
Note

Is Successful Water Privatization a Pipe Dream?: An Analysis of Three Global Case Studies

Tanya Kapoor[†]

INTRODUCTION	158
I. METHODOLOGY.....	161
A. Class Dynamics	161
B. Business and Deal Structure.....	162
C. Political Climate.....	163
II. COCHABAMBA, BOLIVIA	163
A. Background	163
B. The Cochabamba Privatization	164
C. The Model Applied	167
III. KWAZULU-NATAL, SOUTH AFRICA	171
A. Background	171
B. The KwaZulu-Natal Privatization	172
C. The Model Applied	174
IV. MANILA, PHILIPPINES.....	178
A. Background	178
B. The Manila Water Privatization	178
C. The Model Applied	182
V. AN OVERVIEW OF WATER PRIVATIZATION POLICIES	185
A. Class Dynamics	185
B. Business Structure and Political Oversight	188
CONCLUSION	192
FIGURES	
Table 1: Water Supply and Coverage – Selected Southeast Asian Cities	179
Table 2: Manila Water Company’s Rates.....	182
Table 3: Manila Water Profits and Profit Margins	182

[†] Yale Law School, J.D., expected 2016. University of Maryland, B.S., 2013. I am extremely grateful to Professