 2017.

Table 2.1. Case summaries

	Ownership change	**Type of private participation**	**Political Transitions**		
			Mandate period	*State governor (Party)*	*Approach to service provision*
Sanepar (Paraná)	1998	Concentrated minority ownership (until 2016)	1995-2002	Jaime Lerner (PDT / PFL)	Market-oriented
			2003–2010	Roberto Requião (PMDB)	Society-oriented
			2011–2018	Beto Richa (PSDB)	Market-oriented
Copasa (Minas Gerais)	2006	Dispersed minority ownership	2003–2010	Aécio Neves (PSDB)	Market-oriented
			2011–2014	Antônio Anastasia (PSDB)	Market-oriented
			2015–2019	Fernando Pimentel (PT)	Society-oriented

Prepared by the author.

My argument relies on qualitative data gathered through in-depth interviews and documentary analysis of company reports and financial statements, transcripts of investor calls, assessments by financial analysts, and news articles. I conducted fieldwork in Paraná and Minas Gerais in January 2017. Throughout the research, I spoke to 16 interviewees, including company employees and managers, union members, and officials in government and regulatory agencies. Respondents were selected through a combination of purposive and snowball sampling. Because I sought out interviewees who could comment on company history, most respondents held senior or mid-level positions within their organisations and / or had several years of experience working for the companies, the public sector, or in the water and sanitation sector broadly. I am a native of Brazil and have studied water issues in the country for several years. My cultural background, existing networks, and my position as a PhD student at a well-renowned foreign university likely facilitated access and trust-building with interviewees. Due to confidentiality, I use the codes S1–S9 to refer to the nine interviews related to Sanepar's case and the codes C1–C7 for the seven interviews related to Copasa's. With the exception of interviews S8 and S9, held in July–August 2019, all others were conducted in person or via phone between January–February 2017.[30] I complement the qualitative analysis with company data on service coverage, operational efficiency, investments, and financial performance retrieved from annual company reports and from the National Information System on Sanitation

[30] Interviews lasted between 30–140 minutes (median time of 90 minutes) and were transcribed and analysed through a combination of deductive and inductive coding.

(SNIS), a database maintained by the Brazilian government (Appendix C summarise this data for each company).

4. Concentrated vs. dispersed private participation

Sanepar's transition to mixed-ownership is an archetypical 1990s story. Internationally, multilateral organisations like the World Bank extolled the merits of private participation (Idelovitch and Ringskog, 1995). Domestically, the Brazilian government advanced a broad privatisation agenda. Utilities also faced financial constraints that rendered private participation attractive. In the 1980s–1990s, resources for infrastructure investments dwindled due to Brazil's economic and fiscal crisis, hampering utilities' ability to expand coverage and improve operations. Against this backdrop, in 1998 the administration of governor Jaime Lerner (1995–2002) in Paraná decided to place 39.71% of Sanepar's common stock for sale through a public auction (Murara, 1998). The privately-held firm Dominó Holding won with the highest bid. Its main shareholders were a combination of foreign and domestic investors: the French multinational Vivendi (now Veolia), the Brazilian construction company Andrade Gutierrez S.A, and Opportunity Daleth S.A. (a holding company owned by the private equity fund CVC/Opportunity).[31]

The new ownership structure led to a model of corporate governance in which private investors had significant influence over company decision-making. The shareholder agreement between Dominó and the state government afforded Dominó the right to appoint three of the nine members of the Administrative Board—the decision-making body tasked with determining business strategy and investment plans, electing managers, and deciding on shareholder dividends. The other six members were appointed by the government, but were required to vote as a bloc. In practice, this meant the minority partner had *de facto* veto power within the Board (Castro, 2003). Dominó also had the right to nominate three of the company's seven managers, including the financial and operations managers. This governance structure, several documents and interviewees noted, empowered minority private investors, allowing them to hold strategic positions within the company and to maintain a close rein on its strategy and operations (Interviews S2, S3, S5, S6, S7, S8). As one senior manager observed, Dominó was literally there, working with them, on a 'daily basis' (Interview S3).

The scenario was different at Copasa, where semi-privatisation resulted in more passive investor engagement in company decision-making and management. Copasa opted to semi-privatise by selling 30.56% of shares on São Paulo's stock exchange, Bovespa,[32] through an initial public offering (IPO) held in February 2006. By that point, the political-economic context in Brazil had shifted. The administration of President Lula da Silva (2003–2010) began to channel resources into infrastructure investments, breathing new life into the water and sanitation sector. Nonetheless, the administration of governor Aécio Neves (2003–2010) in Minas Gerais shared with Lerner's in Paraná a belief in market discipline and in the potential for private participation to improve service provision.

[31] Dominó Holding's ownership structure at the time was as follows: Vivendi (30%), Andrade Gutierrez (27.5%), Opportunity (27.5%), and Copel (15%)—Paraná's state-owned energy company.
[32] Renamed B3 in 2017.

As soon as Neves took office, Copasa's new administration began to prepare for an IPO (Oliveira, 2015). A majority (73.7%) of the shares issued on Bovespa were purchased by foreign investors, while the rest were acquired by domestic investment funds, financial institutions, and individual investors (Copasa, 2006).

The new ownership structure entailed governance changes in line with neo-institutional prescriptions. Following the IPO, Copasa chose to comply with the 'Novo Mercado' listing agreement—Bovespa's highest level of corporate governance. In addition to transparency and financial disclosure requirements, the agreement establishes a two-year term limit for Board members—20% of which must be independent (Musacchio and Lazzarini, 2014). The rules aim to increase companies' financial independence and reduce political interference. Indeed, Copasa's management at the time argued the new structure would minimise the influence of political appointments—a problem considered pervasive among state-owned companies (Andrés et al., 2011). According to one long-time employee, the aim was 'to use private capital as a regulator of [company] management' (Interview C5). However, this scenario did not materialise. As the same employee observed: 'In spite of the oversight of minority shareholders, of private capital, the administration did whatever it wanted to do.'

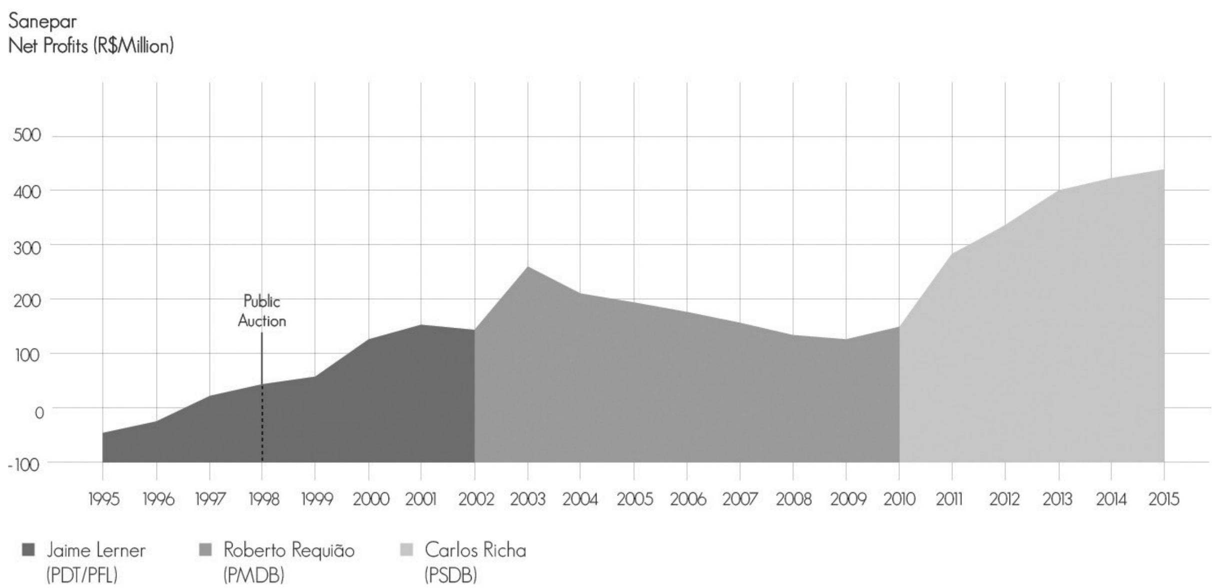
The dispersed nature of private minority ownership at Copasa helps account for why private investors in the company did not have the same level of influence over decision-making and management that Dominó enjoyed at Sanepar. Copasa's dispersed private investors mainly exerted indirect pressure over the company through market signals such as share prices on the stock market. In fact, based on quarterly earnings conference calls, intermediaries such as financial analysts and investment banks were the most important interlocutors and sources of market pressure on the company. In light of the relatively passive and distant participation of dispersed private investors, the Minas Gerais' state government continued to call the shots within the company through Board appointments and allied managers—just as it had done prior to the IPO. In fact, whereas private participation occupied a central role in interviewees' retellings of Sanepar's history, in Copasa's case respondents generally shrugged off the effects of semi-privatisation on company practices (Interviews C3, C5, C6, C7). A senior government official in Minas Gerais, for example, noted: 'Look, it would be unfair for me to say, given what I observed, that Copasa underwent a big change or that the company's rationale (*raciocínio da companhia*) totally changed after it opened itself to private capital. It didn't' (Interview C3). As some of my respondents observed, in many instances the 'interests' of private investors were evoked only when convenient for the company to justify what were otherwise political decisions—an issue I explore further below (Interviews C3, C4, C5).

5. Political modulation

Distinct forms of private engagement—close and active in Sanepar's case, distant and passive in Copasa's—reveal how ownership structure and corporate governance shape the opportunity space for private investors to influence how utilities behave. While concentrated private participation amplified this space in Sanepar's case, dispersed participation contracted it in Copasa's. However, the extent to which private participation influenced the direction of service delivery requires understanding how political processes shaped state action and relations to investors over time.

Under the watchful eye of its new private partner, Sanepar pursued sweeping operational changes. Following the ownership change in 1998, a new 'results-oriented' approach (*política de gestão por resultados*), championed by the minority partner, was introduced with the goal of pushing managers to meet performance targets and decrease capital expenditures and operational costs (Sanepar, 2001). The approach produced quick financial results. Sanepar's operational revenues grew from R$318 million in 1995 to R$925 million in 2002, four years after the ownership transition (Sanepar, 2002). Net profits also increased from approximately R$22 million in 1997 to R$145 million in 2002 (Figure 2.1). Annual tariff increases indexed to inflation and measures to increase efficiency contributed to these results. The number of employees per thousand connections dropped from 3.13 in 1999, the first year after semi-privatisation, to 2.33 in 2002. Billing losses decreased from 28.17% to 25.34% in the same period (Appendix C).

Figure 2.1. Sanepar's net profits (1995-2015)



Prepared by the author. Source: Annual company reports.

Whether these changes constituted positive improvements, however, was disputable in the eyes of company employees—illustrating the co-existence of different value systems within utilities. Some interviewees lauded the operational gains and reminisced about the early years of concentrated private participation with satisfaction, with one manager referring to them as 'the good old days' (Interview S3). However, others bemoaned its detrimental effects on what they considered to be Sanepar's social mission. Long-time, front-line company workers observed that during this period (1999–2002) the company focused on contracts with potentially lucrative municipalities and placed less emphasis on expanding coverage to poorer urban and rural areas where provision was costlier and generated fewer returns (Interviews S5, S6, S7). Indeed, overall investment in water supply and sewerage collection did not increase substantially in the first few years after semi-privatisation and improvements in access to services were small (Appendix C). Even the most nostalgic manager recognised that the emphasis on attaining performance metrics produced both 'good and bad memories:' 'Some extreme things ended up happening, such as turning lights off, turning equipment off to save energy… So, we had to stop and think: 'what's inefficiency and what isn't?' There were places receiving no service because the equipment was turned off' (Interview S3).

This ambivalent account of Sanepar's initial years post semi-privatisation matches, to a large extent, the mixed outcomes of water privatisation experiments elsewhere in the world, marked by a divide between efficiency and equity issues.[33] Despite the concerns of some rank and file employees, concentrated participation enabled Dominó to exercise influence over management and play an undeniable role in fostering an 'efficiency-at-all-costs' ethos within the company (Interviews S3, S5, S6, S7, S8).

Nonetheless, it would be simplistic to attribute service outcomes during this time to inherent biases from private participation alone. Rather, Sanepar's practices reflected the service dynamics resulting from the combination of concentrated minority ownership and the government's approach to service provision during Lerner's administration. Lerner advanced a market-friendly political program, oriented towards attracting private investment and shrinking the role of the state. Within Sanepar, a circumscribed role for the state meant an expanded role for private investors in shaping the direction of service delivery. The state sought to maintain a relationship of synergy with its private partner (Interviews S2, S3, S8), while government appointees did little to balance Dominó's influence over management or restrain the company's growing focus on economic performance. In fact, company reports show the government stimulated Sanepar's profitability (Sanepar, 2002).

This relationship shifted dramatically following a change in political administration in 2003, when Roberto Requião replaced Lerner as governor. During Requião's administration (2003–2010), synergy gave way to conflict, configuring a clear 'two-headed monster' scenario. Requião favoured a statist and society-centred approach to service provision, opposing his predecessor's privatisation agenda. Government appointees within the company reflected the change in policy orientation. The President of Sanepar's Administrative Board, Pedro Xavier wrote in a 2005 statement that 'for this government, a [company] committed to making every effort to maximise profits and assure the greatest possible return to shareholders (…) simply has no reason to continue existing' (Xavier, 2004). The new administration moved to curb Dominó's influence within Sanepar. The government changed company management, maintaining only one manager previously appointed by Vivendi, one of Dominó's main shareholders (Portal Saneamento Básico, 2003). It also sanctioned a decree attempting to rescind the shareholder agreement with Dominó, arguing the agreement conceded Sanepar's management to the minority partner, thus violating, in practice, the state law requiring the government to have control over the company (Xavier, 2004). Following a judicial battle, in 2004 Dominó managed to reverse the decree, maintaining the original agreement in place. Nonetheless, the legal disputes

[33] For reviews, see Bakker (2010); Budds and McGranahan (2003).

continued in subsequent years, as the state government sought to reduce Dominó's participation in the company.

Unlike the *laissez-faire* approach of Lerner's administration, Requião's team sought to play a more active role in steering company practices towards the achievement of social goals. Sanepar launched a social tariff aimed at increasing affordability for low-income customers and implemented a sanitation program designed to expand service coverage to 25 thousand households in rural Paraná (Sanepar, 2003). These efforts also catered to the governor's constituents, primarily located in rural and lower- to middle-income regions of the state. Total investments in water and sewerage in the first four years of Requião's administration increased relative to Lerner's (Appendix C), albeit investment figures also reflected greater ease of access to federal credit during President Lula's government.

Concomitantly, Sanepar's financial performance took a hit. Profits declined during Requião's two consecutive terms. One reason was the lack of tariff adjustments indexed to inflation. Between 2006 and 2010, the governor refused[34] to adjust tariffs, arguing the company could pursue investments and remain financially sustainable without transferring costs to customers—for example, by reducing operational costs (Castro, 2008). The tariff freeze did not bode well with market analysts. The credit rating agency Moody's changed Sanepar's outlook to negative, citing concerns about 'the company's ability to generate adequate cash flows' given the lack of tariff adjustments (Soares and Hess, 2009). Tariffs are a key driver of shareholder value (Interview S2).

But the market outlook changed in the aftermath of the 2010 state elections. The newly elected governor, Beto Richa, reintroduced a pro-market orientation and worked swiftly to re-negotiate the shareholder agreement and restore friendly ties with Dominó (Sanepar, 2015). The minority shareholders regained influence within Sanepar's Administrative Board as well as authority over operational and financial management (Interviews S2, S3, S5, S6, S7, S8). Sanepar's business strategy was also revamped with an eye toward growing the company and increasing liquidity in preparation for a potential IPO, which occurred in late 2016. In just one year (2010–2011), net profits augmented from R$149 to R$284 million—an increase of approximately 91%.[35]

While the change in administration marked a return to *laissez-faire*, politics was far from removed from the equation. Interviews with managers and government officials in Paraná illuminated the markedly different value systems of company allies and state agents during Richa's administration compared to Requião's, illustrating the modulating role of political dynamics in shaping how these actors construed company goals—and, at the same time, (re-)inscribed public-private boundaries. One senior government official, for example, criticised Sanepar's previous administration for its 'ideological bias' and 'socialist behaviour,' arguing that Sanepar was 'a market firm and should behave as such' (Interview S1). Top managers at Sanepar echoed this viewpoint. While one praised Richa's administration for placing the company's financial sustainability above 'populist impulses' (Interview S2), another sought to construe the emphasis on efficiency as central to the company's social mission: 'You have to be economically efficient so that efficiency will become the interface (*ponto de contato*)

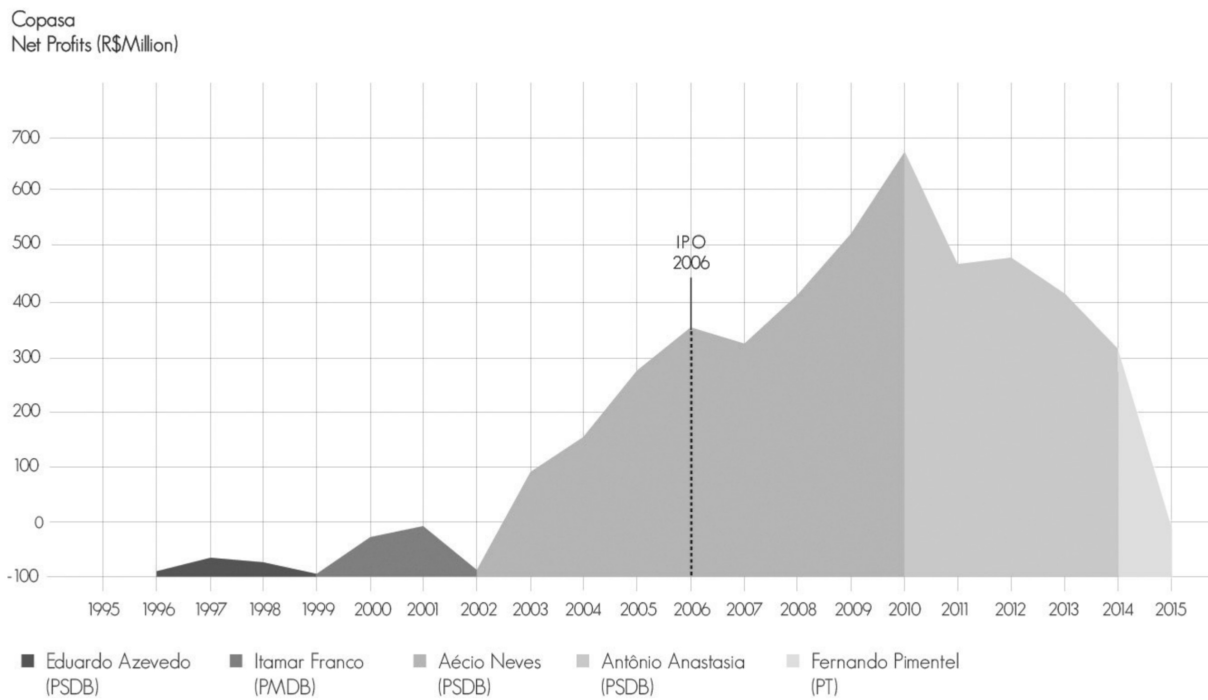
[34] In the absence of a regulatory agency, the governor had the last word on tariffs.

[35] These results reflected cost-reduction measures such as voluntary layoffs, a reprisal of the performance-oriented management policy, and a 16% increase in tariffs granted by the governor in March 2011.

between the public and private sides. (…) When something is public, it has a greater obligation to be efficient because the money is not my own, it belongs to the whole collectivity (*coletividade*)' (Interview S3).

The role of state agents in shaping service delivery rationales was even more pronounced in Copasa's case, where dispersed minority ownership limited the role of private investors. As previously noted, Copasa's model enabled the state government to retain—through political appointees—the level of influence over the company it had enjoyed prior to semi-privatisation. For the majority of the period analysed, company practices followed a 'business as usual'—or, perhaps more adequately, 'politics as usual'—tone. For example, reflecting on the role of the state within the company, one senior official at ARSAE, the state's regulatory agency, highlighted how political motives continued to shape investment decisions following the IPO: "Oh, the governor wants to build a wastewater treatment plant in a small town of 2,000 inhabitants,' that isn't a priority but then the priority changes to meet a demand from the governor. (…) A lot of money was thrown away in projects that ended up not becoming reality' (Interview C7).

Figure 2.2. Copasa's net profits (1995-2015)



Prepared by the author. Source: Annual company reports; Ministério das Cidades (2015).

In fact, the most significant changes to company management and practices appeared to occur in the years leading up to semi-privatisation, when Copasa was being 'prepared for the market' (Interview C6). In 2003, governor Aécio Neves appointed Mauro Costa—described by one interviewee as 'a right-wing guy, very tough, but someone who makes things happen' (Interview C5)—

to serve as Copasa's new president. Costa implemented a series of rebranding and efficiency-enhancing measures designed to revamp the company: 'he came in and he really began to apply the make-up (*modelagem*) of a firm to Copasa. He got the company to focus on training, on technological development. He placed greater responsibility on the management team and more effectively demanded results' (Interview C6). Service-wise, Costa and his management team sought to expand Copasa's customer base by investing in new water and sewerage connections and fostering relationships with municipal mayors. They also expanded its funding sources through the issuance of R$600 million in debentures. Perhaps most noticeably, the company enacted two consecutive tariff increases in one year—at 29.8% and 35%, both were well above inflation at the time. Taken together, these changes helped boost the company's financial performance. After eleven years of continuous deficits, Copasa ran a profit of R$94.1 million (Figure 2.2) in the first year of Neves' government (Copasa, 2003). The make-up effort is exemplary of how administrative and organisational reforms can arguably play just as fundamental a role in infusing market rationalities into public utilities (Davis, 2004) as private participation itself.

Operational and financial gains following the IPO built on these earlier efforts (Appendix C). While investments in water supply and sewerage collection increased following the change to mixed-ownership, service coverage growth rates did not change substantially, remaining steady over time. Copasa also benefitted from greater ease of access to credit at the federal level and from other sources of finance, making it difficult to disentangle how much funds obtained through the sale of shares to private investors contributed to capital investments (Oliveira, 2015). Several interviewees suggested that resources from the IPO were actually spent unwisely and contributed little towards coverage expansion (Interviews C2, C3, C4, C5, C7). Interestingly, in 2007 Copasa created a subsidiary, Copanor (*Copasa Serviços de Saneamento Integrado do Norte e Nordeste de Minas Gerais S/A.*), focused on providing services in low-income areas in the north and northeast of the state. But according to interviewees the overarching aim was to prevent operations in these areas from weighing on Copasa's balance sheet (Interview C6).

Copasa's case complexifies the analysis of how public-private relations unfold over time. Unlike at Sanepar, where the ownership structure configured possibilities for synergistic or conflictual relations between the state and minority private investors, at Copasa public-private relations were more one-sided—almost a marriage of convenience. Despite the government's market-orientation, throughout Neves' tenure and during the subsequent administration of Antônio Anastasia (2011–2014), the interests of private investors were mobilised erratically and often in accordance with political strategies. An example shared by one company employee illustrates this process:

> Whatever didn't align with the administration's interests, they would say: 'No, we can't do it because of our minority shareholders, we can't justify it to them.' [For example], a tiny city called Fruta de Leite had a hepatitis outbreak because of the city's water supply and the mayor came to Belo Horizonte to ask Copasa to take on the water system there. [Copasa] said 'no' because it was inviable: 'I can't, it's a publicly-traded company, your city isn't lucrative and it'll hurt us [financially].' This kind of stuff. I mean, it isn't in the archives but you have witnesses. (Interview C5)

Copasa's 'business as usual' trajectory was disrupted in 2015, following the election of governor Fernando Pimentel (2015–2019) of the Worker's Party (PT). His victory marked the first time in over twenty years that a left-wing administration took control of the state government in Minas Gerais. The political transition reshaped Copasa's governance structure. Pimentel appointed a number of Board members and company managers who generally favoured a strong role for government in the provision of public services and the promotion of social development (Interviews C2, C3, C4, C5, C7).

One of the main effects of the change in administration concerned Copasa's relationship to its regulator, ARSAE, and to other state agencies. During my fieldwork in Minas Gerais in 2017, Copasa was working with ARSAE to develop a new tariff structure. But while in the past interactions between the company and the regulatory agency were marked by distrust—with Copasa at times attempting to hide information—during Pimentel's tenure the company sought to collaborate more with the agency. 'We now have this dialogue, this proximity with Copasa's management in a very transparent way,' observed a senior official at ARSAE. 'We won't open our legs to Copasa, so to speak, but we try to understand their difficulties and needs' (Interview C7). The company also began to work more closely with the State Secretariat of Urban and Regional Development (SEDRU) to develop a state-wide sanitation plan and to prioritise investments in vulnerable regions in the north and northeast of the state (Interviews C2, C3, C4). In part, this entailed adopting a new approach to Copasa's subsidiary, Copanor, which had struggled financially since its inception. The state government gave up a portion of its profit share to support Copanor's restructuring and eventual re-integration into Copasa (Interview C6).

The change in company orientation was not accompanied by a hostile stance towards private participation. Unlike the administration of Sanepar during Requião's tenure, Copasa's new management under Pimentel sought to develop a more balanced relationship with private investors. Transcripts of earnings conference calls, for example, indicate that managers were committed to ensuring Copasa's financial sustainability and creating shareholder value (Copasa 2015, 2016). The administration also took steps to restore the company's financial health, which had declined during the administration of governor Anastasia due to growing debt and to a water supply crisis precipitated by a drought between 2013–2014. Steps included reducing the number of high-level, high-paying positions, implementing a voluntary dismissal program, and renegotiating debts. According to one employee, the Administrative Board also adopted a more active role in guiding company activities—as opposed to simply offering its tacit support for directives already agreed to with the governor (Interview C5). The changes were viewed positively by financial analysts—the main intermediaries between the company and dispersed investors—and increased Copasa's market credibility (Interview C1). Within a year company shares appreciated 150% in 2016, whereas Bovespa appreciated less than 40% in the same period.

These politically-driven changes to governance and company strategy signalled an attempt to balance social and financial goals, attending to both the interests of market investors and the government's own society-oriented approach to service provision. That corporate governance and regulatory improvements were happening under the administration of a left-wing government is not necessarily surprising. Cioffi and Höpner (2006: 463) find that rather than favour 'markets over politics,' centre-left parties in advanced economies used corporate governance reforms to undermine political economic elites and to establish alliances with the financial sector. In Brazil, however, changes within Copasa cannot be reduced to partisan politics alone, since the Worker's Party (PT) was not programmatically consistent in the last two decades. Much like in Sanepar's case, the aligned values of appointed allies within the company were a crucial dimension of political modulation. Take, for instance, a story shared by a senior advisor at Copasa about the challenges the new management team faced after arriving at the company in 2015:

> We were complete outsiders, people like me, the [current president], the financial manager (…). We were not from Copasa, nor from the [sanitation] sector, nor from the political parties that had been in charge all of this time. Although we aren't affiliated with the PT, we arrived and everybody here hated the PT. 'If Pimentel wins, I die', some said. You know, we heard this at the time. So, we arrived and there was an enormous information boycott—I don't even know if it's still going on. So, we asked some people who in the company was more ideologically aligned with us so that we could place them in key positions. (Interview C4)

This account illustrates the organisational tensions emerging from the encounter of old and new planning rationalities, as well as the importance of having allies within the company to support the implementation of different service delivery agendas. Both at Sanepar and at Copasa, the company floor was an important political space of struggle over the direction of service delivery.

6. Conclusion

This article illuminates the role of organizational and political factors in shaping the long-term relational dynamics of public-private arrangements for service delivery. First, my analysis of Sanepar and Copasa reveals that different types of private participation may either expand or constrain the space for investors to influence organizational decision-making and service delivery strategies. Concentrated ownership in Sanepar's case enabled closer and more active investor participation in company decision-making, while dispersed ownership in Copasa's case precluded this. In fact, Copasa's case illustrates how private participation may serve to mask other political processes driving company decision-making.

This analysis underscores the need to move beyond commonplace analyses that simply pit private against public provision and to interrogate the conditions under which private interests influence the governance of service delivery across different financial arrangements. Bringing greater empirical nuance to the study of private participation is particularly pressing as the turn to finance becomes a more important feature of development advice and practice (Mawdsley, 2018). O'Brien and Pike (2017) argue that the financialization of urban infrastructure is not a 'monolithic juggernaut rolling-out in the same way everywhere' but a differentiated and uneven process. However, we still lack a deeper understanding of the mechanisms through which such differentiation occurs in practice, particularly outside of traditional investment geographies in advanced economies. This study points to the analysis of ownership concentration and corporate governance as one pathway for disentangling modalities of financial investment and their effects on service delivery.

Second, contra the assumption that profit maximization will override other service objectives, I find that states retain an important role in shaping the direction of service delivery through what I call political modulation. In the cases of Sanepar and Copasa, I argue that modulation occurred through transitions in government that shifted political approaches to service delivery, which were then translated into the activities of utilities and state agencies through the work of politically appointed managers and bureaucratic officials. In some instances, these approaches were aligned with market rationales, strengthening the interests of private investors and contributing to extreme scenarios such as, in one example from Sanepar, turning off equipment to meet efficiency targets. In others, new administrations pushed companies to prioritize socially desirable goals.

The concept of political modulation is useful for capturing the mutable nature of planning rationalities guiding state action and service provision. Scholars have observed that state capacity is crucial for steering private engagement towards redistributive service outcomes (Miraftab, 2004; Baer, 2014). However, the capacity to act in the public interest may be temporally constructed (or destructed) through political processes that infuse into the state varying policy commitments. Other studies have described similar processes of modulation, driven by policy ideology, in shaping the distribution of city-wide infrastructure investments (Marques and Bichir, 2003) or, more broadly, the content of infrastructure privatization reforms in Latin American countries (Murillo, 2009). However, beyond partisan ideology or politicians' policy preferences, I stress the need to examine the role of bureaucratic politics within the state (and within utilities) as a modulation mechanism for shaping organizational values and decision-making around service priorities.

More broadly, attention to political modulation helps to problematize prevailing neo-institutional development policy frameworks that treat politics with suspicion, positioning it as a barrier to more effective service delivery (Dubash and Morgan, 2012). My analysis not only indicates that institutional remedies for political interference hardly remove politics from the equation, they also reveal a potentially positive role for politics in orienting service delivery towards more equitable and progressive outcomes. Without minimizing challenges posed by clientelism (Herrera, 2017) or corruption (Davis, 2004), I argue that institutional reform efforts that seek to 'depoliticize' public-private service delivery arrangements by reducing the influence of political appointments, for example, risk closing channels through which redistributive concerns enter into the state and shape private participation. Here, it is worth recalling Hirschman's (1967: 144) warning that the price of insulation 'can be loss of easy access to political power, and this loss may be crippling, especially for agencies engaging in highly controversial social and administrative, rather than purely technological, innovation.'

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Chapter 3

Against the 'Local' Grain: Finance and the Centralization of Urban Sanitation Governance

1. Introduction

Cities and their infrastructures have long been important arenas for the materialization of financial interests. The subprime mortgage debacle and accompanying global financial crisis in 2008 invigorated political economy scholarship on the relationship between finance and the politics of urban development. Scholars have drawn on the catch-all concept of "financialization"[36] to capture the instruments and rationales through which housing, real estate, and infrastructure projects are increasingly being converted into sources of financial rents.[37] Infrastructures such as electricity, transit, highways, and water and sewage, in particular, have emerged as increasingly attractive "asset classes," promising long-term, stable returns to global investors (Torrance, 2008; Inderst and Stewart, 2014; Pike et al., 2019). Concerns with the aging quality of infrastructure in advanced economies as well as persistent "infrastructure gaps" across the global South have given momentum to this "infrastructure passion" (Carolini and Cruxên, 2020).

This article examines the insertion of financial investors into the private provision of water and sewage services—hereafter simply sanitation[38]—in Brazilian cities. In the past five years, private equity groups and institutional investors have become sizeable players in this realm. They currently own or have substantial equity participation in some of the largest private sanitation providers in the country. I refer to this phenomenon, for short, as *financialized ownership*. As of 2019, financialized providers controlled nearly two-thirds of the private sanitation market, spanning more than two hundred Brazilian municipalities. Some, such as the city of Rio de Janeiro, are the kind of world-famous cities that have concentrated the attention of scholarship on finance and urban development; the majority, however, are small or mid-sized cities largely "off" the analytical map (Robinson, 2002). This study explores two questions: (1) Why and how have financial investors gained prominence in

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[36] In all its allure, financialization remains a relatively amorphous concept. It has been variously mobilized to capture the "ascendancy of shareholder value as a mode of corporate governance," the economic dominance of a "rentier class," the "proliferation of new financial instruments," and the "increasing importance of financial activities as sources of profits" (Krippner, 2011: 27-28). Contending with its multiple uses, Aalbers (2019: 3) defines financialization broadly as "the increasing dominance of financial actors, markets, practices, measurements, and narratives, at various scales, resulting in a structural transformation of economies, firms (including financial institutions), states, and households."

[37] For reviews of this literature see, for example, Daniels (2019) and Aalbers (2020).

[38] I refer to sanitation, as opposed to the more common shorthand references in the literature to "water politics," "water privatization," or "water financialization," for two main reasons. First, to align with usage in Brazil, where sanitation refers to both water supply and sewage. While in Brazil sanitation also encompasses solid waste and drainage, my analysis brackets these as they constitute distinct service provision markets. Second, to rescue sewage from the analytical sidelines. Despite their importance to public health and the environment, sewage collection and treatment often lag behind water supply in terms of investment and coverage. In 2019, nearly half of the Brazilian population lacked access to sanitary sewer systems, while about 20% (or 41 million) lacked access to water supply (Brasil, 2020).

private sanitation provision in Brazil? (2) What are the political implications of financialized ownership for the governance of urban sanitation delivery? By governance I mean both the local political relations that govern public-private contractual relations and the broader legal and regulatory environment within which these relations take place.

These questions stem from two observations concerning the extant scholarship on the financialization of urban development and governance. The first is the common tendency to explain financialization in relation to a generic backdrop of increasing capital mobility, neoliberalization, and ever riskier and speculative forms of municipal politics.[39] These factors have certainly contributed to creating various opportunities for financial engagement in urban development and infrastructure service delivery across the globe. However, by taking them as common starting points, we place the processual component of the "-izations of the world" (Taylor, 2000) into the review mirror: we assume financialization is occurring rather than explain how it occurs in relation to different socio-political and historical conjunctures. As Robinson and Attuyer (2020: 7) have argued, it is important to bring into view "other processes at work in different contexts," particularly in the under-researched geographies of financial investment in the global South.

I propose that one way to do this is to shift our analytical starting point away from macro narratives of financialization or localized analyses of project- or city-level cases towards a historical exploration of the development of particular markets. As Klink et al. (2019: 3) note, urban political economy scholarship on financialization has tended to "[take] markets relatively for granted." Institutions of market governance are often considered pre-existing conditions for financial interest, informing the selective investment strategies of global finance (Halbert and Rouanet, 2014; Skerrett, 2017). However, as Goldman and Narayan (2021) have observed, financial investors engage dynamically with shifting market contexts. I build on this insight to argue that attention to market evolution can help us better understand the conditions under which financial investors enter into and help to reorganize urban infrastructure services across different contexts.

The second related observation concerns the issue of where we locate political agency in the financialization of urban development. Urban political economy scholars have illuminated an important role for states—often local governments—in enabling financial deepening within cities (for a review, see Aalbers, 2020). This can occur, for example, through the privatization of public land to facilitate speculative real estate development, or through the mobilization of various debt instruments and forms of public-private partnership to finance urban development. In some readings, states are pressured into pursuing financialized strategies due to the weight of austerity politics as well as inter-city competition to attract capital (Peck and Whiteside, 2016). In others, states appear as "go-getters," constructing asset classes (Weber, 2010), serving as speculative agents (Beswick and Penny, 2018), and

[39] This backstory largely emanates from North-Atlantic contexts such as the United States and the United Kingdom, where much of the literature on financialization is concentrated (Shatkin, 2017), and typically traces back to fiscal austerity, the contraction of federal support, and the spread of neoliberal policy ideas since the 1970s. This context contributed to the emergence of various modes of "entrepreneurial"—in Harvey's (1989) influential terminology—and "neoliberal" urban governance (Jessop, 2002; Weber, 2010). Tasked with greater responsibilities, many local governments sought to overcome fiscal constraints and promote urban development through partnerships with the private sector and, increasingly, via financial means, thus creating opportunities for financial investors to cash in (Peck and Whiteside, 2016; He, 2020).

using the monetization of land and urban development as state-building projects (Shatkin, 2017, 2019). Amplifying the lens beyond the state, other scholars have highlighted the role of intermediaries such as multilateral development agencies (Gabor, 2021; Mawdsley, 2018), standard-setting organizations (Hilbrandt and Grubbauer, 2020), and local networks of private actors (Halbert and Rouanet, 2014) in internalizing risks, circulating financial knowledge and practices, and helping financial capital to "land."[40] In the infrastructure space, for example, Torrance (2008) finds that global institutional investors rely more on local relational networks than on financial models to overcome information gaps and make infrastructure investment decisions.

These analyses have shed light onto the political underpinnings of the financialization of urban development. However, they have also tended to position financial investors as relatively removed from the on-the-ground politics of making financialization happen. My analysis aims to recover political agency for investors by exploring how changes to business ownership influence the ways in which providers approach the politics of infrastructure service delivery in particular markets. In other words, I am interested not simply in the political origins of financialization but on its political consequences for service provision. This perspective speaks to recent calls for a closer engagement with the "optics" and pathways through which finance navigates different markets and shapes urban development (Guironnet et al., 2016; Goldman and Narayan, 2021). In examining business ownership, I seek to contrast financial investors with other private investors that have historically engaged in private service provision. This comparative lens contributes to deconstructing "analytically unitary" treatments of the private sector (Searle, 2014) and specifying what kind of politics financial actors bring to the table when they enter into different urban development and infrastructure markets. I expand on my analytical framework for understanding market development and business ownership and politics in the next section.

To explore how financial investors became more entangled in private sanitation provision in Brazil and examine the political and regulatory implications of this entanglement, this study integrates historical analysis, ethnographic research, and comparative case studies of private sanitation providers. This approach allows for the multi-scalar exploration of firm-level, institutional, and broader political-economic factors shaping private urban sanitation delivery over time. I trace the historical development of a private market for sanitation delivery in Brazil from the early 1990s to 2019, the year prior the passing of a sweeping regulatory reform of the sector (Law n. 14.206/2020) that was designed to encourage greater private participation in sanitation provision. I also use within- and cross-case comparison (George and Bennett, 2005) of the largest private sanitation holdings[41] in the sector to examine ownership and corporate governance changes. These holdings are: BRK Ambiental, Aegea, and Iguá Saneamento. While these companies used to share a common DNA—ownership and control by family-owned construction business groups—financial investors now either own or have substantial equity participation in all three. I compare these holdings to Águas do Brasil, the fourth

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[40] There can also be frictions: local actors may dispute development opportunities and struggle over calculative practices with financial investors (David and Halbert, 2014; Searle, 2014).

[41] These are private investor firms that, in turn, have their own shareholders. For clarity, in this paper I use holdings to refer to the private sanitation companies that control various operations across the country and investors to refer to their shareholders.

largest private company in the sector, which did not experience a similar transition to financialized ownership during the period analyzed.[42] Drawing on insights from organizational ethnography, I seek to provide "extreme close-ups" and "long shots" (Ybema et al., 2009) of private sanitation providers, zooming in to examine organizational practices, values, and forms of politics under different ownership models, and zooming out to trace, historically, the mechanisms that paved the way for the greater insertion of financial investors into this market.

My analysis draws on two years of research between 2019–2021 and relies on document analysis, participant observation during in-person and virtual events, 87 interviews[43] with a total of 79 individuals (see Appendix A for a list of interviews), and a novel dataset I compiled on public-private sanitation contracts in Brazil between 1994–2019 (Appendix B). To protect the identities of interviewees, I use codes to refer to the interviews and omit the names of companies where I feel it may compromise interviewee anonymity. I also draw on two months of in-person fieldwork in Brazil between July and August 2019. To overcome some of the well-known challenges of gaining access to business actors (Schneider, 2014), during this period I worked as a research intern for a private consultancy firm in São Paulo whose work includes supporting the development of infrastructure public-private partnerships. I was able to carry out my independent research at the same time. By embedding myself within this organization, I obtained insight into the practices and knowledge circuits that inform private participation in sanitation provision and gained access to several actors within this world.[44]

By retracing the historical development of private participation in sanitation delivery in Brazil, I first show that the destabilization of existing domestic market structures can open pathways for the greater insertion of financial investors. Beginning in the mid-2000s, a few large, family-owned Brazilian construction groups combined distinct local private operations into holding companies. This resulted in a concentrated market configuration within a fragmented regulatory context. Fewer firms had to navigate oscillations in regulatory capacity and in the behavior of local elected officials across several operations, which professionals in the sector often jokingly referred to as "the follies of the mayors." I show that construction business groups, however, accommodated these tensions by fostering a politically embedded model of service delivery governance. This model became untenable following a nation-wide corruption scandal known as "Lava Jato" (Operation Car Wash), which destabilized deep-

[42] While the addition of Águas do Brasil helps to establish a point of comparison for parsing out the implications of changes to financialized ownership among the other firms, I am cognizant of the potential diffusion of business practices across companies. I took this factor into consideration during data collection and analysis.

[43] Interviewees were selected through a combination of purposive sampling (based on a list of individuals I identified as potentially useful sources based on their current employment and experience) and snow-ball sampling. These included current and former managers and CEOs of private sanitation companies, managers of state companies, financial investors, consultants, policymakers, specialized lawyers, and leaders of business and civil society associations. To protect anonymity, I refer to CEOs and managers simply as managers. The interviews lasted 83 minutes on average. The majority were recorded with permission from interviewees. For the interviews I was unable to record, I took notes during the conversation and expanded on these notes immediately following the interview in order to capture as much of what I recollected as possible.

[44] My activities as an intern encompassed supporting a weekly policy report on the sanitation sector and organizing a debate with legislators and federal government officials around the regulatory reform of the sector.

rooted forms of state-business relations and pushed construction business groups out of the sector. It was in this context of disorder and mistrust in politics that finance stepped in.

Furthermore, I demonstrate that the insertion of financial capital was not simply as an extension of privatization per se (March and Purcell, 2014), but entailed changes to the very political logic of private participation. Specifically, while we might have expected financial actors to capitalize on local politics, I find instead that the emergence of financialized ownership pushed private sanitation companies to try to "escape" local politics and resulted in regulatory centralization. Companies centralized operational decisions at the holding level and curbed ties to local officials. They have also pressured for the standardization of regulatory activities at the national level. This entailed successfully mobilizing in favor of the 2020 regulatory reform (Law n. 14.026), which included the creation of a federal regulatory body tasked with elaborating guiding norms for subnational regulatory agencies (Cruxên 2021b or Chapter 4). Unlike the model of political embeddedness fostered by construction business groups, thus, I argue that financial investors have propelled a form of *centripetal politics*, that is, a political effort to scale governance up, moving towards more centralized organizational and institutional service delivery arrangements. I argue centripetal politics constituted a strategy for more closely monitoring assets across consolidated operations, reducing political risks, and ensuring stable returns in an otherwise politically unstable and fragmented regulatory environment.

2. From the ground up: bringing markets and business politics into view

My analysis of the pathways for and political consequences of the insertion of financial investors into the provision of urban sanitation services in Brazil foregrounds the exploration of market development and business ownership and politics. I take the view that markets are socially and politically embedded institutions (Fligstein, 2001; Knox-Hayes, 2016), and that understanding their development requires attention to the actors that help to construct and organize them. This means not only states or other intermediaries but also, and crucially, firms. In Brazil, as I will show, the private market for sanitation delivery is largely consolidated around a few dominant holding firms that own contracts and control operations across different cities. Local public-private contracts have thus become spatially linked to one another via shared firm ownership.

However, the role these kinds of private holding companies may play in the governance of urban infrastructure has received scant attention in urban political economy scholarship on financialization. Presumably, this is because the literature tends to treat public-private partnerships or privatized service provision as relatively localized "instruments" for financialization (Peck and Whiteside, 2016), studying them either on a case-by-case basis or in relation to aggregate private investment flows. In contrast, building on other work, I approach public-private arrangements for infrastructure service delivery as long-term political "relations between non-fixed actors" (Cruxên, 2021a: 2). This perspective shifts attention to the actors behind the instruments or contracts, and to their mutable organizational and political characteristics. In the case of holding firms, for example, changes to their ownership may impact how these firms approach relationships with the state. Given that holding companies tend to set the overall business strategy for their subsidiaries (Johnson et al., 2008), I propose these firms can influence the governance of urban infrastructure at two levels: (1) they "link down" by defining the norms of engagement between their private subsidiaries and local governments, and (2) they "link up" by carrying out national-level lobbying or other policy-related activities that can reconfigure the broader institutional framework for the provision of urban infrastructure services (Arroyo, 2004).

In examining the temporal development of markets and the role of firms therein, I consider how gradual market transformation may produce internal incoherencies that create conditions for broader institutional change. As historical institutionalist scholars have argued, institutions have "change-permitting properties" such as gaps, ambiguities, and contradictions (Mahoney and Thelen, 2010). Social actors may exploit these properties to promote change. In Brazil, I argue that the progressive process of business consolidation that organized the private sanitation market around a few dominant holding firms created an incongruence between a concentrated private provider landscape and a fragmented regulatory environment. This mismatch gave rise to latent pressures for greater regulatory centralization, which could help to reduce political risks and transaction costs for private sanitation holdings. This analysis serves as a check on the image of financialization as an ineluctable or disruptive "juggernaut" (O'Brien and Pike, 2017). It reveals that, as financial investors became more prominent in the private sanitation market, they acted as catalysts for institutional change in an environment already filled with tensions. Indeed, I show that the very insertion of finance into private urban sanitation delivery required the destabilization of long-standing business practices of market governance. Financial actors and their strategies, thus, need to be situated in relation to the contextual development of different markets.

In this vein, I propose we need to factor in how business ownership shapes the ways in which firms politically navigate markets and existing tensions therein. Put differently, we need to explore business politics under different types of investors. Here I build on insights from literature on business organization which suggests that different types of shareholders are likely to vary in their objectives, which in turn may affect company activity (Kang and Sørensen, 1999; Bruton et al., 2010). Family-owned firms, for example, have been found to look and behave differently than multinationals or businesses financed primarily by financial markets (Schneider, 2013; Davis and Kim, 2015).[45] In the infrastructure space, Page et al. (2008) draw a useful distinction between "strategic investors" and "financial investors:" while the former consider the potential for deriving multiple benefits from infrastructure projects, such as returns from activities like construction, the latter focus primarily on the extraction of financial gains. Scholars of business politics have also noted that the economic activities of business actors cannot be understood separately from their political behavior, which depends both on organizational characteristics and the politico-institutional contexts in which they operate (Walker and Rea, 2014; Puente and Schneider, 2020).

In the context of the historical development of the private sanitation market in Brazil, I distinguish between two main types of investors. The first are large, family-owned business groups

[45] More broadly, scholarship on the role of firms in development has shown that companies with different ownership and governance structures, of different sizes, and with different levels of experience may behave and perform differently within the same institutional environment (Cohen, 2007; Schneider, 2013; Amsden, 2009; Fuller, 2016).

from the construction sector—who behaved like strategic investors. Business groups in Latin America, particularly family-owned ones, have typically been characterized as highly socially and politically embedded (Perkins, 2019; Schneider, 2013). In the Argentinian water sector, Post (2014) found that private concession contracts owned by domestic business groups were more resilient than those owned by foreign multinationals. She argues domestic business groups were not only better positioned to withstand political and economic volatility due to their diversified domestic holdings, they were also more capable of building trust and negotiating with public partners due to their ties to local governments and shared understandings of the social norms undergirding economic relations. In Brazil, large construction business groups with diversified holdings have a long history of engagement in urban development, especially through close—and often corrupt—interactions with the state (Rolnik, 2019; Campos, 2012; Carazza, 2018). In the sanitation sector, I argue construction business groups fostered in their holdings a model of service delivery governance centered on *political embeddedness*. This included maintaining close ties to local elected officials but also, and crucially, pursuing a relatively decentralized management approach that afforded subsidiaries greater decision-making autonomy to handle local issues. This model accommodated political tensions and transaction costs within a fragmented regulatory environment.

Financial investors such as private equity funds constitute the second main type of investors I explore.[46] "At its most basic," as Leyshon and Thrift (2007: 99) note, "finance consists of the mobilization of capital with which to invest." This entails a continuous search for investable assets that can yield clear income streams. The possibility of extracting long-term, predictable returns is precisely the reason why infrastructures have become attractive asset classes for institutional investors (Carolini and Cruxên, 2020). Private equity investors, in particular, have been associated with a number of traits. They have been positioned as bastions of efficiency, infusing more stringent corporate governance standards, transparency requirements, and professional management into the companies they invest in (Leeds, 2015). They have also been associated with asset stripping, debt-loading, and short-termism (Wright et al., 2009; Hall, 2006; Page et al., 2008).

In the water sector, scholars have noted that financialized ownership may encourage utilities to engage in financial engineering and adopt extractive calculative practices that place the interests of shareholders above those of citizens (Allen and Pryke, 2013; Loftus et al., 2019; Furlong, 2020; Klink et al., 2019). The case of Thames Water,[47] the largest provider of water and wastewater services in the United Kingdom, often emerges as a paradigmatic case. Allen and Pryke (2013: 422) found that financialized ownership pushed Thames Water towards a debt-financing model centered on the securitization of service revenues, that is, household water bills were "turned into a tradable financial product, broken up into separate earnings packages, assigned a risk profile and sold onto investors seeking long-term real returns." Before assets can be bundled up into defined income streams and

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[46] While the distinction between types of investors is analytically useful, it risks overshadowing heterogeneity within different types. Wright et al. (2009), for example, have highlighted variation within the private equity industry, while a 2017 World Bank report on Canadian pension funds is illustrative of how institutional investors from the same country may differ in terms of their mandates, objectives, and strategy (World Bank, 2017).

[47] In 2006, Thames Water was acquired by a consortium of international investors led by the Macquarie Group, an Australian infrastructure asset management firm.

yield stable returns, however, they have to be constructed (Leyshon and Thrift, 2007). My premise is that this is as much a political process as a financial engineering one. My analysis thus seeks to push forward the study of financialized ownership in the water sector by exploring what kind of politics enables firms to secure stable income streams from service delivery for their financial investors, particularly in fragmented political environments considered risky and unstable.

I argue financial investors bring three lenses to bear on how private providers navigate infrastructure service delivery markets: *predictability, credibility,* and *funneling*. Predictability has to do with the consistent generation, reporting, and forecasting of returns; credibility is about maintaining a good reputation in the eyes of the market, which is essential for the ability to access future capital (via debt and equity); and funneling concerns an emphasis on return extraction primarily from service delivery—unlike strategic investors, who consider a broader set of activities (Page et al. 2008). These lenses speak to the exercise of control over service delivery. Drawing on Scott's (1998) insight that centralized planning[48] ties into the construction of order and stability—particularly in complex contexts perceived as illegible—I suggest that the greater insertion of financial capital into a consolidated private market for sanitation delivery encouraged holdings to pursue a model of governance centered on *centripetal politics*. They curbed ties to local elected officials and formalized political relations to minimize threats to their reputation—particularly, as I will discuss, in the context of mistrust in politics that characterized the downfall of business groups and the insertion of finance into the sanitation market. They centralized organizational decision-making at the holding level to better monitor assets and forecast returns. They mobilized in support of regulatory standardization at the federal level with the expectation that centralized regulation could help to alleviate local political risk and enhance the predictability of returns from service delivery, which in turn facilitates debt repayment. These forms of centripetal politics were strategies for creating the kind of market financial investors wanted to see.

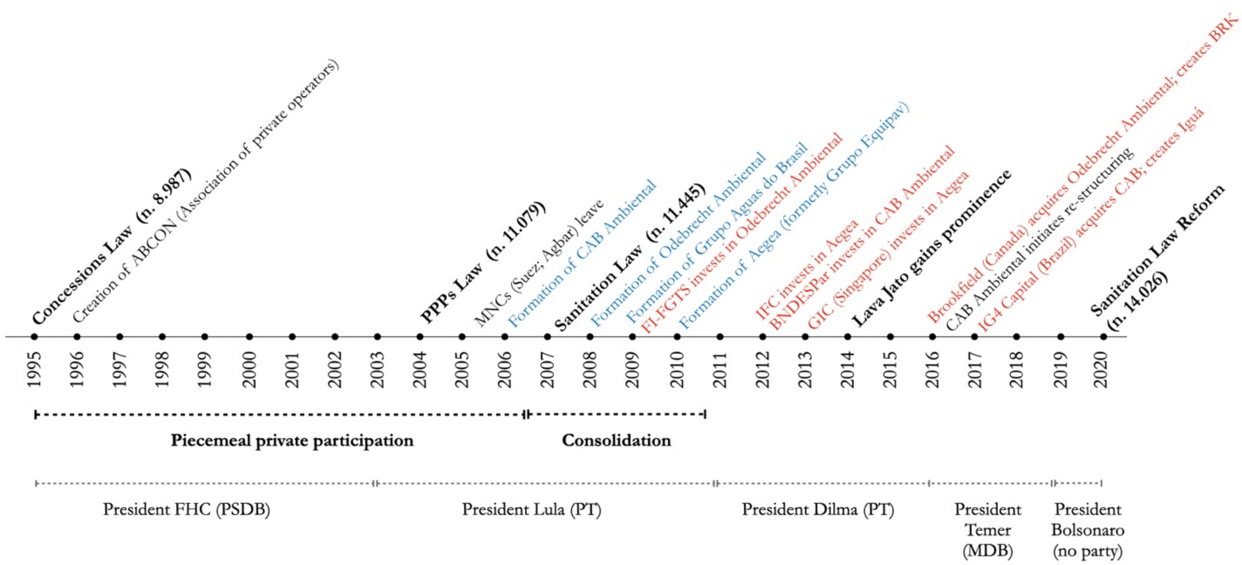
3. Consolidation

"To remedy the significant shortfall in infrastructure investments, and to put Brazil back on the path of sustained economic development, it is necessary to have the active participation of the private sector."[49] With these words, President Fernando Henrique Cardoso (1995–2002) touted, in 1995, the passage of the Concessions Law (n. 8.987), which instituted rules by which private actors could be granted the right to deliver public services in Brazil. Although the legislation meant to inaugurate a new era of private investment in public infrastructure provision, private engagement in

[48] While Scott's (1998) concept of legibility relates to modern statecraft, in my view it can also be fruitfully explored in relation to the crafting of institutions of market governance, particularly when specific markets or geographies are opaque from the point of view of firms or investors. In drawing on Scott's work to discuss financial capital, I do not mean to position finance as a totalizing or homogenizing force. Rather, I am building on a more foundational insight, namely that being able to "see" and extract resources (whether state taxes or financial revenues) can be facilitated by some measure of organization, standardization, or centralization.
[49] Fernando Henrique Cardoso, 1995, "Foreword," *Public Service Concessions in Brazil*. Brasília: Presidência da República, Secretaria de Assuntos Estratégicos, p. 5.

sanitation delivery was sluggish.[50] In this section, I trace the gradual development of this market. First, I demonstrate how it evolved from "piecemeal" private participation, in the mid-1990s to mid-2000s, toward a concentrated market configuration as large construction business groups consolidated different local operations. This process of business consolidation began around 2007 (see Figure 3.1 below for a timeline of relevant events). Second, I discuss the politically embedded model of service delivery fostered by construction business groups.

Figure 3.1. Timeline of private participation in the Brazilian sanitation market



Own elaboration. Notes: 1) In bold: relevant macro institutional and political events; 2) In blue: formation of main business group-owned holding firms; 3) In red: equity investments or ownership transitions involving state-led investment vehicles, institutional investors, and private equity.

a. Starting piecemeal

Private sanitation delivery in Brazil emerged in the mid-1990s at the confluence of two movements. The first was the embrace of private initiative that characterized the spread of neoliberal restructuring programs in the 1980s–1990s. President Cardoso's signature Concessions Law was far from unique. Privatization and liberalization reforms were prolific in Latin America, albeit variegated (Perreault and Martin, 2005). Slowing rates of growth and mounting debt in the 1980s, the "lost decade," undermined confidence in state-led development and fostered a turn to market-oriented reforms (Lindauer et al., 2002). The second movement was the crumbling of the institutional architecture that had underpinned sanitation provision in Brazil for nearly three decades. As the country transitioned from military dictatorship (1964–1985) to democracy, the provision of sanitation

[50] While I concentrate on the more recent (post-1990s) history of private participation, private investment was not, of course, a new phenomenon. In the 19th century, for example, foreign-owned or -financed firms played a significant role in the early development of sanitation systems in cities such as Rio de Janeiro (Meade, 1997; Heller et al., 2014).

services swung from a centralized configuration—attuned to the controlling ambitions of the authoritarian military regime—toward a multi-scalar institutional landscape and fragmented regulatory environment.

During the military regime, the institutional framework for sanitation delivery had three core pillars: (1) the 1971 National Sanitation Plan (PLANASA), which set nation-wide policy directives for service provision; (2) the National Housing Bank (BNH), which not only financed investments but also played a role in policy implementation and enforcement across the territory (Arretche, 1999b); and (3) state government-owned companies (Companhias Estaduais de Saneamento Básico, CESBs), which were created to provide services in each state. CESBs were able to establish sizable—and relatively captive—markets during this period. They benefited both from ample federal resources and from authoritarian policies that curtailed municipalities' fiscal and political autonomy, pushing municipal governments to grant services to state-level companies (Arretche, 1999a).

In the late 1980s, the economic crisis and democratization process rocked this architecture. PLANASA and BNH became extinct, leaving a policy and regulatory vacuum at the national level. Meanwhile, subnational governments, especially municipalities, resurfaced as relevant governance scales (Vargas and Lima, 2004). Brazilian civil society, in an explicit rejection of authoritarian military ideology, embraced decentralization and public participation as central values (Abers and Keck, 2013); municipal elections became more competitive; and the new 1988 democratic Constitution expanded the political authority of municipal governments. The Constitution established that municipalities held responsibility for urban development policy, which included the provision of public sanitation services when these were of local interest. Decentralization of sanitation services, however, was a patchy and partial process. The federal government remained a relevant source of financing via national public banks such as Caixa Econômica Federal (CEF) and the National Development Bank (BNDES). Meanwhile, state companies continued to be the dominant service providers. As Arretche (1999a: 117) observed, devolution of sanitation services from states to municipalities following democratization was "practically null." In 1995, when President Cardoso's administration introduced the Concessions Law, the 27 existing CESBs provided water services to nearly 78% of Brazil's urban population.[51] Effectively, the market for sanitation provision lacked a clear regulatory framework, remained saturated, and became entangled in a more complex web of intergovernmental relations.

Against this background, private participation in sanitation delivery developed rather "piecemeal." Investors took advantage of market opportunities that emerged sparsely and primarily at the municipal level. "Initially, the private sector looked at isolated concessions, it sought to start step-by-step. The 'entry mode' was often pilot operations, as part of a consortium," summarized one consultant.[52] Between 1995 and 2002, President Cardoso's two terms in office, a total of 41 service concession contracts with the private sector were signed, 92% of which involved a single municipality

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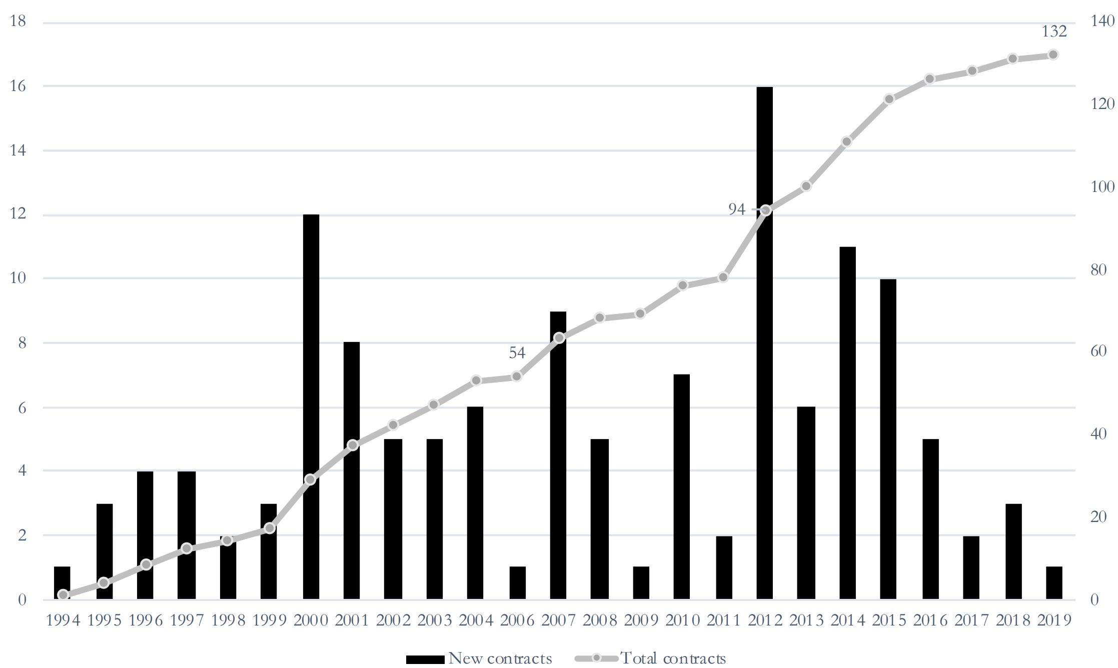
[51] Brasil, Presidência da República, 1995, *Public Service Concessions in Brazil*. Brasília: Secretaria de Assuntos Estratégicos, p. 29.

[52] Interview I73 (private sector consultant, 2021).

(see Figure 3.2). For perspective, Brazil had nearly 5,500 municipalities in Brazil in 2000.[53] Those concessions were largely located in the comparatively more developed states of São Paulo and Rio de Janeiro in the Southeast, and in the state of Mato Grosso,[54] a thinly populated, agrarian state in Brazil's Center-West region.

Figure 3.2. Public-private sanitation contracts per year (1994-2019)



Own elaboration. Source: own database (2020).

The localized mode of private engagement we observe in Brazil contrasts with experiences in countries such as Chile and Argentina, where central governments in the 1990s advanced wholesale water privatization programs at regional scales (Baer, 2014; Post, 2014). President Cardoso's administration did create targeted programs to encourage public-private collaboration projects, and made available dedicated financing lines for private sanitation companies via BNDES and CEF (Parlatore, 2000). However, broader privatization ambitions stumbled on a few roadblocks. One was the very multi-scalar institutional architecture of the sector. Bringing the private sector in depended on the political alignment and will of state governors—who controlled state companies—and

53 G1, "Em 67 anos, Brasil criou 3.990 municípios, aponta Atlas do IBGE," 14 December 2010. Available at http://g1.globo.com/brasil/noticia/2010/12/em-67-anos-brasil-criou-3990-municipios-aponta-atlas-do-ibge.html (accessed 05 September 2021).

54 In 2000, the state government of Mato Grosso dissolved its state sanitation company, Sanemat, and fully devolved service responsibility to municipal governments. Several opted to concede services to private providers.

mayors—who technically owned the services.[55] Another roadblock was strong civil society mobilization against private participation, which prevented different initiatives to grant services to the private sector from gaining traction (Heller et al., 2014; Sanchez, 2001). Oppositional mobilization by municipal associations and social movements also helped block a legislative attempt by the Cardoso administration in 2001 to create a new regulatory framework for sanitation provision (Souza and Costa, 2011). Finally, lack of coordinated action among federal agencies and the relative tardiness with which the federal government turned its attention to sanitation compared to other infrastructure sectors such as electricity[56] and telecommunications also likely contributed to a process of "reform without reform" (Arretche, 1999b). These factors helped to configure the piecemeal model of private engagement in sanitation we observe from the mid-1990s to mid-2000s.

A central characteristic of this early market configuration was regulatory fragmentation. This was encapsulated in the notion of "regulation by contract" (Ferreira, 2005), meaning that public-private contracts were the primary regulatory mechanisms. Public partners, typically municipal governments, oversaw their execution. An inherent trait of this model was the need to navigate municipal politics and relations with local elected officials, especially mayors. "There was no [regulatory] agency, there was nothing. To raise a tariff, even if it was to adjust it based on inflation, you needed the "okay" from the mayor. And if you had any problems with the mayor, he wouldn't give it," recounted one former manager of the French multinational Lyonnaise des Eaux (later Suez).[57] Political relationships mattered beyond contractual regulation and enforcement. They could also help private providers obtain sources of financing (Ferreira, 2005), secure new commercial opportunities, or smooth out day-to-day operational activities that rely on state planning, such as land use and zoning regulations. Speaking about their interactions with different municipal offices, one long-time manager of a private operation in the state of Rio de Janeiro observed that "whenever there is some erosion or noise between the concessionaire and the mayor's office, things tend to reverberate downwards as well, especially with the secretariat of public works."[58] Unsurprisingly, concerns with adjusting investment decisions and firm strategies to electoral cycles[59] and the rhythms of politics were recurring themes in my interviews with managers of private firms.[60]

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[55] Indeed, where private engagement occurred at the level of state companies, it was through the initiative of ideologically aligned state governors with strong political clout such as in the semi-privatizations of Sanepar, in the state of Paraná, and of Sabesp, in São Paulo, both of which transitioned to mixed-ownership arrangements. I discuss these mixed models in another article (Cruxên, 2021a).

[56] In the electricity sector, where the Constitution clearly granted service ownership to the federal government, Cardoso's government managed to advance a more significant privatization program and regulatory reform (Tankha, 2006).

[57] Interview I38 (private operator, 2018). In 1995, through a consortium with the Brazilian construction group Odebrecht, Lyonnaise had acquired a concession to provide water and sewage services in Limeira, a city of about 250 thousand residents in the state of São Paulo. It was the first full concession awarded in the country. After the contract was signed, it took nearly five years for the local private operator, Águas de Limeira, to attain a tariff adjustment due to a series of political and juridical conflicts, including accusations of corruption in the bidding process (Ducci, 2007). See also Estadão, "Acordo garante o saneamento de Limeira," 26 January 2001.

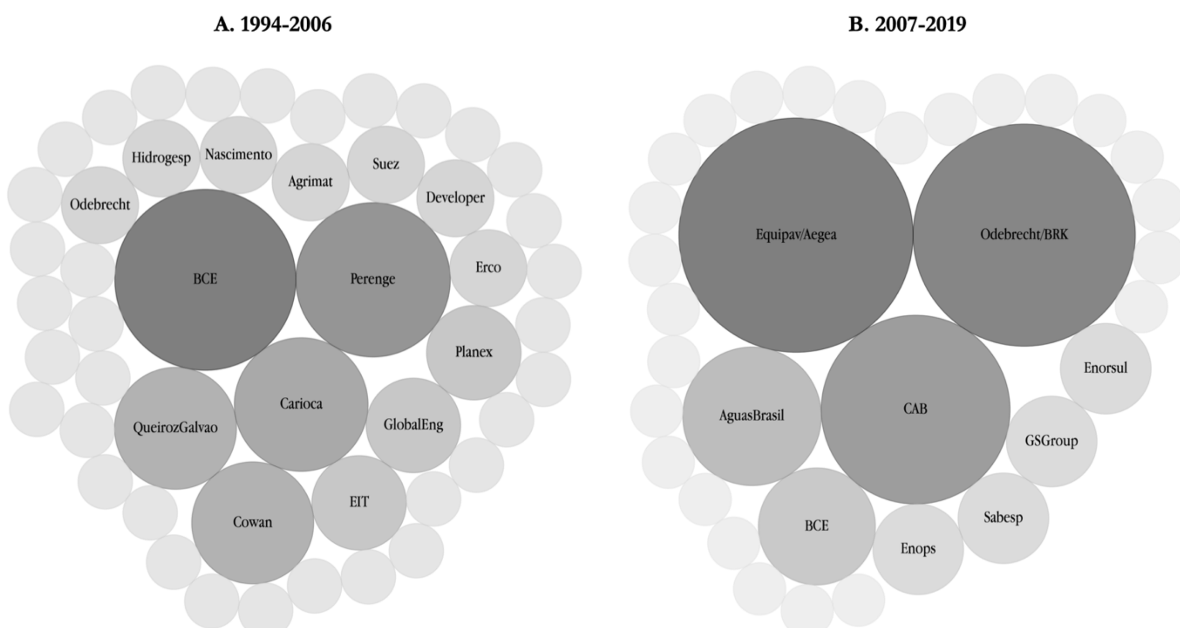
[58] Interview I40 (private operator, 2019).

[59] In Brazil, municipal elections are held every four years, separately for federal and state elections, which are held on a different four-year cycle. Since 1997, mayors can be reelected for a second term. Municipal electoral cycles for the periods covered in the research are as follows: 1997-2000; 2001-2004; 2005-2008; 2009-2012; 2013-2016; 2017-2020.

[60] Interviews: I6 (private operator, 2019); I7 (private operator, 2019); I23 (private operator, 2019); I25 (private operator, 2019); I35 (private operator, 2019).

Initially, this fragmented regulatory context was matched by a scattered investor landscape. I documented the number of times different investor firms appeared in association with contracts awarded since 1994, whether alone or as part of a consortium. For the period between 1994–2006, which I consider the "piecemeal" phase, I identified 49 investor firms involved in the 52 contracts for which original sponsor information was available.[61] In total, 54 contracts had been signed in that period. Only three investor firms were connected to five or more contracts, while 34 had only one contractual appearance. Figure 3.3-A below illustrates this market dynamic. The area of the circles reflects the proportion of times a firm appeared in connection to a contract relative to the total number of firm contractual appearances in the period.[62] Brasil Central Engenharia (BCE), a construction group from the state of Mato Grosso, appeared the greatest number of times, with 10 contracts. The firm had won several of the contracts awarded in that state. Overall, investor fragmentation meant that local private operations were largely independent from one another. Individual investor firms did not have to deal with several local governments at once.

Figure 3.3. Contractual appearances by distinct investor firms when contracts were signed



Own elaboration. Source: World Bank PPI Dataset (2019).
Note: For clarity, I removed the labels for firms that only appeared once.

[61] This data was extracted from information on project sponsors and textual project descriptions contained in the World Bank's 2019 PPI database. I found project descriptions, specifically, to have more granular information on the initial project investors, that is, the firms that were originally awarded the contracts. To be clear, this data concerns initial investors, not firms that may have acquired the same contracts later.
[62] The total number of firm contractual appearances is the sum of frequency of appearances for each firm. If a firm appeared in 10% of the total number of firm contractual appearances, the area of the circle was equal to 10.

The overwhelming majority of these early private investors were Brazilian engineering and construction groups, not specialized service providers. One interviewee called it the "invasion of the *civilistas*,"[63] a reference not only to their civil engineering roots but also to the lens through which these firms looked at the sector. Many saw it as an opportunity to "continue to build infrastructure works" at a time when difficult economic conditions squeezed options in other markets (Parlatore, 2000: 302).[64] This "invasion" resonated with a "construction culture" ("*cultura obreira"*) ingrained in the sanitation sector since the 1970s (Arretche, 1999b). State-level companies not only prioritized infrastructure works, they typically contracted these out to private construction firms (Marques, 1997). As opportunities for direct private sanitation provision emerged in the 1990s, the *civilistas* moved from the sidelines to center stage. While multinational companies were the main protagonists of water privatization experiments elsewhere in Latin America (Lobina and Hall, 2007), in Brazil foreign firms such as Suez and Aguas de Barcelona were involved in only seven of the 54 contracts signed in the piecemeal period. Similar to Argentina, where these firms won sanitation concessions in larger and wealthier provinces (Post, 2014), in Brazil these groups showed an appetite for bigger operations: six of the contracts with foreign capital involved cities with greater than 100 thousand residents. In four of the seven contracts, however, multinationals partnered with domestic construction groups, reinforcing the importance of this type of capital in the development of private sanitation delivery.

b. A builder's market

Beginning around 2006–2007, the investor landscape transitioned to a concentrated configuration. A smaller set of investor firms acquired an oversized role in the private sanitation market. The construction culture, however, perdured. Figure 3.3-B above illustrates this process. In the period between 2007–2019, four firms stood out in terms of contractual appearances: Grupo Equipav (later Aegea) with 20 appearances, Odebrecht Ambiental (later BRK Ambiental) with 17, CAB Ambiental (later Iguá Saneamento), and Águas do Brasil with 7. By contrast, no individual firm had appeared in more than ten contracts in the preceding piecemeal phase. In 2019, those four firms controlled nearly 74% of the 132 active public-private sanitation contracts in Brazil I documented (Table 3.1 below provides a breakdown of their portfolios in 2019; see Appendix B for a map of existing operations). The majority of these 132 contracts were concessions (85%) and public-private partnerships (11%).[65]

This new market configuration emerged through a process of business consolidation. A few leading, family-owned construction business groups began to consolidate disparate operations into holding companies. In addition to winning new contracts, these holdings acquired existing ones from other private investors, growing in size. Odebrecht Ambiental, for example, was created in 2007 to be the sanitation investment arm of Odebrecht S.A., a world-famous construction giant attached to the Odebrecht family and with roots in the Northeastern state of Bahia. Odebrecht was among a select

[63] Interview I41 (private sector consultant, 2019).
[64] Other interviewees reinforced this point: I72 (multilateral agency, 2021); I73 (private sector consultant, 2021).
[65] According to the Brazilian legislation, PPPs are distinct contractual arrangements in which private sector compensation comes partially or entirely from the public partner.

group of Brazilian construction firms that made a name for themselves during the heyday of state-led developmentalism, in the 1950s-1970s, by building big infrastructure projects such as roads and hydroelectric dams during the military regime (Campos, 2012). Growing economic volatility in the 1980s pushed these groups to diversify their business activities across different sectors—Odebrecht, for instance, made a big push into petrochemicals—to reduce exposure to economic shifts as well as dependence on state-funded projects (Gaspar, 2020). Privatization initiatives, in fact, became a popular vehicle for the diversification strategies of business groups not only in Brazil but across Latin America (Schneider, 2013; Rettberg, 2001).

Table 3.1. Portfolio of largest private investor firms in the sanitation sector (2019)

Private firm	Prior firm or group name	Number of contracts	Number of municipalities	Types of contracts	Geographic scope
Águas do Brasil	--	12 (9%)	14 (6%)	12 C	10 L; 1 R; 1 SL
BRK Ambiental	Odebrecht Ambiental	23 (17%)	108 (44%)	15 C; 6 PPPs; 1 SD; 1 LA	15 L; 8 R
Aegea	Grupo Equipav	45 (34%)	49 (20%)	41 C; 3 PPPs; 1SD	44 L; 1 R
Iguá Saneamento	CAB Ambiental	18 (14%)	36 (14%)	14 C; 4 PPPs	16 L; 2 R
Others	--	34 (26%)	40 (16%)	30 C; 2 PPPs; 2 LA	32 L; 1 R; 1 SL
Total	--	**132 (100%)**	**247 (100%)**	**112 C; 15 PPPs; 2 SD; 3 LA**	**117 L; 13 R; 2 SL**

Own elaboration. Source: own database (2020).
Notes: Others refers to firms with fewer than 10 contracts. C = Concessions (full and partial); PPPs = Public-private partnerships; SD= "Sub-delegation";[66] LA = Asset Lease Agreement; L = Local (single municipality); R = Regional (more than one municipality); SL = Sub-local (area within a municipality). One of Águas do Brasil's contracts is shared with BRK Ambiental.

The storylines of the other private holdings that became dominant in the sanitation sector shared similar traits. Grupo Equipav—a São Paulo-based, family-owned conglomerate—began in the 1960s as a paving company and progressively diversified into several sectors, including sugar, ethanol, and road concessions.[67] The group ventured into sanitation services in 2005. Five years later, it created the holding company Aegea to oversee its different sanitation contracts. Between 2012 and 2014, Aegea acquired at least 20 existing operations—several of which were in the state of Mato Grosso and were formerly held by BCE. CAB Ambiental was set up in 2006 by Grupo Galvão, a family-owned conglomerate with undertakings in construction, oil and gas, and transportation. CAB's engineering roots, however, were topped by a French flavor: some of its managers had prior experience working for Lyonnaise des Eaux.[68] Finally, the holding Águas do Brasil was formed in 2009 to consolidate the

[66] Sub-delegation (SD), here, refers to arrangements where a state-level company (CESB) sub-contracted services to a private operator.
[67] Valor Econômico, "Depois da crise, Equipav planeja voltar a crescer," 17 November 2010.
[68] At this stage, the few existing multinationals were exiting the market due to shifts in business strategy as well as setbacks in sanitation concession contracts elsewhere in the region, such as in Argentina and Bolivia. Interviews: I41 (private sector consultant, 2019); I52 (private sector consultant, 2019).

operations of family-owned groups with similarly deep foundations in construction, including Grupo Carioca Engenharia and Queiroz Galvão Participações. These groups had often joined forces as a part of consortia to win sanitation concessions since the 1990s, building a particularly relevant presence in the state of Rio de Janeiro.

Important politico-economic and institutional developments spurred this process of business consolidation. To start, concerted private engagement unfolded in a context of vigorous public investment rather than austerity. In the early 2000s, Brazil rode the uplifting wave of the commodity boom, which propelled economic growth across Latin America. Fiscal strangulation and scarce infrastructure investment—trademarks of the 1990s—were placed in the rearview mirror. Public investment became a key pillar of federal government policy under President Luiz Inácio "Lula" da Silva (2003–2010) (Carvalho, 2018).[69] In 2007, the government introduced the Growth Acceleration Program (Programa de Aceleração do Crescimento, PAC), which promised nearly 504 billion Reais of investments in physical and social infrastructure by 2010, encompassing more than 900 infrastructure works across different sectors (Gaspar, 2020: 259). New investment commitments and a favorable macroeconomic climate translated into opportunities for construction business groups to expand their portfolios. Odebrecht S.A., for example, increased its gross income more than three-fold, from 12 to 41 billion Reais, in the first decade of the 21st century, becoming one of the largest business groups in Brazil.[70] Sanitation delivery was one among the many infrastructure enterprises these groups pursued. According to a study commissioned by the National Confederation of Industry (Confederação Nacional da Indústria, CNI), investments in sanitation increased from 3.7 to 8.3 billion Reais between 2007–2010, corresponding to a 0.7% gain in the share of investment as a proportion of GDP (CNI 2016). Fewer opportunities for private participation in sanitation delivery emerged than construction business groups had hoped for since the bonanza also benefited public municipal and state sanitation companies.[71] Nonetheless, private participation in the sector continued to grow steadily over the years (see Figure 3.2 above).

Another pivotal development during this period was the enactment of the 2007 Sanitation Law (n. 11.445). After years of regulatory limbo, the new legislation provided a much-awaited policy and regulatory framework for sanitation delivery since the demise of PLANASA and BNH. In particular, it mandated the creation of independent regulatory agencies to monitor utilities and regulate prices. The promise of greater regulatory clarity further stimulated construction business groups to orchestrate their activities in the sector.[72] The effervescence, in fact, started a couple of years prior, when Congress began discussing the proposed text for the new legislation. It also built on steam generated by the passing of the Public-Private Partnerships Law (n. 11.079) in 2004, which established PPPs as a new infrastructure investment modality alongside concessions.

69 For a discussion of the "ambivalent" nature of sanitation policy under President Lula, see Britto and Rezende (2017). The authors also provide a descriptive account of increasing private participation in the sector since that period.

70 Odebrecht S.A., 2010, "Odebrecht 2010-2020" (annual report).

71 Interviews: I13 (business association, 2021); I25 (private operator, 2019); I72 (multilateral agency, 2021).

72 O Estado de São Paulo, "Saneamento terá R$ 3 bilhões de parcerias," 06 February 2008; Valor Econômico, "Odebrecht se arma para entrar na disputa por serviços de saneamento," 27 August 2008; Interview I52 (private sector consultant, 2019).

Although these legal and regulatory improvements stimulated business consolidation and market concentration, regulatory fragmentation persisted. In 2019, only about 42% of Brazilian municipalities had a defined regulator of service provision (FGV CERI, 2019). In total, 51 different agencies regulated sanitation services, at both municipal and regional scales (ABAR, 2019). Regulatory capacity varied. While some agencies had greater autonomy, resources, and expertise, others—especially at the municipal level—often did not (FGV CERI, 2019).[73] Lawyers working on public-private arrangements often poured their faith into contractual design, attempting to customize contracts and anticipate as many potential future issues as possible.[74] But when contracts often last an average of 30 years, this is bound to be an exercise in futility. In fact, one manager of Iguá Saneamento (formerly CAB Ambiental) once remarked at a public webinar focused on "perfecting contractual norms" that "the only certainty we have is that concession and PPP contracts will change."[75]

c. Political embeddedness: "The mayor is my client"

Business consolidation within a fragmented regulatory landscape created an apparent mismatch between the organizational and institutional scales at which private sanitation provision was organized. While the market became more concentrated, the municipal orientation from the piecemeal period persisted: 88% of the 132 contracts I documented in 2019 were local contracts with a single municipality (see Table 3.1 above).[76] To the extent that fewer firms now handled contractual relations across a number of different operations, their exposure to local "political risks" increased. Effectively, they had to negotiate "mayor to mayor." In my interviews with managers, regulators, lawyers, and consultants with experience in the sector, there were numerous anecdotes or illustrations evoking the image of unhinged mayors making unilateral decisions or unwarranted demands on providers. One company manager observed that mayors "create difficulty so they can sell ease," while a lawyer recounted seeing cases where "the mayor explicitly asked that 25% of the water revenue go to the mayors' office, something completely nonsensical."[77]

Such political unpredictability might ordinarily frighten investors. But this was a legible landscape for construction business groups. Far from feeling intimidated, they largely saw this fragmented and personalistic political environment as "waters they knew how to navigate."[78] There was a perception, in fact, that fragmentation could serve as a balancing act: political difficulties in one concession were less relevant on the whole, particularly from a financial standpoint, if other operations

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[73] Several interviewees in both the public and private sector noted this aspect as well.

[74] Interviews: I66 (private operator, 2021); I74 (finance, 2021). Some lawyers have emphasized the importance of building flexibility into contracts (I26, law office, 2019).

[75] Connected Smart Cities, "Bloco #10 | O novo marco legal e a necessidade de aperfeiçoamento das regras contratuais Novo marco e aperfeiçoamento das regras contratuais," (Webinar) 09 June 2020. Available at https://www.youtube.com/watch?v=IEOpGsfoYRo (Accessed 01 November 2021).

[76] Over time, companies such as Odebrecht Ambiental and Aegea did try to gain scale and market share by pursuing larger PPP or sub-delegation contracts with state-level companies. One advantage of these contracts is that they can shield private providers from direct political negotiation with mayors. Other companies, like CAB, maintained a municipal orientation. Interviews: I36 (private operator, 2019); I52 (private sector consultant, 2019); I73 (private sector consultant, 2021).

[77] Interviews I35 (private operator, 2019) and I43 (law office, 2019), respectively.

[78] Interview I55 (private sector consultant, 2019).

were going well.[79] The construction DNA contributed to this lens. Business groups looked at investments in the sector holistically, that is, as opportunities to not only earn returns from service delivery but to build more infrastructure. Several interviewees referred to this as an emphasis on CAPEX (capital expenditures) as opposed to OPEX (operating expenses).[80] Portfolio diversification across various sectors likely further diluted concerns with how turbulence at any one sanitation operation might affect construction groups' overall balance sheet.

Crucially, political embeddedness enabled the sanitation holdings controlled by these investors to navigate stormy political waters rather well. One dimension of such embeddedness was cultivating close ties to local elected officials. These ties were central to the "politico-institutional logic," as one financial investor put it,[81] that guided how construction groups operated. Attention to such relations may unsurprisingly invoke images of *quid pro quo* deals and corruption. Speaking broadly of public-private urban infrastructure projects at the time, one lawyer suggested that "no one engaged in concessions with the expectation of municipal stability. The way the private sector dealt with that was through campaign contributions—republican and non-republican… That's how they controlled the follies of the mayors."[82] For example, the "Lava Jato" (Car Wash) investigation, which I will return to, revealed that Odebrecht Ambiental had made illegal campaign contributions to local politicians in order to win and sustain sanitation service contracts in several cities.[83] In the perception of some interviewees, however, corruption in the sanitation sector appeared comparatively less prevalent than in other infrastructure sectors such as transportation or, as Lava Jato demonstrated, oil and gas.[84]

A purely transactional lens, however, obscures how these political strategies built on deeply ingrained relational norms. Collaboration (or collusion) between construction groups and political actors had long been a characteristic of urban and infrastructure development in Brazil (Rolnik, 2019). Working with elected officials to understand their concerns, needs, and accommodate them as much as possible was part of the business ethos. "The service is local. How can I not talk to the mayor? The mayor is my client," exclaimed a former manager of CAB Ambiental when I asked about how pre-existing and current private holdings compared in terms of how they approached business risks.[85]

[79] Interviews I52 (private sector consultant, 2019); I55 (private sector consultant, 2019). Both had worked as managers of some of the largest private firms at the time.
[80] Managers I interviewed who worked for these holdings at the time attempted to minimize this construction bias, arguing that the companies progressively shifted towards an emphasis on operational efficiency. Nevertheless, the generalized perception among other actors I interviewed was that the construction bias persisted.
[81] Interview I76 (finance, 2021).
[82] Interview I13 (law office, 2021). It is worth noting that construction giants such as Odebrecht, Galvão, Queiroz Galvão, and Carioca—core shareholders of sanitation holding companies—were among the top political campaign donors in national elections held between 2002–2014 (Carazza, 2018), before donations by corporations were banned in 2015. They also played a role in municipal elections: in 2012, Melo (2021) found that construction groups accounted for 22% of political donations at the local level, second only to commercial firms. These contributions helped sediment relations with politicians, which could be advantageous for project development, bidding, regulatory outcomes, access to financing or tax subsidies, and so forth.
[83] Electoral laws prohibited campaign donations from concessionaires of public services to politicians. Correio Braziliense, "Executivos da Odebrecht confessam caixa dois de R$ 300 mil para ex-prefeito," 15 June 2017.
[84] Interviews: I52 (private sector consultant, 2019); I74 (finance, 2021).
[85] Interview with manager A (private operator, 2019). Whenever the names of firms are mentioned in connection to an interviewee, I will omit the interview reference code to protect anonymity. In these instances, I distinguish among interviewees by using capital letters (e.g., "A", "B", and so forth).

"You have to create the adequate instruments for dealing with this reality, not try to change that reality," the manager added. For an investor such as Odebrecht, this perspective was a decades-old philosophy. Norberto Odebrecht, the group's founder, wrote in his rulebooks that "'whatever the client desires or needs, whatever the client considers valuable, that is decisive.' And he made it clear that the client was the elected authority (*governante*), not the state" (Gaspar, 2020: 45). These relationships were more than simple business transactions. Norberto's son, Emilio Odebrecht, lectured as much in 2008—shortly after creating Odebrecht Ambiental—to a crowd of Odebrecht managers and their families who attended the company's traditional end-of-year gathering: "It is pointless to have a mere commercial relationship, based on interests. Remember that trust is not earned through quick, one-off contacts, on top of an agenda crowded with demands. We earn trust, above all, through respect, coexistence (*convívio*), and mutual knowledge" (Gaspar, 2020: 51).

Another dimension of political embeddedness, which enabled such "coexistence" on the ground, concerned how holdings approached relationships with their subsidiaries. While there were differences in managerial approach across the holdings, on the whole they tended to afford greater decision-making autonomy to their subsidiaries, what I refer to as organizational decentralization. In addition to facilitating relationship-building with local officials, autonomy "at the edges" allowed subsidiaries to address context-specific or emergent issues with greater agility. In fact, the idea was not exclusive to fully private holdings. Sabesp, São Paulo's state company, had followed a similar principle in the 1990s when it created different business units in the state. According to one long-time manager, it was "much more efficient for Sabesp to have a manager that knows the mayor, especially up-country, [a manager] that goes to the same social club and so forth."[86] Among the private holdings, Odebrecht Ambiental was perhaps the most extreme exponent of a decentralized organizational culture. Local teams and regional managers were responsible for strategic investment and operational decisions[87] and had total freedom to talk to officials and close deals.[88] At Aegea, the spirit of a decentralized approach lived on in the company's slogan: "Masters of Brazilianness" (*Mestres em 'Brasicidades'*), an allusion not only to the firm's presence across the territory but also to the ability to adapt to the idiosyncrasies of local contexts—including, presumably, political ones. I elaborate further on this dimension when examining how governance under financial investors re-shaped this approach.

4. Disorder

This politically embedded model of service delivery governance began to unravel as the castles built by Brazilian construction business groups dissolved into sand. The disintegration began with Lava Jato. The money-laundering probe broke out in 2014 and expanded into a broad-scale and long-lasting[89] anti-corruption investigation. The scandal implicated several Brazilian construction groups—including some of the core shareholders of private sanitation holdings—in overpriced contractual

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[86] Interview I29 (CESB, 2019).
[87] Interviews: I35 (private operator, 2019); I55 (private sector consultant, 2019); I73 (private sector consultant, 2019).
[88] Valor Econômico, "Gigante da construção vai ao fundo do poço após 75 anos," 18 June 2019.
[89] The investigative task-force behind the Lava Jato operation lasted for nearly six years. It was disbanded in February 2021 by President Jair Bolsonaro.

schemes and illicit payments to politicians of all stripes, ravaging Brazilian politics.[90] These malfeasant deals primarily involved Brazil's state-owned oil company, Petrobrás, but encompassed other infrastructure sectors such as energy, transportation, and, to a lesser degree, sanitation.[91] The anti-corruption inquiry progressively took a toll on construction business groups—an effect compounded by Brazil's growing economic crisis after 2014. Revenues declined as they lost contracts, confronted interruptions in existing infrastructure projects, and faced trouble accessing credit due to compromised reputations and lower credit ratings.[92] Odebrecht, whose name became irrevocably associated with the scandal,[93] saw its net worth decline from 9.1 billion Reais in 2013 to 5.4 in 2017.[94] Effectively, as construction business groups were thrown into disarray, Lava Jato had the unintended consequence of disordering the ownership and governance models that had characterized the formation of the private sanitation market, paving the way for financial investors to play a bigger role.

I do not mean to suggest that construction business groups operated "outside" of finance. In the real estate sector, scholars have noted that construction groups have often acted as brokers in the financialization of urban development, connecting investment funds to developers, service providers, and policymakers in Brazil's largest urban centers (Fix, 2011; Melo, 2021). In the sanitation sector, holdings controlled by large construction business groups drove inceptive financialization by seeking out strategic partners in the state and in multilaterals to strengthen their capital structure and support growth strategies. For example, BNDESPar, the investment arm of BNDES, acquired a minority participation in CAB Ambiental in 2012. Meanwhile, between 2012–2013, the International Finance Corporation (IFC), the World Bank's private equity arm, and GIC, the Singaporean sovereign wealth fund, acquired minority stakes in Aegea. This ownership reconfiguration followed a shake-up of Grupo Equipav, Aegea's majority owner, which split up and restructured its businesses due to mounting debt and disagreements among controlling families.[95] According to one manager, bringing in financial investors worked as a "rubber stamp" for the holding's credibility and reputation: "when we went prospecting, we could say 'look, we have IFC.' This boosted Aegea's credentials (*deu uma credencial*) in the sanitation market."[96]

When Lava Jato hit, other private sanitation holdings also looked to attract financial partners as a means for staying afloat while still keeping construction groups at the helm. In late 2014, Odebrecht Ambiental did financial roadshows with the goal of issuing debentures to support infrastructure investments, and also attempted to lure Blackstone, the world's largest private equity group, into acquiring a stake in the company. CAB Ambiental courted an equity investment from the

[90] The political repercussions of the scandal were significant. It led to the arrest of several high-profile political figures, including former President Lula, and played into the impeachment of President Dilma Rousseff in 2016. It also arguably contributed to the rise of a conservative populist wave—propelled by anti-corruption rhetoric—that resulted in the election of President Jair Bolsonaro in 2018. It also reverberated elsewhere in Latin America: the former president of Peru, Alan Garcia, committed suicide after being implicated in the scandal.
[91] Valor Econômico, "Lava-Jato começa a investigar áreas de transporte e saneamento," 10 February 2016.
[92] G1, "Lava Jato e crise derrubam receita das grandes construtoras em 2016," 04 May 2017; Estadão, "Operação Lava Jato deixa mais de R$90 bi em obras paradas", 18 June 2017.
[93] So much so that in 2020 the group changed its name to Novonor.
[94] Carta Capital, "Lava Jato: 5 anos depois, empresas ficam livres" 29 September 2019.
[95] Monitor Mercantil, "Sócios da Equipav se separam em mais de 20 empresas," 23 June 2010.
[96] Interview with manager B (private operator, 2019).

Brazilian private equity group GP Investments as Grupo Galvão, CAB's core shareholder, struggled financially due to the lack of payments from Petrobrás for other projects. However, the reputation costs of Lava Jato poured cold water on those negotiations.[97] In 2015, Grupo Galvão filed for bankruptcy. Odebrecht would follow suit in 2019, after having shed several assets to raise cash amid a credit crunch.

Table 3.2. Ownership transitions among three largest private investor firms in the sanitation sector

Investor firm	**Original shareholders**	**Transition to financialized ownership**	**Shareholders in 2019**[98]
BRK Ambiental	Odebrecht S.A.	2017	- Brookfield Business Partners* (Private equity, Canada) - FI-FGTS (State-led investment vehicle, Brazil)
Aegea	Grupo Equipav	2012–2013	- Grupo Equipav* (Construction group, Brazil) - GIC (Sovereign wealth fund, Singapore) - IFC (Investment arm of World Bank)
Iguá Saneamento	Grupo Galvão Participações-Galvão Engenharia	2017	- FIP Iguá*, managed by IG4 Capital (Private equity, Brazil) - FIP Mayim, managed by IG4 Capital - BNDESPar (State-led investment vehicle, Brazil) - CYAN (Investment fund)

Own elaboration. Notes: "*" Majority participation. Sources: BRK Ambiental, "Annual Report," 2018; Aegea, "Apresentação Institucional," July 2019; Iguá Saneamento, "Relatório da Administração 3T2019," 2019.

For financial investors looking for market opportunities, there is nothing like a "distressed asset"—or so I heard a few times during my fieldwork. In the second half of 2015, Global Water Intelligence (GWI), a platform dedicated to covering the private water industry, reported that bidders were queuing up for sanitation concessions in Brazil. "Multiple bankruptcies could dramatically change the ownership structure of the water concessions market," GWI announced.[99] The prediction held. Between 2016–2017, Odebrecht Ambiental was acquired by Brookfield Business Partners, the private equity arm of the Canadian financial group Brookfield Asset Management, and became BRK Ambiental. Around the same time, the newly created Brazilian private equity group IG4 Capital acquired CAB, pushing away Grupo Galvão and rebranding the holding as Iguá Saneamento.

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[97] Valor Econômico, "Operação Lava Jato dificulta negócios em saneamento," 08 January 2015 (Acervo Senado Federal); O Estado de S. Paulo, "Operação Lava Jato dificulta emissão de dívida para projetos da Odebrecht," 09 December 2014 (Acervo Senado Federal). Efforts to "bring in" private equity accompanied an increasingly more active private equity market (Puente, 2020), as well as the institutional development of Brazil's debt capital market (de Bragança et al., 2015).

[98] Following the transitions to financialized ownership, ownership structures have been fluid. Iguá Saneamento's, for example, has undergone several changes. In 2021, its ownership was largely organized around two investment funds—FIP Iguá and FIP Mayim—both managed by IG4 Capital. The funds' core investors, however, were CPP Investment Board (CPPIB) and AIMCo, two Canadian Pension Funds. As for Aegea, IFC sold its stake in the company in 2019. In 2021, Itaúsa, a Brazilian investment holding company, acquired a minority stake in Aegea.

[99] Global Water Intelligence, "Brazilian Car Wash," 17 September 2015.

These acquisitions marked the transition to a market configuration in which the three dominant private holding firms in the sanitation sector were either controlled or had relevant participation from financial shareholders (Table 3.2 above summarizes these ownership transitions). As aforementioned, Aegea already featured financial investors as part of its capital structure, albeit in minority positions. The fourth largest player, Águas do Brasil, did not experience similar ownership shifts, remaining "100% national," as one company manager put it.[100]

The Lava Jato scandal not only devastated construction business groups, inadvertently creating direct opportunities for financial investors to take over some of the largest private sanitation holdings, but it also disordered what up to that point had arguably been the very "Brazilian way of doing business."[101] "Lava Jato was as follows," mused one interviewee, "we saw a hole and in it there was a feather; we pulled the feather and there was a wing; when we pulled the wing, there came a chicken; when we pulled the chicken, the whole chicken coop came out. These relationships had been in the infrastructure and construction sectors for years."[102] A 2019 editorial of one of Brazil's largest newspapers, *Folha de São Paulo*, credited the investigation with helping to "collapse the traditional mechanism for mobilizing capital for large infrastructure works in the country—the spurious association of politicians eager to overprice with contractors organized in cartel, all financed by [national] public banks and state-owned pension funds."[103] Beyond the unravelling of such "grand" schemes, however, my interviewees often referenced a "pre-" and "post-Lava Jato" relational business context: the former marked by some level of "flexibility," as some put it; the latter characterized by greater formalization of organizational practices and relationships (both political and commercial).[104] This involved, for example, the adoption of internal compliance programs to detect and fend off violations of laws, regulations, and ethical standards. The scandal contributed to a boom in compliance consulting[105] as firms from various sectors, including construction groups, sought to implement these programs.

This shifting context, unsurprisingly, jeopardized the model of political embeddedness that had marked the consolidation of private sanitation operations under construction business groups. The greater insertion of private sanitation delivery into the financial world, as I discuss next, intensified the need for shifts in political strategy among private sanitation providers. It should be noted, however, that to examine urban sanitation delivery governance within this new investor landscape is to explore the ascendancy of financial investors in relation to the post-Lava Jato context, one in which relational norms had been unsettled, concerns with corruption were high, reputations were under scrutiny, and trust in politics—at all levels—had eroded. It was in this state of flux that old and new investor rationalities clashed and gave rise to centripetal politics.

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[100] Interview with manager H (private operator, 2019).
[101] Margolis, M., "Latin America's Biggest Corporate Crime Gets a Worthy Epic," Bloomberg, 02 January 2021.
[102] Interview I72 (multilateral agency, 2021).
[103] Folha de São Paulo, "Ruínas da Odebrecht," Editorial, 24 June 2019.
[104] Interviews: I23 (private operator); I25 (private operator, 2019; I43 (law office, 2019).
[105] G1, "Compliance vira mercado em alta para escritórios de advocacia e consultorias," 09 July 2017.

5. Centripetal politics

"The hairs of the Canadians stand on end at some of the things that happen," remarked one manager at BRK Ambiental—formerly Odebrecht Ambiental—during our meeting at their headquarters in Morumbi, one of the highest valued neighborhoods in São Paulo city.[106] The "things" alluded to were the political challenges the company faced in its local operations, while "the Canadians" referred to the holding's majority shareholders, Brookfield Business Partners. Among the things that horrified the private equity group were mayors unwilling to pay contractual guarantees or approve tariff revisions. The contrast with the days in which construction business groups were at the helm was noticeable. When we spoke in 2019, one firm manager from these past times recalled a recent meeting with an asset management firm that, despite being interested, felt hesitant to invest in a sector perceived as so subject to political instability. "This is the context," the former manager argued, "if you can't deal with it, don't play."[107] But the newly revamped private sanitation companies were not content to simply play the same old game. Bolstered by the growing prominence of financial investors, they progressively set out to change the playing field. This entailed gaining more control of subsidiary operations and shielding themselves from local political relations while also seeking some refuge in upper scales of governance.

While the reference to "the Canadians" implies a certain foreignness to the Brazilian context, that is a misleading impression. The Brookfield group, for example, had been present in the country since the late 19th century, when it founded the private electricity utility São Paulo Tramway, Light and Power Company (or simply Light). Since the 1970s, Brookfield had invested in over 25 companies in Brazil—including a growing presence in urban real estate and agricultural land (Barros Junior, 2019). It is, nonetheless, a "global" investor; in 2019, Brookfield held 350 billion US Dollars in assets under management globally, 40 billions of which were in South America.[108] IG4 Capital, in turn, is an asset management firm with Brazilian roots[109] created in 2016. It specializes in "turning around companies under special situations," particularly distressed or underperforming ones in emerging markets. Its investment philosophy integrates Environmental, Social, and Corporate Governance (ESG) and works towards "sustainable capitalism."[110] Iguá Saneamento was IG4 Capital's first undertaking. In 2017, IG4 raised 410 million Reais[111] for the private equity fund FIP Iguá, which acquired CAB Ambiental. Beyond raising capital, IG4 has since also played an active role in Iguá's day-to-day management.[112]

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106 Interview with manager C (private operator, 2019).
107 Interview I55 (private sector consultant, 2019).
108 BRK Ambiental, "Apresentação Institucional," 07 August 2019. Its presence in Latin America was more significant than in the Asia-Pacific region at the time, where it only had US$ 27 billion under management.
109 Its owners had ties to the Brazilian private equity group GP Investments, which had previously considered acquiring a stake in CAB Ambiental.
110 IG4 Capital, "Who We Are," Website. Available at https://ig4capital.com/ (Accessed 03 October 2021).
111 Equivalent to about 128 million US Dollars at the time, based on an average US Dollar to Real exchange rate of 3.19 Reais in 2017. Source: https://www.exchangerates.org.uk/USD-BRL-spot-exchange-rates-history-2017.html (Accessed 03 October 2021).
112 Interviews with manager I (private operator, 2019), manager D (private operator, 2019).

What was different about how these investors approached the politics of sanitation delivery, thus, was not necessarily a lack of familiarity with the Brazilian context, but the lenses through which they read it. One of these lenses was what I refer to as *funneling*, or an increased focus on return extraction directly, and primarily, from the provision of services. This contrasts with the more "holistic" framework that construction groups had deployed. I do not suggest, of course, that construction groups did not care about returns from service delivery or profitability. As one manager from that time observed to me: "It's capitalism, after all." What I highlight is that financialized ownership shifted the logic of return extraction. It decoupled it from its prior umbilical connection to construction and narrowed it to operational issues with direct bearing on revenue streams from service delivery. To borrow the language my interviewees used, there was a shift away from CAPEX (capital investments and costs) towards OPEX (operations). "When we came in," a manager at Iguá Saneamento noted, "our restructuring plan was to forget investment programs, conceptions, and focus very heavily on operational efficiency (…) The [preceding company] had a statement of operational focus but we did not see that. In our case here, our focus is on performance."[113] Between 2017 and 2018, Iguá went from registering losses of R$ 74.5 million across its operations to earning a profit of R$ 28.1 million.[114]

Funneling entailed shedding the engineering DNA that had long been a core trait of the sector. At Aegea, one manager reported their biggest challenge was "running a company of engineers,"[115] while another related the following in response to a question about what they had personally learned in their career at the firm:

> Another challenge for me was to understand the financial market itself. So, with the entry of the [financial shareholders], the company's vision totally changed. The way we looked at the business, from the point of view of profitability, of project evaluation, was one. After they came in, the discussions became different. I think before we looked at it very much from a technical point of view, "engineering-esque" (*engenheirístico*), you know? (…) With the entry of these [investors], you need to look at it from the point of view of profitability to the shareholder.[116]

Interestingly, while construction business groups were also investors, they were not viewed as shareholders in the same way that financial investors were.

A second important lens was *predictability*, or the consistent reporting and forecasting of returns. Predictability requires both some level of institutional regularity and control over assets,[117] particularly when investors expect stable cash flows from service delivery to distribute dividends and repay debt. "Here is what I think," explained one lawyer when I asked how changes to financialized ownership mattered for contractual relations, "you have more urgency to generate results. There is no longer the possibility of… imagine having a company controlled by Canadians or Japanese, there is no longer the possibility of explaining to [them] that you won't question the mayor's order to not

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113 Interview with manager D (private operator, 2019).
114 Valor Econômico, "Sob novo comando, Iguá lucra em 2017," 13 March 2018.
115 Interview with manager E (private operator, 2019).
116 Interview with manager B (private operator, 2019).
117 Interview I20 (finance, 2019).

readjust [tariffs] because it's an election year."[118] To the extent that tariffs affect revenues, they play directly into the creation of shareholder value. Under the lens of predictability, then, regulatory fragmentation emerged as a source not only of greater transaction costs but of potential revenue instability across operations.

This concern went beyond the direct perspectives of financial shareholders of sanitation holdings. It involved paying heed to the expectations and perceptions of financial market actors broadly—and of potential future investors or creditors therein who looked at the sector "from above." This related to a third lens, *credibility*, or the ability to maintain good standing and reputation in the eyes of the market with a view towards raising more capital in the future[119] or potentially going public. Explaining why existing sanitation companies had trouble going public, for example, the head of one private equity group noted: "Equity investors… they are still very afraid of exposing themselves to a highly fragmented market, with regulation that is still, as I mentioned, very dependent on municipalities, on mayors, on municipal regulatory agencies (…) I think that's a legitimate apprehension. They say: 'Well, Brazil is problematic, chaotic, from a political and institutional point of view, what if there are any issues? Are there any controls?" [120] One fund manager at a financial firm specialized in equity securities concurred, "I think the biggest fear the private sector has is this whole issue of having to negotiate mayor-to-mayor (…). The biggest risk in an investment such as this, for those of us who are not inside the company, is to know whether there is nothing there that has effectively collapsed."[121]

The translation of these lenses into forms of centripetal politics began at the organizational level. Unlike the more decentralized approach pursued under construction groups—a core dimension of their political embeddedness—financialized holdings sought to standardize operational processes and centralize, to varying degrees, their relations to subsidiaries. That is, holdings began to play a more important role in the day-to-day activities of their local providers, from deciding on how to repair a broken pump to commercial strategies. "I can say the following," observed one manager who experienced the transition to financialized ownership at BRK Ambiental:

> In the last two years the company has undergone a very big transformation both in terms of culture and of governance. It stopped being a family business (…) that, to me, was one of the best companies I've ever worked for because it had a characteristic of granting you autonomy to get results, there was a relationship of trust. And today the culture is more centralized, more professional. It's almost a corporation, you don't have an owner, you have shareholders with shares in the stock market in Toronto, New York, London, São Paulo.[122]

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[118] Interview I43 (law office, 2019).

[119] In the past five to seven years, Aegea, BRK Ambiental, and Iguá Saneamento have all sought to raise more capital for investments through different rounds of debentures issuances. In the case of Aegea, for example, domestic and international capital markets were the sources of 74.2% of its debt in 2021 (Aegea, Apresentação institucional, February 2021 (power point downloaded from company website on 18 March 2021)).

[120] Interview I76 (finance, 2021).

[121] Interview I54 (finance, 2019). Corroborated by I5 (finance, 2019).

[122] Interview with manager F (private operator, 2019).

One consultant put it more simply: "BRK Ambiental saw the same risks that Odebrecht had seen but decided that a centralized approach was better."[123] In comparison, Águas do Brasil joined the movement to centralize decisions concerning hiring and commercial processes at the holding level but maintained operational decisions in the hands of local subsidiaries.[124] Local managers reported that Águas do Brasil's administration council generally maintained a "hands-off" approach and gave them freedom to make technical decisions.[125] This contrasted with observations made by managers and employees at financialized holdings, who suggested a more active participation from their administration councils and closer oversight from financial shareholders.

This does not mean that financialized companies no longer sought to adapt to contextual realities on the ground, but that local providers had less flexibility for handling issues independently.[126] For example, during a field visit to one local operation controlled by a financialized holding, local professionals walked me through a program designed to use technology and smart data to continuously monitor infrastructure assets and operational processes, facilitating the centralization of decision-making. The effort was presented as a means for making local operations more legible to the holding and to its shareholders. As one manager at the holding explained to me, the logic was simple: to the extent that their main input was capital, any issues that compromised their standing in the eyes of potential creditors were their biggest risk.[127] The program's implementation on the ground was not without resistance. Company employees had complained about the loss of autonomy over their work: "no one likes to be controlled," observed one of the professionals heading the program.

The deconstruction of the former model of political embeddedness also encompassed changes to corporate governance and management. This included the appointment of independent members to the board of administration—whereas in the past board members tended to be appointed by the family owners of construction groups. Company executives were also more likely to be legally responsible for failures to meet obligations to shareholders, creating additional incentives for companies to more closely oversee operations and make sure business was being "adequately conducted."[128] Moreover, the aforementioned adoption of compliance programs—a demand from both investors and the post-Lava Jato market context—contributed to formalizing commercial relationships with suppliers as well as political relationships. Between 2017 and 2018, all major private holdings in the sanitation sector developed compliance programs, including codes of conduct, anti-corruption policies, and dedicated hotlines for reporting corrupt or suspicious activities. According to some interviewees, however, compliance changes among the holdings controlled by financial shareholders were the most stringent: "Brookfield implemented a compliance so strong that many

[123] Interview I55 (private sector consultant, 2019).
[124] Interview I19 (private operator, 2019).
[125] Interview with manager J (private operator, 2019).
[126] In some instances, greater organizational centralization reflected concerns with the operational capacity of local subsidiaries (i.e., their ability to perform according to the holding's expectations), not simply concerns with political risks (Interview I57, private operator, 2019).
[127] Interview I7 (private operator, 2019).
[128] Interview I43 (law office, 2019).

thought it would kill the company," observed one consultant.[129] Relations with local officials still mattered, of course, but, in the perception of one long-time manager with experience at different private sanitation firms, there was less room for negotiating:

> What is happening is that when the mayor approaches the person and says, 'there is someone who is a cousin of whomever that needs a job, can you see to it?', the person stands up and says, 'mayor, this issue I cannot discuss,' and leaves. So, this causes an unnecessary lack of connection (*falta de liga*). So, I think compliance is exaggerated, escaping common sense. You could listen to them (…). 'Look, mayor, I'll see if I have a job opening and if the person's profile fits, we can do an interview, a selection process.' You didn't commit a crime, there will be a selection process. If the person doesn't get it, you say 'mayor, they didn't meet our requirements,' end of story. But there are companies that are standing up and leaving. What does this cause? An arrogance, from the standpoint of the mayor or the councilmen that made the request.[130]

It is difficult to ascertain the extent to which these organizational changes have disrupted historically-ingrained business practices. One private equity investor equated the effort to a "civilizing process,"[131] implicitly positioning finance as a modernizing force. But modernizing projects are always filled with tensions, marked by resistance, and thus never totalizing (Mitchell, 2002). One financialized holding learned this the hard way when discussing the readjustment of the service tariff in one of its local operations after the end of a previously negotiated discount. Initially, the firm did not adjust the tariff per the mayor's request, who reportedly did not want the electoral burden of a tariff increase during his term. A few months later, the firm did not ask first, it just applied the adjustment. Legal battles ensued, with the mayor even trying to take over the subsidiary. "We had to change the relationships at the bottom (*embaixo*), re-nurture them, and move things forward," recounted one manager at the holding.[132]

Lawyers I spoke with observed a tendency towards greater litigation within this transitional environment, as moving to courts—or judicialization—also became a strategy for shielding companies from political relations.[133] One observed, in particular, that perhaps what was lacking, among financial investors, was a sensibility towards the fact that the extraction of stable cash flows is not inherent to an asset but is also, and crucially, politically constructed: "I think the investor that bought these assets or became a shareholder saw in them a stable cash flow. But in reality, you need a lot of energy to realize this cash flow. A lot of energy and a lot of convincing. It's the day-to-day work there with the public partner [*poder concedente*], legitimate but tough."[134]

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[129] Interview I73 (private sector consultant, 2021); corroborated in interviews I6 (private operator, 2019), I12 (law office, 2019), I52 (private sector consultant, 2019).
[130] Interview I38 (private operator, 2019). This behavior was precisely what another interviewee, a manager at Iguá, recounted doing in one instance: "So, the mayor and the local public prosecutor tried to induce a certain conversation and I said: 'Mayor, here is the deal, you have a beautiful city, I know it, it's wonderful, you'll have great success, but I'm leaving.' This conversation lasted five minutes. I got up and left" (Interview with manager D, private operator, 2019).
[131] Interview I76 (finance, 2021).
[132] Interview I57 (private operator, 2019).
[133] Interviews: I12 (law office, 2019); I43 (law office, 2019).
[134] Interview I33 (law office, 2019).

Perhaps paradoxically, given that investors such as private equity groups are often portrayed as paragons of efficiency and speed, centralization, formalization, and judicialization may have a countervailing effect, slowing things down. Because litigation can take years, judicialization can curtail and decelerate investments as private firms await juridical decisions. Moreover, organizational centralization can lead to more rigid and sluggish decision-making. One regulator at an intermunicipal agency recounted the following example when I asked if they had noticed differences in their relationships with private subsidiaries after changes to financialized ownership. After contacting a local private provider about a problem, it took much longer than in the past for them to hear back: "In other times, the operations director himself, which operates there in the municipality, would have resolved this issue in ten minutes but this process of communicating with São Paulo [the holding], waiting for them to assess, and getting back to us took a week."[135] In practice, then, adjusting to the lenses through which finance looked at service provision could present further local governance challenges to private providers—challenges that risked offsetting the search for efficiency and for stable returns.

As private holdings sought to both gain more control of local operations and distance themselves from local political relations, we observe another dimension of centripetal politics: business mobilization in support of regulatory centralization at the federal level and of the development of regional—as opposed to local—arrangements for service delivery. This effort to "move up" the governance ladder gained concrete expression with the enactment, in July 2020, of Law n. 14.026. Among the changes introduced by the new legislation, which substantially revised the existing legal framework for sanitation provision, was the creation of a national level regulatory body to standardize regulatory norms and practices for service delivery across the territory. This was done by expanding the regulatory responsibilities of the National Water Agency (ANA), which previously regulated only water resources management. Although ANA was not tasked with regulating sanitation services directly, the legislation encouraged—or forced the hand of—subnational agencies and governments to follow ANA's guidelines by conditioning access to federal public funds to norm compliance. The new legislation also created incentives for what became known as "regionalization" (*regionalização*), or the organization of municipalities into regional blocks that would serve as the basis for the concession of services to providers. The main arguments for this change were to achieve economies of scale and to combine service provision in richer cities with poorer ones, thus rendering concession contracts more attractive to investors while also potentially improving service coverage where it was most needed. Implicitly, however, regionalization also meant that services would no longer be handed over to providers on a municipality-to-municipality basis, thus reducing the need to negotiate mayor-to-mayor. The responsibility for creating these blocks within each state was given to state governments, raising criticisms that the legislation curtailed the constitutional rights and autonomy of municipal governments.

As I discuss further in a separate article (Cruxên, 2021b, see chapter 4), private sanitation providers played a key role not only in molding the content of the legislation, but in leveraging different pathways of influence to help the legal and regulatory reform succeed. The idea to promote

[135] Interview I42 (regulatory agency, 2019).

regulatory standardization, for example, was planted by the association of private sanitation providers (ABCON) in consultations with the federal government in 2016.[136] At the time, the model of political embeddedness private providers had long pursued was crumbling along with the downfall of construction business groups, and private sanitation companies faced trouble accessing capital. As financial investors became more prominent among firms in the sector, the call for regulatory standardization strengthened. According to one manager at Aegea, the expectation was that subnational agencies would abide by the guidelines created by ANA due to both the financial incentives incorporated into the legislation—namely, ability to access public resources—and a sort of "moral enforcement:" "whoever doesn't follow [the norms], it will raise questions from public prosecutors or the justice system: 'Why are you not following?'" Perhaps more tellingly, the manager added, "Whoever doesn't follow will [also] be sending sort of mixed signals to the market."[137]

6. Conclusion

This study has explored the pathways for and political ramifications of the insertion of financial capital into the provision of urban sanitation services in Brazil. By historically tracing the development of private participation in the sanitation sector, I first show that contingent processes of market transformation may create openings for investors such as private equity groups to become more relevant players in the provision of urban sanitation services via the acquisition of ownership stakes in private service providers. Specifically, in Brazil financial investors capitalized not on localized modes of entrepreneurial urban development per se but largely on the ramifications of a broad corruption scandal, Lava Jato, for the organization of the private market for sanitation delivery. The scandal destabilized deep-rooted forms of state-business relation and pushed out the investors who had historically dominated private sanitation provision: domestic, family-owned construction business groups. While the transition to financialized ownership built on the gradual work construction groups had done over the years to gain scale by consolidating disparate local private operations into holdings, it also pushed private sanitation firms to move away from the engineering ethos and political logics that had informed how these firms approached service provision when construction groups were at the helm.

A second insight from this study, then, is to illuminate how financial logics translate into political logics of service delivery within specific markets. While much attention has been paid to the political origins of deepening financial engagement in urban development and infrastructure provision, its consequences for the political and regulatory relationships that govern infrastructure service provision, for instance, remain underexplored. Comparing the politics of service delivery under construction business groups versus financial investors, I argue that the transition to financialized ownership pushed private sanitation holdings to engage in *centripetal politics*: they sought to move away

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136 The association had already made a similar proposal at a special sub-commission on sanitation policy held in Congress in 2015. At the time, construction business groups were already under stress due to the repercussions of Lava Jato. See Comissão de Desenvolvimento Urbano, Câmara dos Deputados, 2015, "Relatório Final da Subcomissão Especial da Universalização do Saneamento Básico e do Uso Racional da Água – SubÁGUA," Brasília, November 2015.

137 Interview with manager G (private operator, 2019).

from local politics in search of more centralized scales of organizational and institutional governance. The process of business consolidation around a handful of holding firms that large construction business groups had spearheaded progressively created a tension between a concentrated market configuration and a fragmented regulatory context in which firms had to navigate multiple and mutable political relationships. While family-owned construction business groups had pursued a politically embedded model of service delivery that accommodated political instability across their consolidated operations, this model crumbled following the Lava Jato scandal and the growing participation of financial investors. Within this new market context and under the watchful eye of financial investors, sanitation holding firms sought to curb ties to local elected officials, centralize organizational decision-making, and mobilize for regulatory centralization. These forms of centripetal politics were strategies for improving their credibility with investors, better monitoring assets, and enhancing the predictability of returns from service delivery within a fragmented environment viewed by financial investors as politically unstable.

This analysis offers important insights for the theorization of the relationship between finance and the politics of urban infrastructure provision. First, while extant literature has privileged the analysis of the political role of states—especially local governments—and networks of intermediaries in promoting financial deepening within cities, this study recovers political agency for financial investors and firms to illuminate their role in shaping the governance of urban infrastructure services not simply within particular cities but across cities. This requires, on the one hand, paying greater attention to how different markets are structured—for example, by exploring how myriad local private operations may be spatially linked through joint ownership. On the other, it requires more careful attention to business strategies and forms of politics under heterogenous investors. While private actors may share a common interest in profit-making, how they set themselves up to achieve this end may vary depending on ownership structures and shifting state-business relational norms. Although extant literature has offered insight into the calculative practices and rationales that inform the conversion of infrastructures such as water and sewage into financial assets, this study underscores that we also need to understand the political logics and relationships that enable—or hinder—the extraction of returns from these assets. My analysis of centripetal politics in the context of urban sanitation provision in Brazil provides a step in this regard.

More broadly, this study helps to shed light onto how "financialization may create the conditions for its own deepening by conditioning the regulatory environment in which it is situated" (Pagliari and Young, 2020: 113). Interestingly, in the case of sanitation delivery in Brazil, the construction of institutional stability within a financialized investor landscape entailed mobilizing for the addition of a regulatory layer at the national-level, on top of existing subnational regulatory bodies. This finding adds to recent scholarship problematizing the common association of finance with preferences for deregulation (Brooks, 2020). Beyond that, it problematizes spatial lenses such as the "global-local" interconnection that have often been mobilized to situate the politics of local urban development and infrastructure provision in relation to the globalization of finance, often implying a dwindling national scale (Brenner, 2019). Extant scholarship has typically privileged the study of particular cities or projects as key sites for the extraction of financial returns (Klink et al., 2019). In part, this analytical lens reflects the very tracing of financial dynamics to variegated decentralization processes that elevated the role of cities and metropolitan regions as sites of institutional experimentation since the 1970s (Brenner, 2009). But while this localized lens helps to anchor finance in place, it risks obscuring shifts to the governance of urban infrastructures that extend across different scales—and reverberate downwards towards the local. My analysis suggests, as others have argued (Christophers, 2012; Brenner, 2019), that no geographic or political scale is inherently meaningful for understanding how private actors engage in the production and governance of urban space. Attention to investor heterogeneity, however, may help to unpack the conditions in which capital moves across scales. This attention is akin to Lee's (2017) argument that we need to consider not only varieties of capitalism but "varieties of capital." In South and Southeast Asia, scholars have noted that state capital has been critical to speculative forms of urban development therein, favoring centralized models of infrastructure governance (Shatkin, 2017; Dimitar, 2021). In the Brazilian context, I show that variation within private capital itself helps us to understand the rediscovery of the national scale by sanitation providers within a consolidated market but fragmented regulatory context. Further comparative research might provide greater insight into the conditions under which financial engagement might translate into similar forms of politics in other contexts.

At a practical level, the findings of this study raise questions about the implications of centripetal politics under financial investors for democratic accountability and equity in the provision of sanitation services. In the 1980s and 1990s, efforts in Latin America and elsewhere in the global South to devolve the responsibility for service delivery to local governments were often meant to bring services closer to the needs of local residents and facilitate public participation, potentially enhancing effectiveness and accountability (Carolini et al. 2019; Perry and Naqvi, 2017; Fung and Wright, 2003). These kinds of decentralization reforms were also at times positioned as beneficial to privatization reforms,[138] to the extent that making subnational governments responsible for regulating service providers could not only "allow local conditions and preferences to shape regulation" but also encourage "competition among subnational regulators to attract private investment" (Kessides, 2004: 96). The efforts to scale governance up and to standardize and centralize regulatory activities that I explore in this study, however, run counter to those arguments. Granted, my analysis explored a moment of transition—and hence tension—between old and new private investment rationales. It is unclear the extent to which this kind of centripetal politics will deliver on the expectations of financial investors or will indeed disrupt deeply ingrained forms of business politics. Further inquiry into how local governments have responded to changes in ownership and business strategy among private providers, as well as into the repercussions of regulatory standardization should help to disentangle the broader ramifications of centripetal politics for local service delivery. Local governance frictions between public and private actors might push some measure of adaptation among private firms, balancing standardization with flexibility. But centralization might also constrain the room for legitimate forms of political struggle over the direction of local service delivery.

[138] In the water and sanitation sector, however, Herrera and Post (2014) note that the objectives of privatization and decentralization reforms have often been at odds with one another: while the former tried to insulate service provision from politics, the latter tried to bring it closer to it by increasing public participation.

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Chapter 4

No Investors, No Reform: How Business Power Drove Regulatory Change in Sanitation Delivery in Brazil

1. Introduction

"We will change, really change, the reality of water and sanitation in the country."[139] This was the promise made by Brazil's Minister for the Economy, Paulo Guedes, during a press interview in August 2019 about a sweeping proposal to reform the legal and regulatory framework for sanitation provision[140] in the country. The reality in question was, according to the government, marked by underinvestment, inefficient public provision, fiscal strains, and inadequate service coverage. In 2019, nearly half of the Brazilian population lacked access to sanitary sewer systems, while about 20% (or 41 million) lacked access to water supply.[141] As a solution to such a reality, the reform's ambition was to foster greater private participation in sanitation delivery. In his characteristic penchant for hyperbolic statements, Guedes argued that by facilitating private investment the proposed legislation would extend access to services, improve public health, and enable millions of Brazilians to lead their lives with greater dignity.

Congress approved the new legislation less than a year later, in June 2020. The reform's triumph, however, was far from a breeze. One federal government official equated the process to warfare: "it was gunshots, punches, and bombs (*tiro, porrada e bomba*)."[142] The challenge began with the reform's very intent: to disrupt a long-standing service architecture centered on service delivery by state government-owned sanitation companies, decentralized regulation, and reliance on federal financing. One of the reform's chief aims, in fact, was to undermine the market power of state sanitation companies. But promoting this kind of institutional change is often hard; institutions carry a "status quo bias" (Mahoney and Thelen, 2010: 29). They imbibe historically-constituted power asymmetries and distribute power unevenly. The legacies created by pre-existing institutional configurations and policies often strengthen the interests of actors who benefit from the status quo, making it difficult for reformers to displace them. Existing sectoral groups—especially state

[139] "Reunião com Ministro Paulo Guedes - PL Do Saneamento," video interview published on the Facebook Page of Representative Evair de Melo, August 07, 2019.
[140] Sanitation in Brazil encompasses both the provision of water supply and sewage services. It does not concern water resources management, which is a separate policy domain. For short, I henceforth use simply sanitation to refer to both services, and "sanitation reform" to refer to the regulatory reform.
[141] According to data from the National Information System on Sanitation (SNIS), a public database maintained by the federal government, 170 million residents had access to water supply (equivalent to 80% of Brazil's population), and 110 million (52%) had access to sanitary sewer systems in 2019 (Brasil, 2020). These numbers, however, do not provide a full picture of sanitation access among the population. SNIS data is self-reported by service providers across the country and does not consider sanitation solutions such as septic tanks. In 2019, the sample covered about 92% of Brazilian municipalities with respect to water supply data, and 75% with respect to sewage.
[142] Interview I68 (federal government, 2021).

companies—were forceful opponents of the reform. So forceful that the federal government had struck out twice, with two failed executive decrees on the sanitation reform in preceding years, before the endeavor produced a home run in 2020.

This article explains how and why this reform eventually succeeded, in spite of strong entrenched interests and opposition. The natural reflex, when examining this question, is to look to the lessons learned from the neoliberal policymaking euphoria that propelled privatization and liberalization reforms in the 1980s–1990s. Latin American countries were particularly prolific in attracting private investment in infrastructure in the last decade of the 20th century, topping other regions in the world by a margin of nearly 200 billion in 2001 US Dollars (Kessides, 2004). At the time, international financial institutions exerted important policy pressures on governments, negotiating market reforms in exchange for fiscal relief (Doyle, 2012). Although domestic political dynamics shaped the varied ways in which these reforms were implemented, executives often took on the mantle of reformers. In Latin America, executives played a central role in accounts of market-oriented reforms, driven not simply by international pressures, but also by ideological views, electoral competition, or unfavorable macroeconomic contexts.[143] In some measure, this reflected the important role executives have historically had in shaping legislative activity and policymaking in the region, given the characteristics of its presidential systems.[144] Manzetti (1994: 67) observed, for instance, that in Argentina, Brazil, Mexico and Peru "privatization was rushed through executive orders."

While the recent market-oriented reform of the sanitation sector in Brazil echoes some of this past—especially in terms of the rationales invoked to justify the need for private investment—it does not entirely comport with the explanations scholars have mobilized to understand this earlier wave of reforms. First, unlike in the 1980s–1990s, there were no strong international pressures to privatize or increase market competition. In fact, the ambition behind the new legislation ran counter to the disillusionment with water privatization in Latin America following contested experiments in countries such as Bolivia and Argentina (Nickson and Vargas, 2002; Loftus and McDonald, 2001; Post, 2014). It also defied trends to return privately-provided services to public provision that have surfaced in cities such as Paris and Berlin (McDonald, 2018; Bel, 2020).

Second, although it is tempting to read this reform as an executive-led form of "neoliberalism 2.0"—especially in light of Brazil's recent embrace of economic liberalism wrapped in right-wing populism—this reasoning is simplistic. A willing government alone does not necessarily produce a market reform, particularly when faced with strong resistance from entrenched interests (Manzetti, 1994, 1999). In Brazil, President Fernando Henrique Cardoso (1995–2002) learned that lesson the hard way. Walking the original 1990s neoliberal path with the watchful eye of the International Monetary Fund (IMF)[145] on his back, he tried but failed to advance a similar pro-market reform of

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143 See, for example, Manzetti (1994, 1999); Stallings (1992); Teichman (2001); Murillo (2009); Campello (2015).

144 For old and new discussions on the role of executives in Latin America, see Gómez (1961) and Palanza (2021).

145 In February 1999, President Cardoso's government and the IMF agreed on a loan package to relieve concerns with the public deficit and currency instability. Among the commitments made by the government in exchange for the loan was the promise to continue to pursue "one of the most ambitious privatization programs in the world." See International Monetary Fund (IMF), 1998, "Letter of Intent from the Brazilian Government," 13 November 1998.

sanitation provision in 2001. Despite being an arguably effective president in terms of getting what the government wanted,[146] Cardoso and his administration were unable to counter strong opposition to the reform from sectoral civil society coalitions (Sousa and Costa, 2011). It is perhaps even more perplexing, then, that the recent sanitation reform effort succeeded under a president, Jair Bolsonaro (2019–present), who has been (dis)credited with replacing Brazil's traditional coalitional presidentialism (*presidencialismo de coalizão*) with a "sloppy presidentialism" (*presidencialismo do desleixo*). Limongi (2019) used the term in reference to Bolsonaro's overt disdain, particularly in the first year of his administration, for political negotiation and coalition building as a legislative strategy. A 2021 study found that Bolsonaro succeeded in passing only 33% of its proposals, on average, into law during the first three years of his administration—the worst overall performance among Brazilian presidents since re-democratization in the late 1980s.[147]

I argue that to fully understand how and why this market-oriented reform of sanitation provision succeeded we must turn towards the existing private market for sanitation services and the role of domestic business actors therein. Despite having a relatively small[148] presence in the sector, I argue that existing private investors[149] were a core driving force for the reform. Private sanitation firms had historically been content with carving small pieces of the market for themselves. However, recent shifts in firm ownership and political strategy pushed these firms out of the margins and into the center of a battle to change the playing field. Specifically, as I demonstrate in a different article (Cruxên, 2021b or Chapter 3), financial actors such as private equity and institutional investors became more prominent shareholders of some of the largest private providers, intensifying pressures for regulatory changes that could reduce political risk and create market room for private firms to grow. In their quest to change the status quo, private investors were led by the Brazilian association of private water and sanitation providers (ABCON), who helped to coordinate diverse private interests, and supported by some national industry associations, private consultancy groups, and business think tanks.

How were business actors, until then relatively marginal in the sanitation sector, able to push the sanitation reform forward? I argue that they managed to do so by progressively building and weaving together what scholars have conceptualized as instrumental, structural, and discursive sources of business power (see, for example, Hacker and Pierson, 2002; Fuchs and Lederer, 2007; Fairfield, 2015a, 2015b). They took advantage of political relationships to set the agenda and work with policymakers in the crafting of different iterations of the reform proposal; they contributed the numbers and language that pro-reformers used to advocate for the legislation; when confronted with consecutive defeats, they worked to reframe and raise the volume (or salience) of sanitation reform in the public realm and developed an alliance with the broader financial sector—particularly with equity investors in Brazil's stock market—as a way to exercise greater pressure on legislators. I say "weave

146 In its second term (1999–2002), for instance, the Cardoso administration managed to approve "95.3% of its proposals in the House" (Alston and Mueller, 2006: 101).
147 UOL Notícias, "Bolsonaro é o presidente que menos aprova projetos no Congresso, diz estudo," 06 December, 2021.
148 In 2019, private participation accounted for only about six percent of the more than 5,500 municipalities in the country (ABCON, 2019).
149 I use "private investors" to refer to the private firms that hold service delivery contracts such as concessions or public-private partnerships. In Brazil, some of these firms are holding companies that control several contracts and their associated operations. These holding firms, in turn, have their own shareholders.

together" because weaving is a learned craft—it requires time to develop the skill. The four-year long process of contention around the reform was marked by setbacks, unexpected turns of events, and fortuitous coincidences. To effectively challenge the status quo, business actors had to build power while in motion, learning what strategies worked, taking advantage of opportune political shifts, and drawing on historical experience to enhance their case.

Analytically, I develop the argument by tracing the reform process from its inception in 2016 to the passing of the final legislation in 2020. I leverage the failures of two executive decrees along the way to dissect how the reform process unfolded, to specify what sources of business power became prominent at different points in time, and to delimit how they contributed to enhancing business's tactical position in relation to relevant contextual developments. Through process tracing, then, I am able to explore business power in motion while also answering Bril-Mascarenhas and Maillet's (2019) call to situate it "in time." Despite centering the role of business, I am wary of the tendency towards "business-centrism" that can characterize studies of business power (Castañeda, 2016), even if scholars acknowledge that power is relational. In my account, I discuss what oppositional actors did to resist the reform. I also explore how interactions between business actors and policymakers, within the executive and in Congress, played out—including illuminating the latter's role in shaping, in some instances, the very preferences of business.[150]

Empirically, I draw on two years of fieldwork while the reform debates were unfolding (2019–2020).[151] This includes two months working as a research intern, in 2019, at a private consultancy firm in São Paulo that, among other activities, supports the development of infrastructure public-private partnerships. By embedding myself in this organization I was able to overcome some of the well-known challenges of gaining access to business actors (Fairfield, 2015a; Schneider, 2014) while also gaining backstage insight into the policymaking process around the sanitation reform.[152] I rely on participant observation in several in-person and virtual events related to the reform; on analysis of policy and legislative documents, media coverage, and organizational materials; and on 87 interviews[153] with a total of 79 individuals. Interviewees included current and former managers of private sanitation firms, managers of state-level companies, financial investors, consultants, policymakers, specialized lawyers, and leaders of business and civil society associations. Due to confidentiality, I use codes to refer to the interviews throughout the analysis (see Appendix A for a list of interviews).

By demonstrating how existing private investors constructed business power to drive regulatory change, this study upends the conventional expectation that private investment in

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150 As Kingstone (1999: xvii) notes, "many prominent approaches to Latin American politics assume [business preferences] rather than subject the preferences to empirical investigation."

151 Despite the Covid-19 pandemic, I continued my research virtually between 2020–2021 by attending online webinars, seminars, and other relevant events related to sanitation provision and private investment in infrastructure in Brazil.

152 My activities as an intern encompassed supporting a weekly policy report on the sanitation sector and organizing a debate with legislators and federal government officials around the regulatory reform of the sector. I was also able to independently conduct my research during this period.

153 Interviewees were selected through a combination of purposive sampling (based on a list of individuals I identified as potentially useful sources based on their current employment and experience) and snow-ball sampling. The interviews lasted 83 minutes on average. The majority were recorded with permission from interviewees. For the interviews I was unable to record, I took notes during the conversation and expanded on these notes immediately following the interview in order to capture as much of what I recollected as possible.

infrastructure is but a product of institutional reforms. Political economy scholars and policymakers have long worked from the presumption that first countries need "good governance"—that is, property rights protections, regulatory quality, institutional stability—before they can attract interest from private investors (see, for example, Savedoff and Spiller, 1999; Farquharson et al., 2011; Trebilcock and Rosenstock, 2015). Kessides (2004: 7) perhaps summarized that wisdom best in a World Bank report that distilled lessons from infrastructure privatization experiences: "Restructure and regulate—and only then privatize." Policymakers in Brazil mobilized this very narrative to argue for sanitation reform. The issue with this lens, as I elaborate further in the conclusion, is that it positions investors as passive onlookers, searching for institutionally stable environments. My analysis, instead, reveals how private investors can be key agents of institutional change.

2. Business power when business is a challenger

It is well established that business actors can play a powerful role in policymaking.[154] Indeed, in the context of capitalist societies, the presumption is typically that business actors are influential or dominant players in economic and political decision-making—even if they do not always get what they want (Chalmers, 2020). Much of the scholarship on business power builds on this intuition, which often extends to a concern with understanding how business actors minimize threats to their interests and sustain conditions that are beneficial to them. In Latin America, recent studies demonstrate that, despite facing social contestation, business power shapes the ability of economic elites to fend off unwelcome tax reforms (Fairfield, 2015a) or keep in place favorable pensions regulation (Bril-Mascarenhas and Maillet, 2019) and export policies (Madariaga et al., 2021). The case of sanitation reform in Brazil, in contrast, offers an opportunity to examine how business actors exercise influence when they are relatively marginal actors within a policy area or sector, and seek disruption as opposed to stability. In other words, it provides a chance to explore business power when business actors are challengers.

Within a particular policy context or market, we may think of "challengers" as relatively marginal or "less privileged" actors who operate within the status quo but may desire change if an opportunity for doing so arises (Fligstein and McAdam, 2011). This is akin to what Mahoney and Thelen (2010) call "subversive" actors. Challengers often square up to "incumbents," that is, more prominent or dominant actors who benefit from the existing state of affairs and typically work to preserve it (Fligstein and McAdam, 2011). Incumbents are likely to have clearer preferences (such as keeping things as they are) and have stocked resources that allow them to resist pressures for change (Fligstein and McAdam, 2011; Bril-Mascarenhas and Maillet, 2019). Challengers, on the other hand, face greater uncertainty and constraints. They may not have well-established resources or strategies for exercising political influence. Their preferences may be less clear, particularly if there are heterogeneous interests among them or if the role of challenger itself is relatively new for them. They also face the burden of proof. Whatever policy alternatives they put forth may appear untested and

[154] For useful reviews of existing literature on business influence, see Walker and Rea (2014); Puente and Schneider (2020).

politically costly from the point of view of policymakers. [155] Challengers also typically have to confront established norms and values that shape the dominant understanding of a policy area. Thinking of business actors as challengers, then, opens up interesting avenues of inquiry: how do business actors get what they want when they start off as marginal actors in a sector? Are their preferences clear from the outset? From where do they draw power? Do particular sources of power become more relevant tactically?

To understand how business actors can become effective challengers I propose we need to consider the temporal development of business power through learning. Scholars typically mobilize the concepts of instrumental, structural, and discursive power to capture the pathways through which business exercises political influence. My analysis builds on this conceptual framework to examine the development of and interplay between[156] different forms of business power. Instrumental business power typically concerns the ability to purposefully engage with political decision-making. Fairfield (2015a) offers a useful synthesis of instrumental sources of power. These encompass relationships with policymakers, including partisan linkages, recruitment into government, or institutional processes of consultation, as well as organizational resources and capacity, such as money, expertise, and internal cohesion.

Structural power, in contrast, emanates not from collective action or political engagement but from the structuring role that capital plays within the economy, shaping the potential for growth and redistribution (Fuchs and Lederer, 2007). As Fairfield (2015b: 4) observes, structural power depends both on "the relative weight of the private sector" and on how policymakers assess the economic ramifications of a policy and its impact on firms' investment decisions. Structural power has most often been associated with disinvestment threats, or the potential that a policy will lead to capital flight. Here, however, I highlight how structural power can be exercised in relation to the promise of future of investment—that is, the assurance that capital will fly in as opposed to out. Instrumental and structural power can complement and reinforce one another (Hacker and Pierson, 2002; Fairfield, 2015a, 2015b). For example, business actors can tap media channels and leverage political connections as a means for increasing policymakers' sensitivity towards their concerns and making investment threats or promises more credible. Conversely, policymakers may consult with business actors to better understand their interests and potential responses to a policy.

A third source of business power is often conceptualized as discursive power, or the ability to influence how issues are framed in the public sphere (Madariaga et al., 2021; Falkner, 2017). This entails defining the ideas, normative values, or evidence that inform how policy-makers and the broader public understand problems and desirable solutions. Unlike the conventional wisdom that business likes to keep things "quiet" and is more likely to be politically effective when issues are of lower salience to the public (Culpepper, 2011), recent studies suggest that engaging in "noisy" politics—or increasing the salience of an issue—can help business actors use discursive power to exert

[155] Policymakers may also derive rents from existing policy or institutional arrangements.
[156] As other "hybrid" approaches to business power have demonstrated (Babic et al. 2022), examining different forms of business power in conjunction offers a fuller picture of how business actors can exercise political influence.

political pressure (Keller, 2018), especially when their interests are weak or under threat.[157] Fairfield (2015a: 37) argues that the ability to frame issues—through media access, technical expertise, or political ties—can be collapsed into instrumental power: "To the extent that shaping norms and ideas entails deliberate, strategic actions designed to influence policy outcomes, discursive power is no different from instrumental power." While I agree that instrumental sources of power can support the discursive strategies of business actors—enhancing their visibility or credibility—I find it valuable to position discursive power separately. Simply behaving instrumentally to shape discourse does not mean effectively crafting compelling narratives that can sway public debate or challenge established norms or values.[158] Discursive power needs to be understood in relation to the ability to delegitimize competing frames,[159] which depends as much on instrumental power as on the quality of the framing or narrative itself. Moreover, discursive power speaks to the more "invisible" (Lukes, 1974) dimensions of the exercise of power, operating in the realm of principles and ideas, not simply of material resources or relationships. It concerns precisely the role of persuasion in effective political action (Li, 2019). Understanding discursive power, thus, entails attention to the language, assumptions, and arguments that actors mobilize, and to how loud they manage to be (Hathaway, 2016).

While I rely on the concepts of instrumental, structural, and discursive power to describe how business actors in Brazil wove together different sources of power to influence sanitation reform, I contend that simply delimiting these sources into categories tells us little about precisely *how* business develops or leverages different sources of influence over time. These pathways neither operate automatically nor are they fixed or static (Fairfield 2015b; Keller, 2018). They can be cultivated over time through different strategies but also fluctuate in relation to political-economic shifts. For example, political turnover in government and Congress may impact the ability of business actors to leverage political connections or shape the permeability of the state to business interests. Structural power may also vary due to changes in the economic context (Fairfield, 2015b). Bril-Mascarenhas and Maillet (2019) break ground in this regard by demonstrating how the pension fund industry in Chile expanded its power in the long-term and strategically leveraged it during short-term moments of contention to resist threats to the policy status quo.

My framework builds on Bril-Mascarenhas and Maillet's intuition that we need to situate "business power in time" and consider how processes taking place within different temporal frames interact to configure possibilities for strategic action in particular contexts. Unlike in their study of Chilean pension funds, however, I show that the construction of business power need not occur mainly via past "power-building investments" but may take place during the course of battle. In Brazil, business actors grew in strength as the reform process unfolded through a dynamic process of collective action that entailed learning from drawbacks, adjusting preferences and political strategies, and taking advantage of unanticipated political shifts. This required developing mobilization capacity on the fly as well as building and weaving together different sources of business power while in motion

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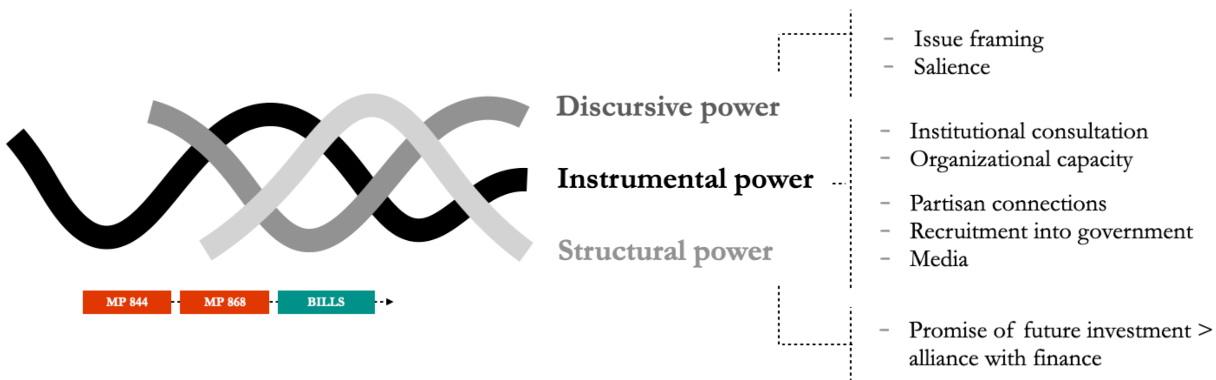
157 See Morgan and Ibsen (2021) for a more recent reflection on issues of "quiet" and "noisy" politics.

158 In a similar vein, Babic et al. (2022: 6) further note that instrumental pathways are but "one aspect of the ideational dimension of business power" given that "changing dominant ideas is often more about shaping public perceptions (or discourses) than simply directly influencing policy makers."

159 Here, I follow Fuchs' (2007: 61) proposition that "discursive power is closely tied to legitimacy."

(Figure 4.1. below offers a simplified illustration of this argument). In this sense, drawing on Clemens (2015: 3), I treat the reform process not as a singular window of opportunity but as a "temporally extended [period] of disruption and potential reorganization" wherein "actors act, fail, and act again." This perspective allows for a more fluid account of business action, one that considers not only what business actors do but also how unexpected contextual shifts within an extended temporality of contention can alter the tactical position of different actors—for example, strengthening business while weakening their opponents. As Clemens (2015: 1) argues, "the challenge is to understand how action unfolds in a crisis and, in the process, reconfigures resources, opportunities, and horizons of possibility for new lines of strategic response."

Figure 4.1. Building and weaving power in motion: a simplified illustration of the argument



Own elaboration.

3. Spoils of victory: restructuring and rescaling

Detecting business power requires, as Zingales (2017) astutely observes, examining "outputs" —who gets what in the end—and not simply inputs or sources of influence. I begin, thus, by explaining the core institutional changes introduced by Law n. 14.026/2020—henceforth the "2020 Law"—which reformed the regulatory framework for the sanitation sector. My aim is not to dissect the legislation's minutiae but to delimit its most disruptive and contentious aspects, particularly in relation to business interests.[160] In doing so, I also provide necessary background on the sanitation sector itself. While I do not claim that the final legislation was entirely determined by business, in the subsequent sections I illuminate how it reflected evolving business interests and power.

I organize the main transformations contained in the 2020 Law around two broad outcomes: *market restructuring* and *rescaling*. Restructuring entailed the alteration of existing contractual rules with the aim of facilitating greater private participation in the sector. Reform enthusiasts, including business

[160] I focus on the most contentious issues in the legislation because they arguably had more substantive relevance for its fate. The issues highlighted here emerged from my participant observation in relevant events as well as my analysis of organizational documents and public statements by different actors, interviews, and media articles.

actors, referred to this as "increasing competition," while critics called it "disorganizing the sector." In effect, restructuring was about dismantling the historical stronghold that state-level companies, known as *Companhias Estaduais de Saneamento Básico* or CESBs, had over the market. CESBs were created in the 1960s–1970s, under the centralizing ambitions of the authoritarian military regime (1964–1985), which sought to weaken the autonomy of municipal governments (Heller et al., 2014). The majority were entirely owned by state governments, while a few—such as Sabesp (São Paulo state), Copasa (Minas Gerais state), and Sanepar (Paraná state)—had transitioned to mixed ownership models with substantial private participation, despite remaining under state control (Cruxên, 2021a). CESBs operated in several municipalities within each state. As of 2019, the 26[161] existing state companies supplied nearly 75% of Brazil's urban population with water and 50% with sewage services.[162] By comparison, public municipal provision corresponded to about 19% and 38%, while private provision through concessions or public-private partnerships (PPPs)[163] comprised only 6% and 12%, respectively.

Undergirding CESBs' market dominance were contractual arrangements known as "program contracts" (*contratos de programa*). These were simplified instruments for intergovernmental collaboration that allowed state companies and municipal governments[164] to enter into service provision agreements. Program contracts were formally instituted through the 2005 Public Consortiums Law (n. 11.107) and reinforced by the 2007 Sanitation Law (n. 11.445), which had defined the pre-existing legal and regulatory framework for sanitation provision—that is, prior to the 2020 Law. Effectively, program contracts consolidated the market power that CESBs had established since the military dictatorship for two reasons. First, because they could be signed and renewed without competitive bidding. Second, because of resource asymmetries between state companies and local governments—often lacking in state capacity.[165] For many municipal governments, renewing program contracts was easier than organizing bidding processes or providing services themselves.[166]

The 2020 Law attacked program contracts directly. It altered the 2005 Public Consortiums Law and the 2007 Sanitation Law to forbid their use, converting all program contracts into concession contracts subject to the 1995 Concessions Law (n. 8.987). Practically, state companies were now subject to the same rules that governed private provision via concessions, which required greater

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161 Only the state of Mato Grosso did not have a state-level sanitation company at the time.
162 GO Associados, "Water and Wastewater Sector Update: Sector Overview and Forecasts". Presentation, 24 July 2019.
163 Concession contracts are the primary mechanisms through which private operators participate in Brazil's water and sanitation market. These can be full concessions, encompassing both water and sewage, or partial concessions focusing on either. Concessions generally afford private operators control over the management and operation of assets, with revenues typically obtained directly from service provision. The Brazilian legislation treats PPPs as distinct contractual arrangements in which private sector compensation comes partially or entirely from the public partner.
164 After the enactment of the 1988 democratic Constitution, ownership of sanitation services was generally considered to lie with municipalities when services were of "local interest." This explains why services have generally been provided either autonomously by municipal entities or by state companies and private providers via contracts with municipalities. Nonetheless, the definition of "local" versus "common" interest has been a long-standing and thorny problem, particularly in relation to service provision in metropolitan regions. The problem of service ownership was also at the heart of debates concerning the 2020 Law.
165 Interviews: I21 (municipal association, 2019); I47 (municipal association, 2019).
166 In some cases, state companies also provided services without formal program contracts. The possibility of formalizing existing precarious contracts was also forbidden by the 2020 Law.

specification of contractual obligations and prevented contract renewal without competitive bidding. Perhaps more radical was the inclusion of a "strangulation" mechanism: requiring CESBs to prove their financial capacity to undertake necessary investments in order to universalize service coverage in the places where they operated by 2033—the universalization target defined by the 2020 Law. Failure to demonstrate such capacity could result in loss of existing contracts.

Private sanitation providers, led by their association, ABCON, stood to gain from these new rules, which would ostensibly make it easier for them to compete for service contracts and capture market share. Private provision, it is worth noting, was concentrated in the hands of four firms: BRK Ambiental, Aegea, Iguá Saneamento, and Grupo Águas do Brasil. Together, these companies controlled nearly 75% of private operations in the country in 2019 (Cruxên, 2021b). The first three were either controlled by or had substantial participation from private equity and institutional investors in their ownership. Needless to say, state companies and their association, AESBE, strongly opposed the elimination of program contracts. Bolstering their ranks were professional associations and labor groups with strong ties to state companies, including ABES (sanitation engineers), worker unions attached to different CESBs, as well as broader anti-privatization groups such as FNU (federation of urban service workers) and FNSA (environmental sanitation movement). The fate of program contracts was perhaps the main trigger point in the reform battle.

Another relevant dimension of market restructuring concerned the potential privatization of CESBs themselves. This route was of special interest to the federal government, under both Presidents Michel Temer (2016–2018) and Jair Bolsonaro (2019–present), as part of their market-oriented policy reform packages. The proposal also sparked interest from financial market investors, particularly in relation to the potential full privatization of Sabesp. Already listed in the stock market, Sabesp is the main sanitation provider in São Paulo state and the largest utility in Latin America. Ironically, enabling the privatization of CESBs required preserving the contracts held by state companies, which constituted their core asset base and were thus key to their market value. While prior legislation nullified existing contracts in the event of a change in the control of state companies, the 2020 Law included special provisions allowing these contracts to stay in place.

Rescaling, the other main overarching outcome, entailed shifts to the scales at which services were provided and regulated, generally pulling away from the municipal level. It encompassed two main proposals. One was the creation of "blocks" of municipalities that would enable the provision (and concession) of public services at regional as opposed to primarily municipal scales. This became known as "regionalization" (*regionalização*). This proposal sparked criticism from the association of municipal providers (Assemae), among others, who argued it undermined municipal autonomy. The stated rationales for regionalization were (a) to encourage economies of scale, which were attractive from the point of view of private providers and investors, but also (b) to address concerns that private providers would not be interested in taking over provision in poorer and less potentially lucrative municipalities. The expectation was that regional blocks would allow for "putting together steak and bone" (*juntar filé e osso*)—a common refrain about the proposal.[167] As I will explain, heterogeneity

[167] The 2020 Law provided myriad incentives for regionalization, such as tying municipalities' access to federal funds to their adherence to regional blocks. It also established a timeline for state governments to create these blocks within their

among private providers meant that this idea initially suffered resistance from ABCON. Nonetheless, the business association eventually coalesced around it, particularly since it helped to demobilize anti-privatization arguments raised by opponents.

The second dimension of rescaling concerned the centralization of certain regulatory activities at the federal level. The 2020 Law expanded the responsibilities of the National Water Agency (ANA), which formerly regulated only water resources management, to include the development of regulatory norms and guidelines for sanitation provision across the territory. To be clear, ANA would not regulate services or set service tariffs directly. This prerogative remained with existing subnational regulatory agencies. ANA's role would be to, for example, establish standards for service quality and efficiency, define norms for tariff regulation and regulatory accounting, and delineate methods for calculating indemnity compensation. It could also serve as an arbiter of potential conflicts between contracting partners. To encourage—or force—subnational entities to follow ANA's guidelines, however, the 2020 Law resorted to the federal government's "spending power." Since the military dictatorship, sanitation providers—including private ones—had relied on federal government funds via grants or financing from national banks such as Caixa Econômica Federal (CEF) and the National Development Bank (BNDES). The 2020 Law conditioned future access to federal funds to compliance with ANA's norms. While over time this proposal became perhaps the least contentious among the ones under debate, business actors had been key advocates for it. The main rationale for regulatory centralization was to tackle regulatory fragmentation and variation in regulatory capacity. Business actors perceived standardization at the national-level as a way to increase regulatory legibility for investors and to minimize political interference and regulatory risk across different subnational operations (Cruxên, 2021b).

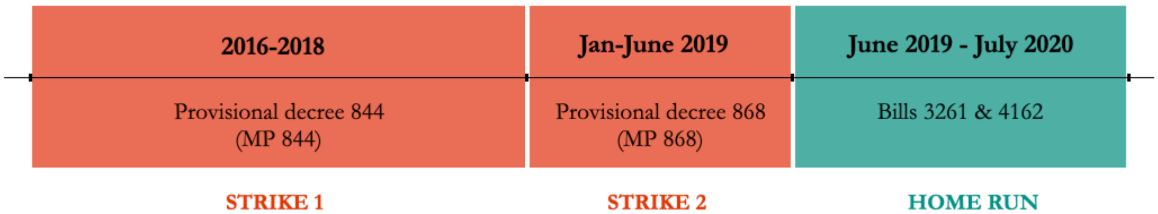
4. Building power in motion

While the building blocks of restructuring and rescaling ideas existed from the beginning of the reform process, reform proposals went through several iterations over time. In fact, the legislation became progressively more, rather than less, disruptive. Four legislative proposals are worth highlighting: two provisional decrees (*medidas provisórias* or MPs), MP 844 and MP 868, and two bills (*projetos de lei* or PLs), PL 3261 and PL 4162. [168] We may discern three main moments of contention around these proposals during the course of the reform process (Figure 4.2 illustrates this timeline, while Figure 4.3 summarizes relevant legislative events within each of the moments, which are differently shaded).

states. If they failed to do so, the prerogative would fall to the federal government. This led to an ongoing (as of the writing of this piece) scramble to create blocks of municipalities in different states, with state governments adopting varying "block-building" strategies.

[168] To examine how the content of the legislation evolved, I closely analyzed seven iterations of these proposals, including the final legislation: 1) MP 844; 2) MP 868; 3) the report on MP 868 produced by Senator Tasso Jereissati; 4) PL 3261 approved in the Senate in June 2019; 5 & 6) the two iterations of PL 4162 (the initial one introduced by the federal government in August 2019, and the revised version approved in the House of Representatives in December 2019); 7) Law n. 14.026.

Figure 4.2. Main moments of contention around reform proposals: two strike-outs and a home run



Own elaboration.

Figure 4.3. Key events in the reform process (2016–2020)

2016	*May*	Former Vice-President Michel Temer becomes President
	Sept-Oct	Interministerial Sanitation Working Group, coordinated by Casa Civil (Office of the President's Chief of Staff), leads institutional consultation and produces a diagnosis of the sector with initial reform proposals
2018	*July*	**Provisional measure 844 (MP 844)** introduced by Temer's administration
	Aug-Oct	Joint Congressional Commission discusses MP 844
	Nov	**MP 844 expires (Strike 1)**
	Dec	**Provisional measure 868 (MP 868)** reintroduces reform proposal
2019	*Jan*	President Jair Bolsonaro takes office
	March	New Joint Congressional Commission formed to discuss MP 868
	April	Senator Jereissati presents report on MP 868 for Joint Commission, introducing several changes to text
	June	**MP 868 expires (Strike 2)**
		PL 3261 introduced by Senator Jereissati in the Senate, replacing MP 868
		PL 3261 approved in the Senate with several amendments; bill is sent to the House of Representatives
	Aug	**PL 4162** sent to Congress by Bolsonaro's administration; **PL 3261 appended** to it
		Special Commission created in the House to discuss sanitation reform; Congressmen Geninho Zuliani selected as rapporteur
	Sept-Oct	Special Commission holds several public hearings
		Special Commission approves Zuliani's final report
	Dec	**PL 4162 approved in the House** (based on Zuliani's final report)
2020	*June*	**PL 4162 approved in the Senate**
	July	**PL 4162 signed into Law n. 14.026** by President Bolsonaro with partial veto

The first and second moments extend between 2016 and the first half of 2019, and concern events surrounding the two provisional decrees, MP 844 and MP 868, respectively. Provisional decrees are executive orders that act as law pending approval from Congress. Brazilian presidents have used them extensively since the 1988 Constitution to exert control over the legislative agenda and fast-track the discussion of particular matters in Congress (Figueiredo and Limongi, 2000; Alston and Mueller, 2006). Decree authority, in fact, has often been used as an indicator of executive strength in Latin American presidential systems (Palanza, 2021). In Brazil, provisional decrees have expiration timelines: they are initially valid for three months but can be extended once for another three. They are analyzed in Congress through Joint Commissions featuring members of the Senate and the House. Both MP 844 and MP 868 expired before a vote in Congress. These failures—or "strike-outs"—signaled the executive's difficulty in inducing rapid legislative change over the matter in the face of strong opposition.

The third moment concerns the discussion of the two bills, PL 3261 and PL 4162, in Congress. It extends from mid-2019 to mid-2020. These bills were also discussed on an urgent basis—a special regime that can speed up the legislative process around a bill. Their content built on ideas generated during debates around the provisional decrees, and formed the basis for Law n. 14.206. The next sections expand on these different moments, examining what role business actors played in each, what they learned from failures along the way, and how this learning informed the political strategies they used to activate and weave together different sources of power over time, contributing to the eventual home run.

a. Starting instrumentally

Business power developed dynamically during the course of the reform process. The build-up began through an institutionalized process of consultation organized by Casa Civil (equivalent to the Office of the President) in 2016, under the newly minted administration of President Michel Temer. The former Vice-President had taken over in May that year, following the impeachment of President Dilma Rousseff. Casa Civil received an auditing report produced a year prior by Brazil's federal court of accounts, Tribunal de Contas da União (TCU), evaluating federal policy initiatives and spending on the provision of sanitation services.[169] The report's assessment was fairly troubling. It concluded that federal resources were not reaching the municipalities most in need—those with higher child mortality rates, lower human development, and lower access to sewage collection.[170] With the report in hand, Casa Civil organized an Interministerial Sanitation Working Group (Grupo de Trabalho Interministerial de Saneamento) tasked with meeting with different stakeholders to produce a diagnosis of the sanitation sector.[171]

The working group served as an initial source of instrumental business power for private sanitation providers. These players had, until then, performed a relatively marginal role in the development of sanitation policy. For example, in the mid-2000s, when the 2007 Sanitation Law was under discussion, private participation was quite incipient. Private investors interested in sanitation services, such as domestic engineering and construction firms, were more concerned with putting in place some regulatory framework for the sector—still lacking since the transition to democracy in the

[169] Tribunal de Contas da União, 2015, "TC 017.507/2015-4," Brasil.

[170] The TCU report also identified other challenges such as a high level of idleness in existing sewage networks due to non-connection by potential users, lack of transparency in federal financing decisions, and lack of intergovernmental coordination for policy implementation. The 2020 Law also included provisions to address these issues.

[171] The team at Casa Civil that led the Interministerial Sanitation Working Group constituted a so-called "reform nucleus," that is, a special task force assembled by Temer's chief of staff, Minister Eliseu Padilha, to oversee the development of the administration's package of policy reforms. See Connected Smart Cities, Interview with Martha Seillier, "Perspectivas para o saneamento básico no Brasil: Por que um novo marco legal?" Online debate, 20 April 2020. https://www.youtube.com/watch?v=2UH9RnMvGRc (Accessed 20 April 2020).

late 1980s—than with battling over the minutiae of its content. Far from challenging the status quo, then, business associations such as ABCON (association of private sanitation providers) and ABDIB (association of infrastructure and basic industries) adopted a compromising stance. They were willing to work with CESBs, for example, to guarantee that the legislation would move forward, in the hope that an improved regulatory environment would stimulate private investment.[172]

But in 2016, when the Interministerial Sanitation Working Group was created, private providers were in a rather different position. The private sanitation market was undergoing its own restructuring (Cruxên 2021b). Central to this reorganization was a shift in the investor landscape. Large, family-owned construction business groups—who, until that point, had been the main investors in the sector—were stepping back. Meanwhile, financial investors were stepping in. In 2017, the private equity groups Brookfield Business Partners (Canada) and IG4 Capital (Brazil) respectively acquired two of the largest private sanitation companies in the country: Odebrecht Ambiental and CAB Ambiental. Odebrecht Ambiental became BRK Ambiental, while CAB became Iguá Saneamento. One implication of this changing investor landscape was an urge to revisit the existing rules of the game. As I discuss in a different article, there was greater concern with the risks that political instability and lack of regulatory capacity at the local level posed to the predictability of returns from service provision, particularly as the politically embedded model of service delivery these companies had long fostered crumbled alongside their politically savvy former owners, the construction business groups (Cruxên 2021b). Newly restructured companies also had money in stock ready to be invested. As one specialized lawyer I interviewed in 2019, at the height of reform debates, summarized: "What do we have today? There is a saturation that prevents private players from occupying more space. With the fiscal crisis, the public sector cannot invest while the private operators are capitalized to do so."[173] A manager at one private sanitation holding reinforced the point, noting that their financial shareholders were frustrated with the lack of new contract acquisitions since taking over the company.[174] Creating market room to grow—by denting, for instance, the preponderance of CESBs—had become imperative.

The Interministerial Sanitation Working Group organized by Casa Civil presented an ideal opportunity for private providers to push for change. The country's dire fiscal situation and President Temer's embrace of a market-oriented policy agenda[175] increased the state's permeability to private sector interests. Casa Civil was particularly keen to hear what business actors had to offer in terms of solutions to perceived problems in the sanitation sector. In fact, the working group started from the premise that "public money was not an alternative," as Martha Seillier, the career bureaucrat heading

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172 O Estado de São Paulo, "Saneamento terá R$3 bilhões de parcerias," 06 February 2008. Interviews: I23 (private operator, 2019); I52 (private sector consultant, 2019).
173 Interview I26 (law office, 2019).
174 Interview I36 (private operator, 2019).
175 After replacing President Dilma Rousseff, Temer embarked on a policy reform push encompassing fiscal, labor, pensions, and tax reforms. The government also sought to foster private investment in infrastructure via the creation of the Investment Partnership Program (PPI). This agenda built on the political program put forth a year prior by Temer's political party, the Brazilian Democratic Movement (MDB). Titled "A Bridge to the Future" (*Uma Ponte para o Futuro*), the program called for "a development policy centered on private initiative." See Fundação Ulysses Guimarães and Partido do Movimento Democrático Brasileiro, 2018, "Uma Ponte para o Futuro."

the working group, later recounted.[176] The federal government had a vested interest in potentially privatizing state companies or pushing them to engage in public-private collaboration. For example, while Casa Civil coordinated the sanitation working group, the National Development Bank (BNDES) was hard at work trying to convince CESBs to engage in ample concession programs—a route that proved less fruitful than hoped for.[177]

Through the process of consultation organized by the working group, business actors were able to exercise an initial agenda-setting role and position themselves as key sources of information for federal government officials—who, by their own admission, lacked experience in the sector.[178] In particular, the working group drank heavily from input provided by ABCON. Leaders of the association such as its executive president, Roberto Muniz (later a Senator), became "fixtures" (*figurinhas carimbadas*), as one interviewee put it, in the hallways of Casa Civil.[179] ABCON also counted on support from nation-wide industry associations such as ABDIB and from Instituto Trata Brasil (a civil society organization funded by private sanitation providers and industry firms such as Coca-Cola, the multinational beverage producer).

ABCON took to Casa Civil a wish list of legal and regulatory changes[180] whose imprints are noticeable in both the initial diagnosis of the sector prepared by Casa Civil's team on October 2016[181] and in the provisional decree MP 844, introduced by the executive in July 2018. Prominent among them were proposals that constituted inceptive articulations of regulatory rescaling and market restructuring ideas that eventually made their way into the 2020 Law. Specifically, ABCON called for standardizing regulatory oversight at the national level through the creation of a role for the National Water Agency (ANA) in producing guiding norms.[182] As aforementioned, regulatory fragmentation was a growing concern among private providers. Another important idea introduced by ABCON that made its way into MP 844 was to restrict the conditions under which program contracts between CESBs and municipalities could be renewed to situations in which competitive bidding was not viable. This constituted an initial attack on the market dominance of state companies, albeit a much weaker one compared to the final legislation. Per this original proposal, program contracts would persist.

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176 Connected Smart Cities, Interview with Martha Seillier, Ibidem.

177 In September 2016, BNDES's leadership met with state government representatives to announce a program in which BNDES would contract technical studies to assess the viability of conceding services provided by CESBs to the private sector. According to one interviewee with insider knowledge, BNDES's president, Maria Silvia Bastos Marques, observed in the meeting that they were not interested in "small privatizations, only regional" (Interview 178, state company, 2017). In November 2016, BNDES announced that 18 state governments had formalized their interest in participating in the bank's program. Fiscal pressures likely contributed to this initial enthusiasm. However, most states dropped out of the program in subsequent months. See: Folha de São Paulo, "Estados desistem do programa de privatização do saneamento," 21 October 2017.

178 Connected Smart Cities, Interview with Martha Seillier, Ibidem.

179 Interviews: I26 (law office, 2019); I33 (law office, 2019); I48 (regulatory agency, 2019); I58 (private operator, 2019); I13, (business association, 2021).

180 ABCON, 2017, "Conceitos chave das propostas para o desenvolvimento do setor de saneamento básico" (document summarizes proposals that had been presented by ABCON to Casa Civil's technical team in 2016). Interview I33 (law office, 2019).

181 Casa Civil da Presidência da República, 2016, "Diagnóstico e Propostas para o Saneamento," Presentation, 19 October 2016.

182 This idea had circulated within the sector for a number of years. For example, it was floated in the failed regulatory reform proposal for the sector introduced by President Fernando Henrique Cardoso in 2001.

Crucially, given that program contracts lasted for decades and had varying expiration timelines, it was unclear the extent to which simply restricting renewals could create market opportunities for private providers in the short- to medium-term.

The timidity of this proposal reflected the fact that business actors were still cautious challengers. As I have noted, the private sector was in flux. Business preferences over the course of the reform were shaped as much by past strategies and experience as by an evolving understanding of their needs within a changing investor landscape and organizational context. Prior to the reform, large private sanitation firms such as Odebrecht Ambiental (later BRK Ambiental) and Aegea, for example, had been investing in market growth strategies centered on partnerships with state companies.[183] As one manager explained, CESBs were "good clients" not only because they were generally more capable than municipal governments, but especially because, if they remained the direct holders of contracts with municipalities, they could shield private companies from political risk.[184] It is unsurprising, then, that while pushing for reform, some private operators favored a less radical approach: beating CESBs up but not knocking them out.[185] Likewise, fragmented interests and path dependencies complicated coalition building with other business actors such as some industry suppliers. Associations such as ABIMAQ (machinery and equipment) and ABIQUIM (chemicals) represented firms that had well-established relationships and contracts with CESBs, and thus appeared hesitant to join forces with private providers.[186]

It took a while, however, for the consultation process led by Casa Civil in 2016 to translate into a concrete legislative proposal.[187] President Temer introduced MP 844 in July 2018, "in the dead of night," as one critic noted (de Oliveira Filho 2018), while the nation's attention was concentrated on Brazil's match against Belgium—a dramatic 2-1 loss—in the quarter-finals of the 2018 World Cup. The choice to issue a provisional decree rather than send a draft legislation to Congress meant to avoid a drawn-out legislative process that could take years.[188] With the 2018 general elections looming on the horizon, the administration had little time to waste. With MP 844 on the table, business mobilization around the reform took off in earnest.

The development of collective action and coordination capacity by ABCON constituted another emerging source of instrumental power for business actors during this period. Much like the private sanitation market, ABCON had been undergoing an internal restructuring in the prior two years.[189] Originally created in 1996, the association's leadership had typically rotated among managers of relevant companies in the sector. In 2016, when the Interministerial Sanitation Working Group was

183 In July 2016, for instance, Aegea had won a 31 year-long contract with Agespisa, the state-level water and sanitation company for the state of Piauí, to take over provision in the state's capital, Teresina.
184 Interview I36 (private operator, 2019).
185 Interviews: I7 (private operator, 2019); I68 (federal government, 2021).
186 Interview I13, (business association, 2020, 2021).
187 A couple of reasons help to explain the delay. One was the prioritization of other reforms by the executive, such as a constitutional amendment instituting a public spending ceiling and a labor reform. Another was the frustrated attempt to induce privatization via BNDES (see footnote 177). The roadblocks BNDES encountered, including the fact that state companies risked losing existing contracts if services were conceded to the private sector, arguably reinforced the understanding that a broader legislative effort was necessary.
188 Connected Smart Cities, Interview with Martha Seillier, Ibidem.
189 Interview: I13 (business association, 2021); I79 (business association, 2022).

created, ABCON had twenty members.[190] Notably absent in this roster was Odebrecht Ambiental, the largest private sanitation company at the time in terms of population served. This absence is suggestive of how particularistic channels of business influence, historically favored by construction business groups such as Odebrecht, might have undercut the role of business associations such as ABCON in the past. Relying on campaign donations[191] and other monetary contributions, these companies often "played by themselves."[192] The "Lava Jato" (Operation Car Wash) criminal investigation—a broad-scale corruption probe[193] largely responsible for the demise of construction groups—revealed, for example, that Odebrecht Ambiental had made both legal and illegal campaign contributions to local politicians in order to secure sanitation service contracts in several municipalities.[194] Campaign donations by firms were forbidden in 2015. Moreover, in the aftermath of the Lava Jato scandal, private sanitation companies, especially those under the control of financial investors, adopted new corporate governance and ethical compliance rules (Cruxên 2021b). These changes pushed them to invest in more institutionalized and transparent channels of policy influence.[195] These changes contributed to bolstering ABCON's collective action role in the reform process. Under Brookfield's ownership, BRK Ambiental (formerly Odebrecht Ambiental) re-joined ABCON and worked closely with its leadership throughout the reform process. In fact, BRK Ambiental and Iguá Saneamento reportedly pushed ABCON to invest in greater professionalization and transparency as conditions for their membership.[196] The 2017 Labor Reform added impetus for the association to fulfill these conditions. Payment of union dues became optional, constraining the resources ABCON used to secure from its affiliate organization, SINDCON (national union of private sanitation providers). Guaranteeing membership from big firms such as BRK Ambiental and Iguá became paramount for ABCON to amass resources.

As part of this organizational restructuring, ABCON's leadership changed. To enhance its lobbying capacity, in 2018 the association hired an experienced lobbyist, Percy Soares Neto (formerly at CNI), as their new director of institutional relations. It also created a separate budget dedicated to the "reform project." But while ABCON geared up for the reform battle, the initial arsenal it deployed alongside some of its allies—Instituto Trata Brasil, ABDIB, and CNI—to rally legislative support for MP 844 was quite old school. They largely relied on a "knock-on-all-doors," "quiet politics" strategy aimed at raising awareness and informing legislators in Congress about the reform proposal.

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190 ABCON, 2016, "Panorama da Participação Privada no Saneamento."

191 See Lazzarini et al. (2015) and Boas et al. (2014), for example, on the role of campaign donations in helping firms in Brazil gain access to federal loans and public works contracts, respectively. Campaign donations by firms were forbidden in 2015.

192 Interview I13 (business association, 2021).

193 The investigation began in 2014. The illicit deals under investigation primarily involved Brazil's state-owned oil company, Petrobrás, but encompassed other infrastructure sectors such as energy, transportation, and, to a lesser degree, sanitation.

194 Correio Braziliense, "Executivos da Odebrecht confessam caixa dois de R$ 300 mil para ex-prefeito," 15 June 2017.

195 Interviews: I25 (private operator, 2019); I57 (private operator, 2019); I13 (business association, 2021). I cannot verify the extent to which monetary contributions or side-payments were indeed "off" the table, though this was suggested in interviews. A key private sector lobbyist (which I will keep anonymous) suggested that, with the tools available to business actors in the pre-Lava Jato context, they might have been able to approve the reform in the first attempt. However, the lobbyist noted, construction business groups might not have sought a reform in the first place.

196 Interview I13 (business association, 2021).

On the other side of the battle front they confronted strong and tactically experienced countermobilization from large sectoral groups that opposed MP 844. "Pressure against [the proposal] was much greater than anticipated, even the government did not expect such pressure," observed a manager at one of the largest private companies.[197] Groups such as AESBE (state companies), Assemae (municipal providers), ABES (sanitation engineers), FNSA (environmental sanitation movement), and FNU (urban service provision workers) joined forces against MP 844.[198] Assemae issued a statement positioning itself against what they called "the MP of thirstiness" ("*MP da Sede*"),[199] while FNSA launched a manifesto, signed by dozens of civil society organizations, calling on "all democratic and popular segments of Brazilian society to denounce and fight against" the decree.[200] In fact, these groups had been critical of the reform effort since the organization of the Interministerial Sanitation Working Group at Casa Civil. They argued the process of institutional consultation had been hastened and biased towards private sector interests.[201] FNU went further, denouncing the diagnostic produced by Casa Civil as a "subaltern form of neoliberalism" that neglected the negative social and environmental impacts of privatizing what they considered to be an essential service and human right.[202] Similar criticisms would resurface throughout the reform process. Like business actors, oppositional groups met with legislators and attended public hearings to try to influence policymakers. They also prepared public manifestos. They argued the reform proposal disorganized the sector and limited the autonomy of municipal governments. They also maintained that the pre-existing legal and regulatory framework already allowed municipalities to concede services to the private sector if they so wished.

With the help of an uncompromising executive, opponents succeeded in blocking MP 844. The Joint Commission formed to discuss the provisional decree in Congress had moved swiftly to advance the project. Effectively, it met only three times, holding a single public hearing.[203] In his final report, Senator Valdir Raupp, the commission's rapporteur and a member of President Temer's party, the Brazilian Democratic Movement (MDB), made minor adjustments to the executive's decree.[204] But before the report could move to a floor vote in the House, AESBE (state companies) mobilized 22 state governors to sign a letter demanding revisions to the text.[205] The letter was published in several

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[197] Interview I67 (private operator, 2021).

[198] These groups have played prominent roles in the sector dating back to the 1980s. In 2001, for example, Assemae and FNSA successfully mobilized municipal governments and legislators against President Cardoso's regulatory reform proposal for the sector (Sousa and Costa, 2011). Historically, these groups largely positioned themselves in favor of public provision, though AESBE, specifically, progressively shifted to a discourse of public-private collaboration. This stance reflected the aforementioned semi-privatization of some of its members (Sabesp, Sanepar, and Copasa) between the late 1990s and late 2000s, as well as the development of partnerships between state companies and private providers.

[199] Assemae, "A verdade sobre a Medida Provisória 844: a MP da Sede," Email, 16 August 2018.

[200] Frente Nacional pelo Saneamento Ambiental, 2018, "Manifesto da Frente Nacional pelo Saneamento Ambiental (FNSA) sobre a MP do Saneamento Básico."

[201] Interview I47 (municipal association, 2019).

[202] FNU, ""Diagnóstico Saneamento": os caminhos da desconstrução da política pública de saneamento básico no governo Temer," 16 October 2016.

[203] Senado Federal, "Comissão Mista da Medida Provisória nº 844 de 2018" (Record of legislative activity). https://legis.senado.leg.br/comissoes/comissao?codcol=2197 (Accessed 24 October, 2021).

[204] Relatório Legislativo, Senador Valdir Raupp, Comissão Mista da Medida Provisória nº 844 de 2018, 30 October 2018.

[205] AESBE, "Governadores pedem revisão imediata da MP 844," 7 November 2018. https://aesbe.org.br/15665-2/ (Accessed 29 January, 2021).

major newspapers on November 07, 2018, nearly two weeks before the MP was set to expire. While the letter stated that private participation was "welcome and necessary," it criticized, in particular, the proposal to eliminate the exemption of program contracts from competitive bidding. AESBE's president at the time pleaded with the federal government to listen to state governments as they were the ones that would "feel the negative impacts of the MP 844, if approved as it is."

Meanwhile, in Congress, opposition legislators mobilized by opposition groups attempted to obstruct the floor vote on MP 844.[206] The executive also faced disagreements within its own coalitional base.[207] In spite of the willingness of business actors to seek a middle-ground, the executive failed to negotiate a compromise. One private sector actor involved in last-minute negotiations around the proposal recounted the episode as follows:

> I was there with folks from private providers negotiating, we even came to an agreement [around the issue with program contracts] but at H-hour a representative, a congressman who was part of the government's base, in charge of negotiating on the government's behalf, arrived at the last meeting we were doing, even with FNU, entered the room and said 'you can stop this negotiation because we will approve this measure whether you want it or not (*na marra*).' Except not, because the following day it wasn't even voted. So, the government thought it really had control, this was at the end of Temer's government, he thought he had control, I don't know what went on in his head (*que raios passou na cabeça dele*).[208]

Indeed, the executive seemed to overestimate its strength and underestimate the opposition's. Temer's administration had initially been quite effective, getting Congress to approve two major reforms within its first year—the "Expenditure Ceiling Act" (*Teto dos Gastos Públicos*) and Labor Reform. But in between 2017 and 2018, Temer began to lose congressional support.[209] Corruption charges mounted against the president, while his popularity decreased, reaching an impressively low approval rate of 3% in September 2017.[210] By the end of 2018, when MP 844 was ready for a vote, right-wing populist Jair Bolsonaro had won the presidential election and Temer's lame-duck government was in a precarious position to rally support for the decree and deal with the opposition in Congress.[211] That was the first strike-out.

b. Learning the way

To keep the reform alive, business actors counted on an unanticipated source of instrumental power. In December 2018, Diogo Mac Cord was recruited to become Secretary of Infrastructure

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[206] On November 12, 2018, opposition legislators reportedly tried to delay the MP's discussion in exchange for allowing the House to vote on a different provisional decree concerning financing for philanthropic healthcare providers. See Portal da Câmara dos Deputados, "Adiamento da MP sobre saneamento permitiu votação de apoio financeiro a santas casas," 12 November 2018.

[207] Portal da Câmara dos Deputados, 12 November 2018, ibid. Interviews: I31 (labor and civil society organization, 2019); I65 (labor, 2021).

[208] Interview I58 (private operator, 2019).

[209] BBC, "Por que Temer está perdendo cada vez mais apoio no Congresso," 26 October 2017. On the last year of Temer's administration, see also Duque and Smith (2019).

[210] G1, "Governo Temer é aprovado por 3% e reprovado por 77%, diz Ibope," 28 September 2017.

[211] Connected Smart Cities, Interview with Martha Seillier, Ibidem; Interview I35, private operator, 2019.

within the new Ministry of Economy—a "super ministry" created by President-elect Bolsonaro to house a number of previously distinct policy areas. The new Minister for the Economy would be Paulo Guedes, a Chicago School-trained economist, founder of the investment bank BTG Pactual, and darling of the financial market. Before being recruited into government, Mac Cord worked for the multinational consultancy group KPMG and had just coordinated a study about investment needs in the sanitation sector commissioned by—surprise, surprise—ABCON.[212] The study, which concluded that investment needs in the sector amounted to nearly 700 billion Reais, became frequently cited by policymakers and the media to justify the intertwined needs for regulatory reform and private investment. With support from Mac Cord, Bolsonaro's transition team negotiated with Temer's administration the reintroduction of the sanitation reform via a new provisional decree, MP 868, in late December 2018. Backed by Guedes, Mac Cord and his team in the Ministry of the Economy became a key node for the articulation of business interests within the state.

One lesson ABCON and its allies drew out of MP 844's failure, however, was that they needed to leverage better sources of influence within Congress, particularly if the executive proved unable to build coalitions of support in the legislative arena. Rather than rely on the traditional "knock-on-all-doors" strategy, what they needed, they learned, were champions. "A more experienced congressman (…) turned to [us] and said: 'Look, so long as you continue to come here bringing numbers, giving technical data, you can forget it, you won't get anything. You have to find a group of congressmen here that will buy into your cause, that understand the issue, and that will disseminate it."[213]

Business actors found their first congressional champion in Senator Tasso Jereissati, who was selected as rapporteur of the new Joint Commission organized to discuss MP 868—the content of which largely reproduced that of MP 844. Jereissati was, by all measures, a key partisan tie for business actors—some nicknamed him "Senator Coca-Cola" due to his stake in the multinational firm. This is not to say that he bowed to business interests. A veteran politician, Jereissati had a keen interest in urban development and water policy.[214] While governor of the state of Ceará in the early 1990s, he implemented two broad-scale programs to expand sewage coverage in the state. Jereissati brought this experience to bear on the reform proposal. "He came in and he said: 'now let's break everything'."[215] ABCON representatives worked "late nights" with Jereissati's team as well as Mac Cord to redevelop the content of the executive decree.[216] Jereissati also tapped into the knowledge of well-rounded veterans such as Jerson Kelman, who had served as president of ANA in the early 2000s, was the former president of São Paulo's state company, Sabesp, and later joined the administrative board of one of the largest private providers, Iguá Saneamento. These "backstage" consultations resulted in two core changes, incorporated by Senator Jereissati into his report, that contributed to making the reform proposal more disruptive: (1) eliminating program contracts entirely; (2) encouraging regionalization.

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212 ABCON SINDCON, 2019, "Relatório Anual"; Interviews I13 (business association, 2021), I68 (federal government, 2021).
213 Interview I58 (private operator, 2019).
214 Interview I66 (private operator, 2021).
215 Interview I13 (business association, 2021).
216 Interviews: 168 (federal government, 2021); I69 (Congress, 2021); I13 (business association, 2021).

These interactions constituted another learning process for business actors, particularly ABCON and private providers, this time with regard to their reform preferences. Eliminating program contracts represented a bigger blow on CESBs than private providers originally intended when they took their wish list to Casa Civil in 2016. But as the dust lifted by Lava Jato and the shifts in firm ownership settled, there was a growing sentiment that this was a necessary step for truly opening up the sanitation market. The regionalization proposal, too, represented an evolution in business preferences. Senator Jereissati was particularly adamant that they need a solution to the problem of creating incentives for service provision in smaller or less lucrative municipalities, especially as critics argued that the private sector would privilege provision in profitable cities.[217] If they were going to sell the regulatory reform to the public as the key for expanding coverage to underserviced areas, this criticism required addressing—hence the idea to join "steak and bone." Larger private providers saw advantages in the creation of regional blocks of municipalities, which would support economies of scale and facilitate market growth. Smaller private providers, however, were likely to struggle to raise capital and compete for regional contracts. While this division initially put ABCON on the fence, the association eventually came around to the idea, understanding that it could help the reform succeed.[218]

Despite the more disruptive nature of Senator Jereissati's report on MP 868, it was approved by the Joint Commission in April 2019. In early June, however, the decree once again died in the House before a vote. History largely repeated itself. Oppositional sectoral groups deployed different countermobilization strategies to block the proposal. In addition to exerting pressure on the Congress floor, Assemae issued a letter, supported by the National Front of Mayors (Frente Nacional de Prefeitos, FNP), denouncing the proposal;[219] ABES, with backing from other sectoral groups, organized a National Day of Mobilization Against MP 868; worker unions organized street protests. Crucially, AESBE—now under even greater threat due to the provision eliminating program contracts—resorted to state governors once more to exert pressure over legislators. On May 12, 24 governors signed a new letter requesting that MP 868 be reconsidered. Among legislators in the House, there was yet again a lack of consensus around the proposal. Taking note of these tensions, the president of the House (equivalent to speaker), Rodrigo Maia, let the decree expire. [220, 221]

Once again, business actors were unable to fully rely on the executive to build support for the reform. They were, of course, working closely with "pockets" of business-aligned policymakers within the government, such as Mac Cord's team at the Ministry of the Economy, which served as an instrumental source of business power. However, President Bolsonaro appeared to work against his

217 Interviews: I69 (Congress, 2021); I13 (business association, 2021).

218 TV Gazeta, "Entrevista com FNU e ABCON sobre a privatização do saneamento," TV interview, 17 June 2019. Available at https://www.youtube.com/watch?v=TXOod2Z1QMc (Accessed 08 July 2021).

219 Assemae, "Carta de Cuiabá," 09 May 2019.

220 Interviews: I31 (labor and civil society organization, 2019); I65 (labor, state companies, 2021).

221 Despite not having put the executive decrees up for a vote on the House floor, Maia was supportive of the sanitation reform proposal and positioned himself as aligned with the private sector's agenda. Some interviewees suggested that the reason Maia let the decree expire was that he was against the use of an executive decree to introduce the reform. It is worth noting that Maia was the son-in-law of the Moreira Franco, who led President Temer's Investment Partnership Program (PPI) between 2016–2017. In a speech at an investment forum in 2017, Maia also declared that "the House's agenda, in sync with President Temer's, is focused on the market, the private sector." See Valor Econômico, "Maia disse ainda que agenda da Câmara é de reformas," 30 May 2017.

administration's agenda. At the start of his term, Bolsonaro rejected the traditional use of coalition building in Congress as a legislative strategy (Limongi, 2019). This created room for House and Senate leaders Rodrigo Maia and Davi Alcolumbre, respectively, to play a bigger role in setting the rhythm and agenda of legislative activity (Melo, 2021). Legislators and the media began to proclaim a new era of "Congressional protagonism," or the idea that Congress no longer simply revised or validated the executive's policy agenda.[222] MP 868 possibly fell victim to this search for protagonism as well as to issues with timing: it competed for attention with a rather more politically salient matter being discussed in Congress at the time, the pensions reform.

The reform impetus was kept alive by Senator Jereissati, who quickly reintroduced his report as a bill in the Senate (PL 3261). Within less than a week of MP 868's expiration, the Senate had approved PL 3261, albeit with important amendments. Crucially, Senators altered the provision terminating program contracts to allow for their renewal at least once, for a period of 30 years. This alteration helped to preserve the market power of state companies, and was thus not ideal from the private sector's standpoint. Additionally, the approved bill did not include the provisions related to the creation of a regulatory role for ANA, since the prerogative to alter the administrative organization of the state lies with the executive. The federal government later introduced a separate bill (PL 4161) in the House that contained this proposition. Once the spotlight shifted to the House, the dynamic expansion of business power during battle came into full view.

c. Tilting through weaving

Despite resulting in a second strike-out, the process of contention around MP 868 was pivotal for business actors and their political allies. It was from this moment forward that they began to more clearly weave together instrumental with discursive and structural sources of business power to tilt the playing field in favor of reform. To confront opposition from sectoral groups, they progressively realized that it was necessary to undercut the power of state companies and reshape the contours of the reform debate, moving it beyond purely sectoral interests. "Your coordination capacity (*capacidade de articulação*) only takes you so far but if you don't have a cause behind it or an issue that can mobilize, even to motivate the troops in front, nothing happens," argued a manager at one of the largest private providers when I asked about what contributed to the reform's eventual success.[223]

'Motivating the troops' and rallying public support entailed building greater discursive power. Business actors and their allies mobilized arguments, numbers, and mental images to develop a pro-reform narrative centered not on narrow issues such as competition or effective regulation, but on the broader quest for universal service coverage. The contours of the narrative that gradually gained prominence were not necessarily novel. They reproduced common arguments—capital shortfalls, inefficient public provision—that have long been mobilized to justify private investment in infrastructure. These were, however, cast under a more compelling frame: the consistent portrayal of

[222] Portal da Câmara dos Deputados, "Alcolumbre destaca protagonismo do Congresso no primeiro ano do governo Bolsonaro," 12 December 2019.
[223] Interview I67 (private operator, 2021).

existing sanitation coverage as extremely precarious and backward. After the expiration of MP 868, for example, ABCON claimed that the proposal's defeat represented a "victory of the corporatism of state companies over the possibility of changing the scenario of backwardness (*atraso*)" that characterized Brazil's sanitation sector.[224] The numbers used to illustrate this scenario were typically sourced from Instituto Trata Brasil, which became a popular source for the assemblage and dissemination of data about sanitation delivery in Brazil.[225] While in practice Trata Brasil constituted a sort of "intellectual arm" of the private sector—some of its studies were funded by ABCON and contracted from private consultancies—in the media and in conversations with legislators it positioned itself as a neutral civil society non-profit. "Representatives in the House looking at the [reform] often want to know what Trata thinks because Trata is neither public nor private. So, they look for [Trata Brasil] whenever they want a neutral opinion, a point of view from society rather than a sectoral one," explained one interviewee.[226] When it came to sanitation access, Trata Brasil had a ready factsheet: nearly 100 million Brazilians (47% of the population) lacked access to sewage services and close to 35 million lived without access to clean water.[227]

Reform supporters used those numbers to decry the jarring anachronism of Brazil's quest for modernity. In a televised interview with CNN, Senator Tasso Jereissati argued that "we have part of Brazil living in the Middle Ages, without sanitation, with sewage running in front of their houses and children with tablets in their hands playing in the sewage. This is absolutely unacceptable."[228] I heard similar accounts of the "medieval" state of the sector in interviews and public events.[229] After the precarious state of the sector had been established, the next step in the narrative was often to note the investment gap: the sector needed between 600 to 700 billion Reais in investments to address this "medieval" context, an investment figure that traced back to the KPMG report commissioned by ABCON and led by Mac Cord, now at the Ministry of the Economy. The narrative proceeded to position private participation as the main solution, given existing fiscal constraints and widespread inefficiencies among state companies. The conclusion was that a broad regulatory reform was needed to attract investors by providing them with security and stability. Perhaps conveniently, the narrative concealed the ways in which the reform played into the interests of existing private investors.[230] During my fieldwork in mid-2019, I heard the contours of this narrative repeated ad nauseam by business actors, policymakers, and legislators.

This narrative also became widely propagated in the media—an instrumental source of power. In July 2019, one of Brazil's largest newspapers, Estadão, released an editorial titled "A mortal enemy."

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224 Correio Braziliense, "Projeto de lei substitui MP do Saneamento," 29 May 2019.

225 This data was typically collected from the National Information System on Sanitation (SNIS), a publicly available database.

226 Interview I60 (civil society organization, 2019).

227 Trata Brasil, "Esgoto," 2019. Available at: http://www.tratabrasil.org.br/saneamento/principais-estatisticas/no-brasil/esgoto (Accessed on January 28, 2020).

228 CNN, "Em debate desde 2018, marco do saneamento está na pauta do Senado nesta quarta," 24 June 2020.

229 Interviews: I35 (private operator, 2019); I76 (finance, 2021). Martha Seillier (federal government official) at the event Debate "Novo Marco Regulatório do Saneamento," 26 August 2019, organized by Grupo de Economia da Infraestrutura & Soluções Ambientais da Fundação Getúlio Vargas (FGV).

230 During my fieldwork in mid-2019, I heard the contours of this narrative repeated ad nauseam by business actors, policymakers, and legislators, including in many of my interviews.

The editorial positioned sanitation provision as "the most precarious" infrastructure sector in the country, highlighted investment gaps, noted the gains in public health, productivity, and tourism that could be derived from universalizing service coverage (citing a study from Trata Brasil), and concluded by calling legislators to take action on the regulatory reform.[231] In a similar vein, an editorial later published by Folha de São Paulo, another of Brazil's largest newspapers, called sanitation indicators "shameful" (*vergonhosos*) and accused oppositional groups and legislators of placing their "petty political interests" (*interesses políticos mesquinhos)* ahead of efforts to "extend sewage services to 100 million Brazilians."[232] In the perspective of several actors, the diffusion of this "crafted narrative of catastrophic numbers," as one congressional aide put it,[233] was fundamental for the eventual success of the reform. One private sector interviewee observed, for instance, that "the media aligned itself with the discourse that [the sanitation sector] lagged behind (*estava atrasado*), that it is not reasonable for children to step on sewage. (…) This discourse ended up prevailing over the fake argument that water is a basic human right."[234]

Business actors and their allies purposefully sought to construe a discursive strategy that amplified the reform debate beyond sectoral interests, increasing its public salience. In the period between the dispute around MP 868 and the transition towards the discussion of the bills in the House, ABCON looked to the agribusiness sector to learn how they could be more effective: "We went looking for inspiration in 'agro' and what was the lesson? The lesson was that we needed to build our discourse (*construir o discurso*) within society."[235] One government official and business ally offered a similar perspective when reflecting on the reasons for the failures of the provisional decrees:

> It was a discussion that was very limited to the sector itself. And we transformed that into a battle of the whole Brazilian population. So, I wasn't going to discuss [the reform] at ABDIB, I was going to discuss it on the Pânico program on Jovem Pam [popular radio]. So, we changed the scale of support for this project. (…) Of course, we had a broad network of support, from ABCON, CNI, several actors. But it's of little use for ABCON to appear on Pânico, you know? It has to be someone from the government that goes into the line of fire.[236]

But ABCON did not shy away from the media spotlight. In its 2019 report the association boasted about becoming the "main voice" for the private sector in the press, appearing 108 times in 15 different media vehicles during the year to comment on issues related to the regulatory reform alone.[237] Perhaps more telling of ABCON's increasing media presence over the course of the reform are estimates of the value of press clippings, that is, of how much media appearances would have cost if the association had paid for all the media coverage it received. According to data collected by the association, in 2018, when the first decree was introduced, the estimated cost would have been 9.5

231 Estadão, "Um inimigo mortal" (editorial), 26 July 2019.
232 Folha de São Paulo, "Bancada do atraso" (editorial), 21 November 2019.
233 Interview I62 (Congress, 2022).
234 Interview I66 (private operator, 2021).
235 Interview I13 (business association, 2021). A private consultancy hired by ABCON collaborated with a consultancy group that worked with the agribusiness sector to learn their strategies for policy influence. For an in-depth analysis of the coordination capacity and influence of agribusiness and agrarian elites in Brazilian politics, see Fernández Milmanda (2018).
236 Interview with federal government official, 2021. Interview code omitted to protect anonymity.
237 ABCON SINDCON, Ibidem, p. 18. Media appearances related to other issues not included.

million Reais; in 2020, when the reform was approved, the cost would have been a whooping 198 million.[238] Part of ABCON's aim was to counter anti-privatization arguments, drawing on accumulated private sector experience to dispel what they considered to be "myths" about private participation. Against the argument that private companies increased costs to consumers to enhance profitability, for example, the association argued the average tariff charged by private providers was only 3% higher than that of other companies.[239]

Delegitimizing state companies was another central dimension of the discursive strategy to position the existing status quo as outrageous and untenable. In other words, state companies were blamed for the poor state of sanitation in the country. Also in July 2019, Trata Brasil released a study,[240] widely publicized in both national and local press, which concluded that 70 of Brazil's 100 largest cities reinvested less than 30% of their gains from service provision.[241] Needless to say, the majority of these cities were serviced by state companies. In media interviews about the study, Trata Brasil's president, Édison Carlos, made veiled critiques of CESBs: "If the company uses all the money to cover expenses, and there is nothing left to invest, then its management is wrong." A month later, in August 2019, the Ministry of the Economy, drawing on the experience of former KPMG consultant, Diogo Mac Cord, also publicized an internal study on the investment capacity and expenditures of CESBs. It argued that several state companies, particularly in Northern and Northeastern states in which coverage was most lacking, underinvested and tended to spend close to 50% of their operational revenues on expenses with personnel.[242] The study reinforced the common critique that state companies were not only inefficient but also sites of corporatism and patronage.

Opponents of the reform sensed their position in the discursive terrain became increasingly more precarious after the demise of MP 868. The leader of one municipal association observed in our interview in August 2019, as the reform debate shifted to the House, that they had noticed an increasing "demonization," as they called it, of public provision: "What we have seen, what is difficult in the debates, is that there is a lot of talk that public [provision] doesn't work. That was actually in O Globo [large newspaper] today. 'The problem is the number of employees; the problem is this or that.'"[243] The association of state companies, AESBE, also perceived a need to assemble its own data about sanitation services in the country to present to legislators in the House.[244] But while AESBE sought to challenge the growing negative press in meetings with legislators and during public hearings

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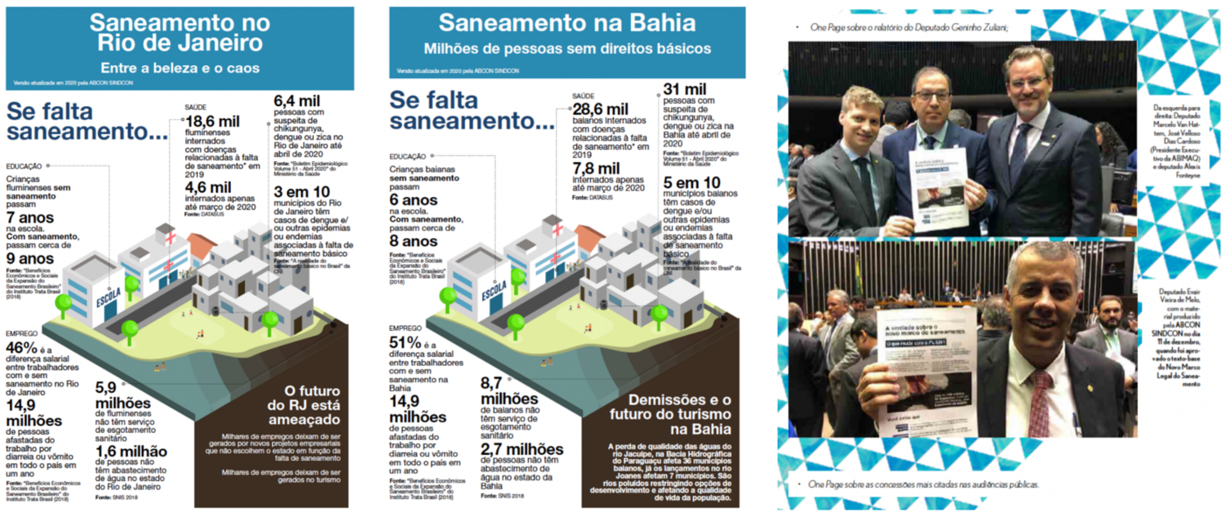
238 ABCON, "Indicadores 2016 2021" (Excel sheet provided by the association on January 10, 2022). The estimates are provided by the association's news clipping service; appearances in more important media vehicles are weighed more heavily. The association reportedly did not pay for any media insertions during this period (Interview I79, 2022).
239 TV Gazeta, Ibidem.
240 The study was commissioned from the private consultancy group GO Associados.
241 G1, "Saneamento básico: maior parte das grandes cidades reinveste menos do que arrecada," 23 July 2019.
242 Ministério da Economia, "Empresas Estaduais de Saneamento: Investimentos e Salários," August 2019.
243 Interview I47 (municipal association, 2019).
244 COMPESA, "Presidentes de companhias de saneamento discutem estratégias em reunião da Aesbe em Natal," 18 June 2019, available at: https://servicos.compesa.com.br/presidentes-de-companhias-de-saneamento-discutem-estrategias-em-reuniao-da-aesbe-em-natal/ (accessed 10 January 2022); EMBASA, "Aesbe apresenta Proposta de Modelagem Econômico-Financeira ao Relator do PL do Saneamento," 14 August 2019, available at: https://www.embasa.ba.gov.br/index.php/2318-aesbe-apresenta-proposta-de-modelagem-economico-financeira-ao-relator-do-pl-do-saneamento (accessed 10 January 2022).

later held at the House of Representatives in Congress, its case became progressively weaker in light of the statistics mobilized against them. As one anti-privatization activist and labor organizer conceded: "It's impossible to not recognize the problems that state water and sanitation companies have. There are a lot of problems and there have been years and years in which they couldn't deliver."[245]

Figure 4.4. Use of one-pagers by ABCON SINDCON to tailor information for legislators from different states



From left to right: "Sanitation in Rio de Janeiro: Between beauty and chaos," "Sanitation in Bahia: Millions of people without basic rights," and photos of legislators holding one-pagers prepared by ABCON SINDON.[246]

The build-up of discursive power enabled ABCON to develop more targeted lobbying strategies to pressure legislators. Another lesson they had learned from prior failures was that it was necessary to reach representatives where it mattered the most: their local electoral bases. Moving beyond conventional strategies of "banners, posters, and t-shirts," ABCON sought to combine lobbying on the Congress floor with targeted and localized digital advocacy. It hired a consultancy company from Brasília, the capital, to continuously place tailored articles in local news media and blogs across the country, highlighting local sanitation problems or how a particular city fared in relation to others. "When the [legislator] goes back home on Saturday and reads the newspaper from his local church, the way he will understand sanitation needs to be on that paper," joked one leader of the association.[247] This strategy built on a change of course that began during the discussion of MP 868, when business actors realized that they could more effectively pressure legislators if they "sliced" sanitation indicators by state. That is, rather than provide legislators with national or regional aggregates, the association began to prepare tailored information sheets ("one-pagers") for

[245] Interview I31 (labor and civil society organization, 2021)
[246] ABCON SINDCON, ibidem, p. 19.
[247] Interview I13 (business association, 2019).

representatives of different states.[248] They also prepared one-pagers about the content of reform proposals (see Figure 4.4).

Private actors in the sanitation space interwove discursive and structural power by leveraging ties and support from the financial sector. As scholars have noted, bringing in new actors to expand the scope of conflict can help relatively weak interests gain strength (Schattschneider, 1975[1960]). While private providers could tout the potential investment gains from the regulatory reform, they lacked a sizable presence in the sanitation market or reasonable disinvestment threats. Their existing operations were largely sunk investments. And although new financial shareholders exercised pressure on some of the largest private companies to grow, there was no indication that these investors might exit—at least not in the short term—if the regulatory reform did not move ahead. Meanwhile, as the state pulled away from public investment, bringing finance in helped strengthen claims by private providers and other reform enthusiasts that further private investment would come if the regulatory reform passed.[249] The perceived legitimacy of these claims relied on the very discursive construction of the problem as one of capital shortage in the face of fiscal constraints. For example, House representative Geninho Zuliani, who was selected as rapporteur of the Special Commission tasked with discussing the reform bills in the House, stated the following in an interview about the reform with a financial news outlet: "We need 600 billion Reais to resolve this problem and this money is in the hands of the private sector."[250]

Within the financial sector, ABCON realized that stock traders and some large investment banks could be their biggest allies. As one asset manager noted, the discussion of the provisional decrees served as a wake-up call for the financial market, alerting them to the sector's large growth potential.[251] From the perspective of financial market actors, sanitation reform was the next big item on the economic reform agenda, particularly after the approval of pensions reform. These actors paid close attention to the potential full privatization of state companies such as Sabesp. They were also keen to see greater regulatory standardization. In the first half of 2017, for example, BTG Pactual, one of Brazil's largest investment banks, had released a report titled "Brazilian Water & Sewage Sector - Is a Revolution Coming?", in which it explicitly advocated for creating a federal regulatory body.[252] The suggestion drew inspiration from the centralized regulatory model used in the Brazilian electricity sector, one financial market actors had greater familiarity with. In other words, they wanted to transpose a model they knew to a sector they understood much less about.[253] Like the existing private providers who were under the gaze of financial investors, financial market actors thought regulatory centralization would help to make the sector more legible and reduce concerns with political interference—in both private and state companies.[254]

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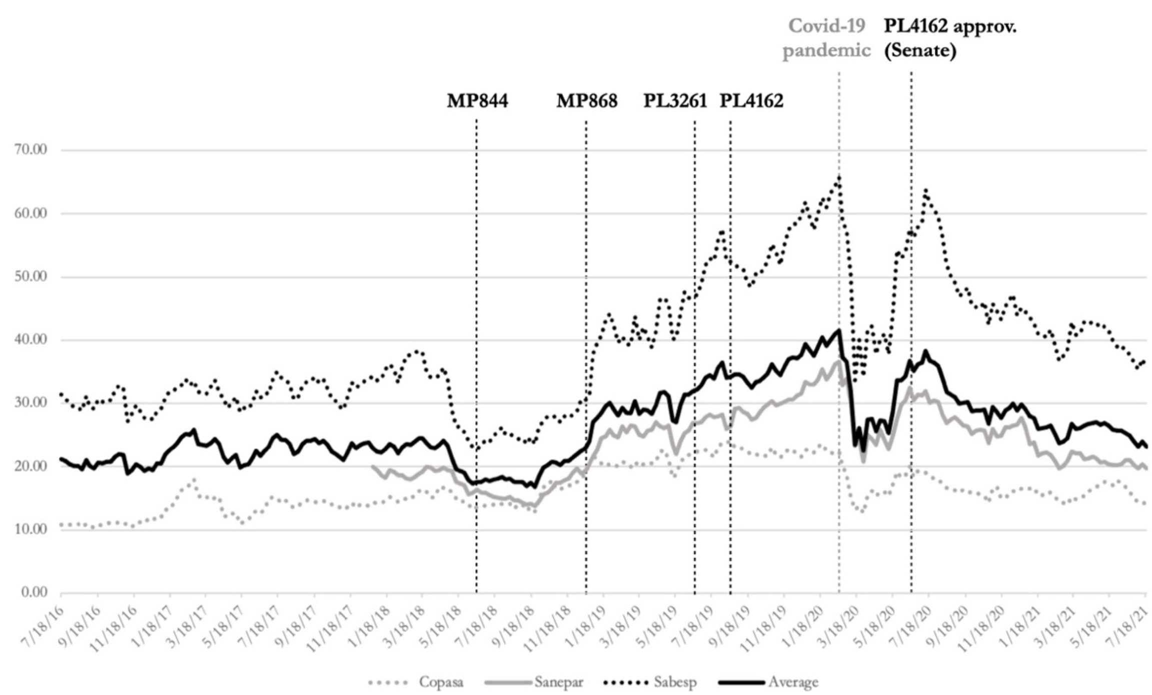
248 Interview 179 (business association, 2022).
249 Though actors in the sector at times confessed being unsure whether more private money would indeed come.
250 Infomoney, ""Saneamento precisa de R$ 600 bi e esse dinheiro está na mão do setor privado", diz relator de PL do setor," 22 July 2019.
251 Interview I20 (finance, 2019). Also: Interview I5 (finance, 2019).
252 BTG Pactual, "Brazilian Water & Sewage Sector - Is a Revolution Coming?", March 2017.
253 Interview I74 (finance, 2021).
254 See presentations by financial sector firms during a public hearing at the House of Representatives: Audiência pública, "Marco Legal do Saneamento Basico PL 3261/19: Contribuições do mercado financeiro," 26 September 2019.

Unfortunately for CESBs—and perhaps ironically—the main way investors in the stock market were able to exercise structural power over legislators was through trading on the stock of the three largest state sanitation companies in the country: Sabesp (São Paulo), Copasa (Minas Gerais), and Sanepar (Paraná). Between the late 1990s and mid-2000s, these companies had transitioned into mixed capital models and, in 2019, were all listed on B3, Brazil's stock exchange. This process illustrates how both short-run and long-run processes came to play a role in strengthening business power at different points within the extended temporality of the reform. Beginning in 2019, and particularly after the approval of PL 3261 in the Senate, the stock value of those companies began to appreciate but also fluctuate in relation to legislative activity around the reform (Figure 4.5 illustrates this process). This was especially true for Sabesp. Legislators took notice of this market movement.[255] But beyond sending market signals, financial actors also played a role on the ground floor. One business association leader recounted: "At the end of the day, the guys who really supported us were the guys who played on the stock exchange. They went to Brasília, promoted newspaper articles, crowded vans to go door-to-door speak to legislators."[256] Media coverage, personal networks, and the organization of seminars about the regulatory reform catering to financial market investors were additional strategies used by sectoral business actors to mobilize the power of finance.

Figure 4.5. Weekly closing share price for CESBs traded on B3 (2016—2021) in Brazilian Real



Own elaboration. Source: Yahoo Finance. Note: average reflects the average closing share price for all three firms.

[255] Interview I62 (Congress, 2020).
[256] Interview I13 (business association, 2021). Also: interviews I62 (Congress, 2020), I68 (federal government, 2021).

Contextual political developments contributed to increasing the weight of financial interests as the reform battle unfolded in 2019. Under Paulo Guedes, the Ministry of the Economy became quite embedded in finance—as illustrated by the very recruitment of Guedes and Mac Cord. They came to represent the voices of the financial market within the state.[257] A few months after they took up their government posts, the Ministry of Regional Development (MDR)—which, on paper, was the ministry in charge of sanitation policy—was sidelined.[258] Sanitation policy effectively became an economic policy: a vehicle for the federal government's agenda of fiscal austerity, privatization, repurposing of public banks, and development of capital markets.

Political shifts and networks also played to the advantage of private providers in Congress. A mutual connection with the vice-governor of the state of São Paulo, Rodrigo Garcia, contributed to Rodrigo Maia's (president of the House) selection of Geninho Zuliani, a first-time congressman from São Paulo state, as rapporteur of the Special Commission that would examine sanitation reform bills in the House. Maia was a close friend of Garcia's. At the time, São Paulo state's governor, João Dória, was interested in fully privatizing Sabesp, the state's sanitation company. Part of Zuliani's mission was to make sure the new legislation also facilitated this goal. In Zuliani, business actors found another champion committed to pushing the reform forward.

Rodrigo Maia tasked Zuliani with producing a consensual report based on ample public debate. The aim was to avoid any perception that public discussion about the reform had been hasty or skewed—a stigma carried by the provisional decrees. In contrast to the sole public hearing held by the Joint Commission that analyzed MP 844, the Special Commission organized twelve public hearings between September and October 2019, with representation from multiple stakeholders.[259] One public hearing was entirely dedicated to the participation of representatives of financial institutions and investors. In the backstage, however, some proposals were safeguarded from the outset, such as the termination of program contracts and the provisions concerning the privatization of state companies.[260] Zuliani and his staff interacted closely with ABCON, financial sector actors, and government officials in the development of their report. ABCON, in fact, was not only the first to be named but received a top score when I asked one of Zuliani's aides which organizations had been most active in terms of engaging with them: "[ABCON] understood all sides." Zuliani's staff also worked with other sectoral groups to find a compromise solution with regard to program contracts in order to smooth out the approval of Zuliani's final report and, eventually, guarantee a successful vote on the House floor.

By this point, oppositional groups were on the ropes. Unlike in previous moments of united struggle against the provisional decrees, reform opponents appeared more divided, with some willing

[257] Interview I68 (federal government, 2021).
[258] Interviews: I13 (business association, 2021); I31 (labor and civil society organization, 2021); I47 (municipal association, 2019); I48 (federal government, 2019); I64 (labor, 2021).
[259] Portal da Câmara dos Deputados, "Comissão Especial - PL 3261/19 - Atualiza o marco do saneamento básico, Audiências Públicas e Eventos." Available at: https://www2.camara.leg.br/atividade-legislativa/comissoes/comissoes-temporarias/especiais/56a-legislatura/pl-3261-19-atualiza-o-marco-do-saneamento-basico/apresentacoes-em-eventos (Accessed 03 November 2021).
[260] Interview I62 (Congress, 2020); Interview I13 (business association, 2021).

to strike a more conciliatory tone.[261] On October 7th, a couple of days before Zuliani's report was read before the Commission, AESBE, ABES, and Assemae co-signed a letter in which they declared support for the construction of a new legal and regulatory framework for sanitation provision and endorsed the proposal to increase private participation, especially via partnerships with public companies.[262] They still called for program contracts and concession contracts to be treated equally. Groups such as FNU, FNSA, and ONDAS, however, maintained their critical stance towards private participation.

Among pro-reformers, the perception was that they had enough votes—not only in the Commission but in the House—to secure a favorable result without a compromise. The more conservative make-up of the legislature (Melo, 2021) likely contributed to this favorable climate. However, Zuliani and Maia were keen to, as much as possible, get state companies and governors on board in order to reduce the probability that a proposal approved by the House might later suffer changes in the Senate.[263] But whereas state governors had backed oppositional groups in previous moments, their support had wavered. Since the discussion of MP 868, business allies within the state had worked to bring some state governors to their side with the hope of neutralizing attempts by AESBE to use governors as shields.[264, 265] Oppositional groups noticed that state governors began to back away from overtly challenging the reform,[266] perhaps contributing to AESBE's adoption of a more compromising stance. Nonetheless, to placate lingering tensions, pro-reform legislators struck a deal centered on a given-and-take solution: (1) allowing state companies to renew or formalize existing program contracts by 2022, thus giving state companies some breathing room, but (2) conditioning the maintenance of existing contracts to companies' ability to prove that they had the necessary financial capacity to universalize coverage by 2033—the "strangulation" mechanism. Private providers were willing to be flexible. ABCON's perception was that this mechanism would, in practice, hurt many state companies just the same as eliminating program contracts point-blank. While the executive eventually vetoed the provision giving state companies until 2022 to renew or formalize program contracts,[267] the compromise meant smooth sailing for the proposal in the House and subsequently in the Senate, leading to the reform's success.[268]

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[261] Interviews: I64 (labor, 2021); I65 (labor, 2021).
[262] ABES, AESBE, and Assemae, "Nota conjunta de apoio à construção do novo marco regulatório do saneamento," 07 October 2019.
[263] Interview I62 (Congress, 2020).
[264] Interviews: I68 (federal government, 2021); I13 (business association, 2021).
[265] For example, following conversations with the Ministry of the Economy, in late May 2019 a group of five state governors in the South and Southeast declared support for the reform, see: Consud – Consórcio de Integração Sul e Sudeste, "Carta de Gramado," 25 May 2019.
[266] Interview I31 (labor and civil society organization, 2019).
[267] The federal government, particularly the Ministry of the Economy under Guedes, was perceived by several actors I interviewed, including business actors, as comparatively more radical in its quest to knock out state companies. Some attributed this to ideological commitments, others to a lack of understanding of the sector and the role of state companies therein—including as potential partners to private providers (Interviews I49, state government; I53, private sector consultant, 2019; I63, public bank, 2020; I64, professional association, 2020).
[268] Nearly 70% of elected representatives (276 of the 401 present and eligible to vote) in the House voted in favor of the reform bill. Of those who voted against, 22% belonged to left or center-left parties who opposed the government and had instructed their legislators to vote "No." Although states in the North and Northeast had reportedly been more resistant to the reform (see Folha de São Paulo, "Privatização do saneamento trava no Congresso com resistência de representantes

5. Conclusion

This study illuminates the role of business actors in driving a market-oriented reform within a hard context for institutional change. Existing scholarship on the politics of market reforms, particularly in Latin America, has typically emphasized the role of international pressures and executives in driving this kind of change. My analysis of the political economy of a recent and far-reaching regulatory reform of sanitation delivery in Brazil reveals, however, that the impetus for reform came from the bottom up, that is, from existing private investors in the domestic sanitation market. Specifically, tracing the legislative process around the reform over a period of four years, I demonstrate that these investors played a fundamental role not only in shaping the content of the reform but also in countering strong opposition to it. They did so by progressively building business power, that is, they developed and wove together instrumental, discursive, and structural sources of power through a fluid process of business mobilization.

I show that instrumental sources of power such as institutional consultation, partisan linkages, and recruitment into government were key for the ability of business actors, particularly existing private sanitation investors, to set the agenda and to keep the reform alive after the executive suffered two consecutive legislative defeats. However, these sources appeared insufficient to confront opposition to the reform and neutralize the power of state government-owned companies, the dominant service providers in the country and their main opponents. To successfully push the reform forward, business actors wove in discursive and structural power. They developed discursive power by engaging in a broad effort to raise the salience of sanitation problems and to frame existing sanitation coverage as precarious and backward. This framing contributed to delegitimizing state provision and neutralizing the power of state companies. Access to media sources and the development of specialized studies and expertise—instrumental sources of business power—supported these framing strategies. To exercise structural power over legislators, private actors in the sanitation space were able to form an alliance with the financial sector. Confronting a fiscal crisis, the state was—or at least positioned itself as—unable to finance infrastructure investments. Existing private investors pointed to financial investors in the stock market to signal the potential for attracting private capital if the reform passed.

The findings of this study contribute to a growing and vibrant literature on the multiple and dynamic facets of business power. To start, it reinforces studies demonstrating the importance of understanding the interplay between different sources of business power (Babic et al. 2022)—thus moving away from mechanistic and static treatments. While the construction of discursive power in this case merits further study, the analysis presented here suggests, like others have proposed (Keller, 2018), that discursive factors can be especially important when business actors are in disadvantageous positions. This study also extends our understanding of structural business power by demonstrating how it can be exercised in relation to credible promises of greater investment, as opposed to simply

do Norte e Nordeste," 17 November 2019), once we break the votes down by state, we do not observe any concerted opposition to the bill from legislators from states in those regions, with voting patterns varying across them. In the Senate, the reform was approved by 83% of Senators (of 78 valid votes).

disinvestment threats. This dimension of structural power might be particularly important to explore as financial interests and actors gain prominence in infrastructure policy decision-making.

Furthermore, the analysis offers insight into a case in which business actors were able to successfully challenge the existing state of affairs and get what they wanted despite starting from a relatively marginal position, given that their participation in the sanitation sector had historically been relatively small. This contrasts with many existing analyses of business power, which typically examine situations in which business actors are defending or minimizing threats to a status quo that is beneficial to them. Importantly, I argue that learning and adaptation were fundamental to business leaders' ability to become effective challengers. I show that building and weaving together different sources of power required a fluid dynamic of collective action based on learning from drawbacks, calibrating course and preferences, and taking advantage of unexpected political developments.

In this vein, this study also provides greater insight into the temporal construction of business power (Bril-Mascarenhas and Maillet, 2019), though not necessarily or primarily via past investments in politics. Rather, I highlight how business actors may adjust course and preferences, and seek new sources of influence as they understand what works during "temporally extended" (Clemens, 2015) processes of contention. In fact, the case of business mobilization around sanitation reform in Brazil illustrates how building business power may entail shedding past forms of investment in politics, such as monetary contributions, which have historically been common strategies for particularistic business influence in Brazilian as well as Latin American politics. More broadly, this study also adds to scholarship (Brooks, 2020) demonstrating how the regulatory preferences and political strategies of private actors are not fixed but instead can evolve through learning and adaptation.

Beyond the analysis of business power and politics, this study also contributes new insights into the politics of private investment in infrastructure outside of the 1980s–1990s wave of market-oriented reforms. Crucially, it problematizes the traditional wisdom that private investment follows from institutional reforms (Savedoff and Spiller, 1999; Kessides, 2004; Trebilcock and Rosenstock, 2015). This idea emerged as a sort of "lesson" from privatization experiences in the late 20th century, where lack of regulatory clarity and clear rules for safeguarding investors were pinpointed as key explanations for the mixed outcomes of these experiments. This view led to an "explosion" of governmental and international development efforts focused on supporting the improvement of contractual and regulatory frameworks to attract private investment to infrastructure, especially from financial actors such as pensions funds and other asset managers who have increasingly looked to infrastructure assets as sources of long-term, stable returns (Carolini and Cruxên, 2020). Critical planning and geography scholars have also worked from this presumption. Institutional environments are viewed as "filters" for the territorialization of private capital, helping to determine where global financial investors, for example, will and will not go (Halbert and Rouanet, 2014; Siemiatycki, 2013; Skerrett, 2017).

Without denying that institutional environments perceived as "safer" may attract greater private investment in the future, the problem with this established view is that it overshadows investor agency. It casts private investors—including finance—primarily as the beneficiaries and legatees of the institution-building efforts of other actors. In the global South, in particular, the spotlight has been on the role of states or multilaterals in "de-risking" and "escorting" capital to development projects (Gabor, 2020; Mawdsley, 2018). My analysis, instead, reveals how private investors can be key agents of institutional change in the governance of urban infrastructure development. This requires looking at private investment not simply from the perspective of prospective "global" investors but understanding the very long-run political repercussions of the development of domestic private infrastructure provision. Institutional reforms neither happen in a vacuum nor necessarily reflect blanket "good governance" reform blueprints. The case of sanitation reform in Brazil suggests that what constitutes an attractive legal and regulatory environment depends as much on the interests of existing investors as on how they perceive the constraints and opportunities offered by inherited institutional arrangements within different conjunctures. Crucially, it suggests that private investors do necessarily sit idly; they actively work to create the institutional environments they think they need.

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Conclusion

Midway through my fieldwork in July 2019, I was walking down São Paulo's iconic Avenida Paulista when I came across an exhibition of the work of photographer Marc Ferrez at the Instituto Moreira Salles. Ferrez was a pioneer Brazilian photographer. In the late 19th century, he produced a collection of photos depicting the ongoing transformation of Rio de Janeiro's natural and built landscape. While perusing the exhibition, I came across a series of photos of water supply construction projects led by the private British company A. Gabrielli (Figure 6.1). Ironically, in trying to take a break from my research, I had walked right into it again—though this time in black and white. The collection offered insight into the role that foreign-owned or -financed firms had played in the early development of sanitation systems in some of Brazil's most famous cities.

Figure 5.1. Photo taken by Marc Ferrez of early construction of water supply systems in Rio de Janeiro (1879)

Source: Photography exhibition "Marc Ferrez: Território e Imagem," Instituto Moreira Salles, São Paulo, July 2019. (The exhibition allowed photographs of the work to be taken by visitors).

During the Brazilian Empire, public administrators sought private expertise and capital to tackle emerging sanitation and housing challenges in the country (Heller et al., 2014). In 1857, for example, the Rio de Janeiro City Improvements Company, backed by the English bank of Glenn and Mills and Co., was set up to install sewers in downtown Rio. In the book *Civilizing Rio* (1997: 76), Teresa Meade recounts that while the company quickly expanded connections, it "came under fire from the very beginning both for the shoddiness and expense of its work and for the way it used its connections with the local government to extend its reach into all aspects of the urban renovations." More than a 150 years later, my research showed that private water and sanitation provision was still a thing, financial actors were still a key part of it, and it all remained very much immersed in politics.

In this dissertation, I have explored the politics of private investment in urban water and sanitation delivery in Brazil—from the local, to the state, to the national scale—in the past three decades. I have sought to offer insight into varying models of business ownership and politics, thus deconstructing monolithic treatments of the "private sector," as well as explore the ways in which financial investors, in particular, have come to play a role in the governance of service delivery by acquiring stakes in water and sanitation companies. I will not attempt to recap the dissertation articles in this conclusion. However, I would like to highlight a few insights to emerge from the research, and point to some lingering questions and pathways for future research.

If there is one message that I hope this dissertation's effort to "disorder" private participation will get across, it is that the ownership of service providers matters. It matters not necessarily in terms of whether it is public or private—the traditional dichotomous lens that has dominated debates around ownership—but crucially in terms of how ownership is structured and who private investors are. This message runs counter to the core lesson that emerged from privatization experiences in the 1990s and early 2000s. The conclusion then was that governance, not ownership, was what mattered for the outcomes of service delivery. Across my dissertation papers, however, I have shown that different models of ownership and types of investors can alter the governance of service delivery. If governance is what matters and ownership shapes governance, then we need to revisit the problem of ownership.

In "The Limits of Insulation" (Chapter 2), I demonstrate that in mixed ownership firms, private investors can have a bigger say in company activities and service priorities when minority private ownership is concentrated rather than dispersed among investors in the stock market. Crucially, I find that when states are majority investors, they can modulate whether service delivery is more attuned to equity or oriented towards market concerns such as efficiency. This kind of political modulation, however, is not without its challenges. After I completed that research, increasing fiscal stress in the state of Minas Gerais pushed the state government to pressure Copasa, one of the companies I studied, into paying out more dividends to shareholders—benefitting not only itself as the majority shareholder but also dispersed minority investors in the stock market (see Almeida and Hungaro, 2021). These kinds of developments underscore my argument that we need to consider more carefully the temporal development of public-private forms of collaboration. They also suggest that the ability of state-appointed bureaucrats and allies to shape service delivery priorities within utilities may be contingent on shifting politico-economic contexts.

In "Against the 'Local' Grain" (Chapter 3), I show that the way in which private firms in Brazil have approached the political regulation of service delivery has shifted along with changes to business ownership. Under construction business groups, business politics was centered on local political embeddedness; under financial investors such as private equity groups, it has moved towards centripetal politics, that is, private firms have sought to move away from local politics and centralize regulatory activities. Finally, in "No Investors, No Reform" (Chapter 4), I show the role of private investor firms in successfully lobbying for a regulatory reform that had wide-ranging repercussions for the governance of urban sanitation delivery in Brazil. If private investors can change the rules of the game, then who owns service provision matters.

The very ramifications of the 2020 sanitation reform in Brazil illustrate who has reaped the benefits of institutional change. Returning to the case of Rio de Janeiro, the city was recently at the epicenter of a contested political process to grant water and sanitation delivery to the private sector through the dismantling of Cedae, the state-owned company which had provided services in the state of Rio de Janeiro since the 1970s. The process entailed splitting the city into four different service areas, grouping each of them with a number of surrounding municipalities, and then offering each package up for auction to the highest bidders of private consortia. The auction took place in April 2021 at B3, Brazil's stock exchange. It was the largest recent concession of sanitation services in the country, raising 22.7 billion Reais.[269]

For private investors in the sanitation sector, it was a symbolic moment. It crowned their efforts to change the legal and regulatory framework for sanitation delivery in Brazil and open up the market to greater private participation. The auction made clear who had been the winners of the reform battle. While the argument for reform had been to increase competition and bring in new private investors, the consortia that bid for different blocks were led by the long-standing and biggest players in the private sanitation sector. The winners were Aegea and Iguá Saneamento. The new money came in, came in primarily via these companies. Aegea secured an equity investment from Itaúsa, a Brazilian investment holding company. Iguá Saneamento attracted an equity participation from CPP Investment Board (CPPIB), a Canadian pension fund. Other large concessions that have occurred since the passage of the new legislation have also largely benefitted existing private holdings in the sector: BRK Ambiental won the bid for a concession involving 13 municipalities in the state of Alagoas in 2020; Aegea won the bid for a concession encompassing 68 municipalities in the state of Mato Grosso do Sul in 2021. The point here is that not only were existing private investor firms in Brazil the ones to drive institutional change, they have been the ones to collect many of the its early rewards.

The way in which the Rio de Janeiro concession was organized—around blocks of municipalities anchored by different areas within the city of Rio—reflected the regionalization principle that was one of the core pillars of the 2020 reform. The promise of regionalization was to "join steak and bone," supporting investment in poorer and less attractive areas by joining them together with more profitable ones. Bidders in the Rio auction, however, showed little interest in the

[269] InfoMoney, "Leilão da Cedae, maior concessão de saneamento do Brasil, arrecada R$ 22,7 bi e supera projeções; autoridades comemoram," 30 April 2021.

one block that had the greatest needs in terms of investment and service coverage.[270] The block included neighborhoods located on the west side of Rio de Janeiro whose territory has been claimed by militias, immersing them in the complex web of organized crime. No investors bid on that block during the initial auction. In a second auction organized later, in December 2021, Águas do Brasil—a non-financialized group that already had experience providing services in one of the areas contained in the region—won the bid for the remaining block.

In my interviews with some managers of private firms and actors in finance, I asked them about how private firms, especially financialized ones, would navigate service provision in complex political environments such as Rio's, marked by urban informality and crime, given the weight of corporate governance and compliance norms on their shoulders. In 2020, nearly 60% of Rio de Janeiro's neighborhoods had been claimed by militias.[271] Overall, the sentiment was that companies would not be able to rely on state institutions for support. Some hesitantly suggested that they might need to strike deals with local militia or drug trafficking leaders behind the curtains, but deny them in public—and, especially, deny them to financial investors. "Imagine saying to the Canadian there that you made a deal, you wouldn't say that," noted one interviewee. Others suggested that the pathway for companies was to work with communities and bring them to their side. What this meant in practice was just recently illustrated by Aegea. In early November 2021, the company announced that its subsidiary in Rio de Janeiro, Águas do Rio, was launching a program to hire a thousand slum dwellers to work for the firm. Job-related tasks included, according to one news report, repairing services, registering households into their subsidized tariff program ("*tarifa social*)," and preventing illegal connections (what Brazilians call "*gatos*"), including in communities controlled by militias.[272] A generous view would be that this is a commendable effort to create jobs, promote local development, and involve communities in service delivery. A less forgiving one would be that this is another way to socialize the risks of service provision and capitalize on the rewards. The truth might be somewhere in between.

The challenges of service provision in Rio bring to the fore the question of how financialized ownership might impact service delivery outcomes. In the case of mixed-ownership companies with shares traded on the stock market, I have argued that there might be room for state actors to modulate whether service priorities will be guided by market rationales or socially progressive ones. In the case of financialized private providers, it was to too early to really tell—at least in the Brazilian context. That remains an open question for further research. International development institutions eager to bring finance into infrastructure provision as a means for reducing poverty, promoting sustainability, and "enhancing prosperity" in developing countries should stay tuned to what happens next in Brazil.

A second lingering question concerns whether the changes in firm behavior and state-business relations that I have described in the wake of "Lava Jato" and the financialization of private sanitation

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270 Globo Extra, "Leilão da Cedae: entenda a situação do único bloco sem propostas, que abrange área de atuação de milícias na Zona Oeste do Rio," 01 May 2021.

271 Folha de São Paulo, "Milícias superam o tráfico e controlam mais da metade do território no Rio, indica estudo," 18 October 2020.

272 Globo Extra, "Águas do Rio, que substitui Cedae, contrata moradores de favelas para atuar em áreas de risco. Há mil vagas: veja como se candidatar," 02 November 2021.

delivery will stick or whether they were transitory. Changing deeply ingrained cultural norms is hard. Political embeddedness was the way many Brazilian firms had historically done business. The tensions that some private providers were facing on the ground—"struggling to keep the mayors in line," as one interviewee put it—could push some measure of adjustment. Centripetal politics, however, should not be understood as necessarily more "sanitized." The search for regulatory centralization, for example, could simply be a way to reduce the transaction costs of regulatory capture.

The effects of standardization and centralization of service delivery governance constitute a final lingering question. Will the new regulatory body have the capacity to reconcile different realities and mediate among many regulatory agencies and actors? To what extent might standardization push regulatory norms apart from the local realities of service provision? Will it undermine the potential for local accountability and democratic participation? While standardization might help to reduce undue political interference in service delivery by local and state governments—or so private investors and financial actors hoped—it might also constrain the space for the kind of potentially productive—or more progressive—political modulation that I have described. Politics is constitutive of service delivery. It is also a pathway for legitimate political struggle and claims-making over the direction of society. Efforts to remove politics from the equation are often veiled attempts to constrain the political space to the interests of some—at the expense of the interests of many.

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Appendix A. List of Interviews

The tables below provide information on the interviews conducted as part of my dissertation research. Table A.1 lists the interviews that support the empirical analysis for the paper "The Limits of Insulation" (Chapter 2), which has been published in the journal *International Development Planning Review*. Table A.2 lists the interviews that support the analyses developed in the two remaining papers: "Against the 'Local' Grain" (Chapter 3) and "No Investors, No Reform" (Chapter 4). Some interview codes apply to multiple interviews with the same interviewee. To protect interviewee anonymity, I use relatively broad categorizations of the interviewee affiliations at the time of the interview. It is worth noting that several interviewees had professional experiences that extended beyond one particular organizational or institutional affiliation, and could thus comment on sanitation issues by drawing on different perspectives and experiences.

In both tables, I use "NR" to denote non-recorded interviews. In some cases, non-recorded interviews conducted on one date were followed by subsequent interviews that were recorded. When interviews were not recorded, I took notes during the conversation and expanded on these notes immediately following the interview in order to capture as much of what I recollected as possible. In Table A.2, "*" denotes an interviewee who had a prior or existing tie to one of the four largest private sanitation companies in Brazil at the time of the interview. These firms are: BRK Ambiental (formerly Odebrecht Ambiental), Aegea, Iguá Saneamento (formerly CAB Ambiental), and Grupo Águas do Brasil (SAAB).

Table A.1. List of interviews for Chapter 2

Code	Date	Affiliation	Location / Medium
S1	1/18/17	State government	Curitiba
S2	1/19/17 (NR)	State sanitation company (CESB)	Curitiba
S3	1/19/17	State sanitation company (CESB)	Curitiba
S4	1/19/17	State government	Curitiba
S5	2/8/17	Labor (CESB)	Skype
S6	2/8/17	Labor (CESB)	Skype
S7	2/8/17	Labor (CESB)	Skype
S8	7/31/19	State sanitation company (CESB) (formerly)	São Paulo
S9	8/17/19	State sanitation company (CESB)	Phone
C1	1/20/17 (NR)	State sanitation company (CESB)	Phone
C2	1/23/17	State government	Belo Horizonte
C3	1/23/17	State government	Belo Horizonte
C4	1/24/17	State sanitation company (CESB)	Belo Horizonte
C5	1/24/17	State sanitation company (CESB)	Belo Horizonte
C6	1/24/17	State sanitation company (CESB); Labor (CESB)	Belo Horizonte
C7	1/31/17	Regulatory agency (state level)	Phone

Table A.2. List of interviews for Chapters 3 and 4

Code	Date	Affiliation	Location / Medium
I1	5/16/19 (NR) 7/23/19	Municipal government	São Paulo
I2	7/5/19	State sanitation company (CESB)	São Paulo
I3	7/9/19 (NR) 7/27/19	Public bank	São Paulo
I4	7/10/19	Private operator*	São Paulo
I5	7/15/19 (NR) 8/27/19	Finance	São Paulo
I6	7/15/19	Private operator	São Paulo
I7	7/17/19	Private operator*	São Paulo
I8	7/17/19	Private operator*	São Paulo
I9	7/17/19	Private operator*	São Paulo
I10	7/17/19	State sanitation company (CESB)	São Paulo
I11	7/17/19	State sanitation company (CESB)	São Paulo
I12	7/18/19 (NR)	Law office	Phone
I13	7/19/19 (NR) 1/19/21 1/20/21 12/30/21	Business association	Brasília; Phone; Phone; Zoom
I14	7/19/19 (NR)	Public bank	Brasília
I15	7/19/19 (NR)	Public bank	Brasília
I16	7/19/19 (NR)	Public bank	Brasília
I17	7/19/19	Multilateral agency	Skype
I18	7/22/19	Business association	Brasília
I19	7/22/19	Private operator*	Skype
I20	7/23/19	Finance	São Paulo
I21	7/24/19	Municipal association	São Paulo
I22	7/24/19	Law office	São Paulo
I23	7/26/19	Private operator*	Phone
I24	7/29/19	Private sector consultant	São Paulo
I25	7/30/19	Private operator*	São Paulo
I26	7/30/19	Law office	São Paulo
I27	7/31/19	Private operator*	Phone
I28	7/31/19	Private operator*	São Paulo
I29	7/31/19	State sanitation company (CESB)	São Paulo
I30	8/1/19	Private operator	São Paulo
I31	8/3/19 12/17/20	Labor; Civil society organization	São Paulo

I32	8/5/19	Academic institution	Skype
I33	8/6/19	Law office	São Paulo
I34	8/7/19	Public bank	São Paulo
I35	8/7/19	Private operator*	São Paulo
I36	8/7/19	Private operator*	São Paulo
I37	8/8/19	Regulatory agency (state level)	São Paulo
I38	8/8/19	Private operator*	São Paulo
I39	8/9/19	Private operator	São Paulo
I40	8/12/19	Private operator*	Phone
I41	8/12/19	Private sector consultant	São Paulo
I42	8/13/19	Regulatory agency (intermunicipal)	Skype
I43	8/14/19	Law office	Skype
I44	8/13/19 (NR)	Academic institution	São Paulo
I45	8/17/19	State sanitation company (CESB)	Phone
I46	8/17/19 (NR)	Federal government	Brasília
I47	8/19/19	Municipal association	Phone
I48	8/19/19	Regulatory agency (federal level)	Brasília
I49	8/20/19	State government	Teresina
I50	8/20/19	Labor (CESB)	Teresina
I51	8/20/19	Labor (CESB)	Teresina
I52	8/23/19	Private sector consultant*	São Paulo
I53	8/23/19 (NR)	Private sector consultant	São Paulo
I54	8/27/19	Finance	São Paulo
I55	8/29/19 (NR)	Private sector consultant*	São Paulo
I56	8/29/19	Private sector consultant*	São Paulo
I57	8/30/19	Private operator*	São Paulo
I58	8/30/19	Private operator*	São Paulo
I59	9/3/19	Academic institution	São Paulo
I60	9/5/19	Civil society organization	Phone
I61	3/30/20	News media	Phone
I62	7/7/20	Congress	Zoom
I63	10/30/20 (NR)	Public bank	Zoom
I64	12/23/20	Professional association	São Paulo
I65	1/22/21	Labor (CESB)	São Paulo
I66	2/2/21	Private operator*	São Paulo
I67	2/8/21	Private operator*	São Paulo
I68	2/24/21	Federal government	São Paulo

I69	3/2/21	Congress	Phone
I70	3/7/21	Congress	Phone
I71	3/10/21	Congress (formerly)	Zoom
I72	3/16/21	Multilateral agency	Zoom
I73	3/19/21	Private sector consultant	Zoom
I74	3/23/21	Finance	Zoom
I75	4/8/21	Federal government	Zoom
I76	4/9/21 4/13/21	Finance; private operator*	Zoom
177	01/24/17	State sanitation company (CESB)	Belo Horizonte
178	01/24/17	State sanitation company (CESB)	Belo Horizonte
179	01/07/22	Business association	Phone

Appendix B. Public-Private Contracts Data

I constructed a database of all active public-private contracts signed between 1994 and 2019 (25 years) in Brazil's water and sanitation sector. Public-private contracts include different types of concessions, public-private partnerships, and asset lease agreements. The year of 1994 was the first in which a public-private contract was signed in the sector post-democratization, while 2019 is the last year prior to the enactment of the 2020 Law (n. 14.026). The legislation substantively reformed the legal and regulatory framework for sanitation provision with the aim of supporting greater private participation. The year 2019 is also the last year for which data was available at the time the database was constructed. I finalized the iteration of the database that I used for the analysis in the Fall of 2020.

Table B.1. Database sources

Year	Source
2020 (April)	Firm portfolios as listed on company websites and organizational reports for BRK Ambiental, Aegea, Iguá Saneamento, and Águas do Brasil (the four largest private sanitation holdings).
2019	Annual report of the Brazilian Association of Private Water and Sewage Service Providers, ABCON ("Panorama da participação privada no saneamento")
2019	World Bank Private Participation in Infrastructure Database (PPI)
2019	Sanitation ranking produced by the Brazilian Association of Sanitation Engineers, ABES ("Ranking ABES da universalização do saneamento")
1996–2016	Municipal elections data from Tribunal Superior Eleitoral (TSE), Brazil's electoral court. The 2016 municipal elections were the last to occur within the timeframe of analysis.

I built the database by manually compiling and cross-checking information from the publicly available data sources listed in Table B.1. For the analytical timeframe I established, I was able to document 132 different active contracts[273] encompassing 247 municipalities (see map below) that were signed between 1994 and 2019. The database contains information on contract characteristics such age, type, and scope; original contract sponsors or investors; names of local private operations and their current ownership; the geography of operations (i.e., names of municipalities and their GPS coordinates); and local political dynamics associated with different contracts (i.e., the names and political affiliations of mayors in office when contracts were signed).

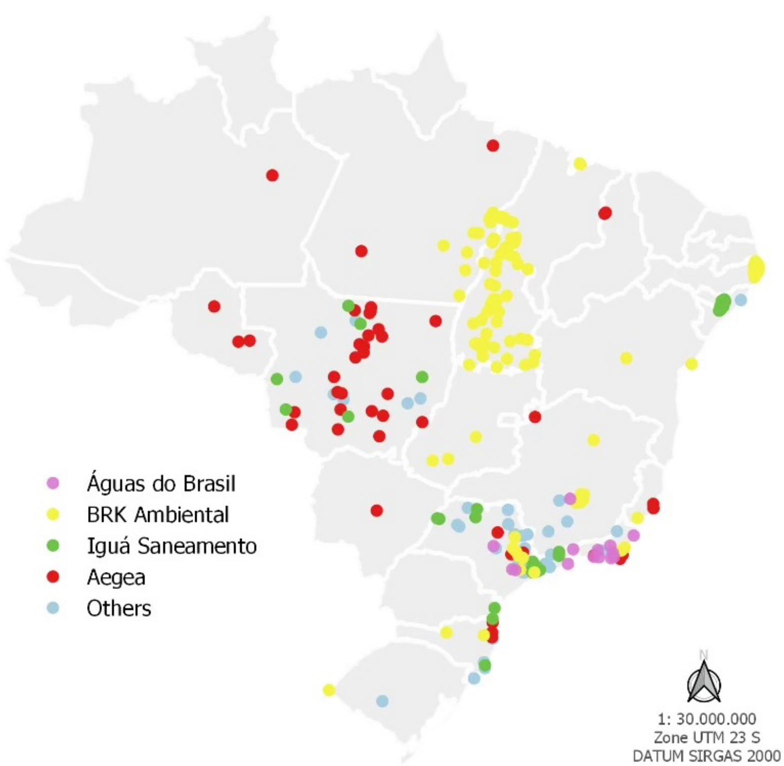
The three main sources I used to construct the database were: company portfolios as detailed in the websites and reports of the largest private water and sanitation providers, which were the core object of interest to my research; the 2019 report produced by the Brazilian Association of Private Water and Sewage Service Providers (ABCON); and the 2019 World Bank Private Participation in Infrastructure Database (PPI). The ABCON report is produced annually and compiles a list of private sanitation operations and contracts in the country. The World Bank's PPI data is also updated annually. I found that both of these latter sources had limitations and that neither offered a complete

[273] I did not include contracts that, albeit signed in 2019, were—as far as I was able to tell—not yet in operation. This includes, for example, a PPP contract won by Aegea at the end of 2019 to provide sewage services in nine municipalities in the state of Rio Grande do Sul.

or necessarily up-to-date view of private participation in the sector. This is why triangulating among them and fact-checking information was necessary. The PPI database had more complete information on the history of different contracts and more granular data on original sponsors—that is, the investors who initially won the contract—but less accurate information on current owners and names of local providers or project names. Of the 132 contracts I documented, the 2019 PPI database contained only 121. The 2019 ABCON report was generally more up-to-date.

A few differences between my data and the 2019 ABCON report are worth noting. The report did not include a 2018 concession contract signed between BRK Ambiental and the municipality of Caçador in the South of Brazil, which I counted. The report included a PPP with Guarulhos that I knew from my qualitative research was no longer active in 2019. I therefore did not count this contract. The report also appeared to count twice a water concession in the municipality of Jaguaruna with the firm Atlantis, which I counted only once. Finally, the 2019 ABCON report included a technical assistance agreement that existed at the time between BRK Ambiental and 78 municipalities in the state of Tocantins. I did not include this agreement in my data as it did not involve direct operation or provision of infrastructure services. All other contract entries in my data match listed contracts in the 2019 report. There were some small disagreements on the years of some contracts between the PPI data and the ABCON data. I relied on triangulation across different sources, including company websites and news articles to parse out the more accurate years.

Figure B.1. Brazilian municipalities with some form of private participation in water and sewerage services (2019)



Source: own database (2020). Note: "Others" refer to companies with fewer than ten contracts.

Appendix C. Supporting data for Chapter 2

Table C.1. Sanepar's Operational and Financial Performance

Year	*Party*	*Governor*	*Total population in municipalities with water provision contracts*	*% population with household water connection*	*% population with household sewerage connection*	*Employees per 1,000 connections*	*% billing loss*	*Total investments in water and sewerage services (R$ Million)*	*% financial performance*	*Net profits (R$ Million)*	*Debt service (R$ Million)*
1995	PDT	Jaime Lerner					27.46		107.51	-48.00	
1996						3.80	27.21		102.08	-25.00	
1997						2.49	28.04		108.19	22.00	
1998			8866.3			3.00	29.02	238.68	103.30	42.00	
1999	PFL	Jaime Lerner	8660.0			3.13	28.17	222.25	113.34	59.00	
2000			5784.1			2.63	26.01	244.09	118.90	136.00	
2001			8951.0	85.23	35.85	2.42	25.26	303.47	121.60	152.00	
2002			9058.8	85.67	38.17	2.33	25.34	295.51	111.60	145.00	
2003	PMDB	Roberto Requião	9143.0	86.54	39.21	2.22	25.48	280.10	120.92	260.00	
2004			9356.1	85.39	39.17	2.16	26.23	325.87	116.66	210.00	
2005			9477.9	85.84	42.01	2.20	26.97	391.04	113.42	193.00	
2006			9631.2	86.31	42.63	2.53	25.19	529.86	110.36	177.00	
2007	PMDB	Roberto Requião	9560.8	89.36	46.42	2.72	22.34	356.45	108.24	157.00	
2008			9840.0	89.28	48.46	2.59	21.21	324.49	103.46	141.90	
2009			9931.6	90.35	51.00	2.58	19.78	312.89	103.25	138.00	278.59
2010			9674.5	87.92	52.87	2.56	20.47	397.23	102.39	149.00	282.12
2011	PSDB	Beto Richa	9738.6	89.41	55.83	2.51	21.06	354.18	108.29	284.00	309.26
2012			9831.3	90.62	59.35	2.50	21.29	456.59	154.13	335.76	123.08
2013			10222.6	91.04	61.06	2.54	20.83	787.00	110.78	402.90	122.94
2014			10302.2	91.99	61.03	2.55	19.80	954.05	107.95	421.59	241.73
2015	PSDB	Beto Richa	10379.0	92.81	66.28	2.52	19.47	795.09	106.71	438.44	442.41

Sources: Ministério das Cidades (2015); Annual company reports (1999-2016). Note: Data on net profits was compiled from company reports for all years; the shaded row indicates the year in which the company was semi-privatized.

Table C.2. Copasa's Operational and Financial Performance

Year	*Party*	*Governor*	*Total population in municipalities with water provision contracts*	*% population with household water connection*	*% population with household sewerage connection*	*Employees per 1,000 connections*	*% billing loss*	*Total investments in water and sewerage services (R$ Million)*	*% financial performance*	*Net profits (R$ Million)*	*Debt service (R$ Million)*
1999	PMDB	Itamar Franco	11524.1			4.24	25.34	146.01	96.24	-97.33	
2000			7453.7			3.99	26.14	156.48	94.11	-28.85	
2001			12293.7	81.44	36.80	3.82	26.27	185.22	100.19	-7.19	
2002			12530.7	82.78	38.08	3.73	25.38	227.09	82.85	-89.95	
2003	PSDB	Aécio Neves	12813.8	82.78	38.52	3.68	24.87	182.57	97.25	94.12	
2004			13135.7	82.66	40.78	3.67	23.93	342.39	98.07	253.03	
2005			13278.6	83.86	42.10	3.68	22.92	452.83	109.18	288.62	
2006			13673.3	84.17	42.35	3.67	30.67	742.63	98.74	356.44	
2007	PSDB	Aécio Neves	13752.6	87.15	45.40	3.57	30.91	650.88	114.57	329.32	
2008			14196.7	87.36	47.84	3.44	29.89	642.49	116.15	407.78	
2009			14155.5	89.39	52.53	3.41	29.57	829.69	117.70	525.31	335.16
2010			13792.3	83.81	53.81	3.35	29.2	693.80	104.87	677.13	386.40
2011	PSDB	Antonio Anastasia	13836.9	84.14	56.71	3.25	28.58	551.31	111.07	470.44	424.17
2012			13925.4	84.31	58.52	3.16	29.29	627.04	102.61	481.72	845.09
2013			14428.7	84.41	60.57	3.09	29.34	649.21	109.08	419.80	575.48
2014			14542.1	84.45	62.17	3.11	28.43	657.03	106.29	318.14	678.14
2015	PT	Fernando Pimentel	14580.7	76.98	52.05	3.05	28.99	946.81	93.21	-11.59	1046.45

Sources: Ministério das Cidades (2015); Annual company reports (2002-2015). Note: Data on net profits was compiled from annual company reports for the years 2002-2015; the shaded row indicates the year in which the company was semi-privatized.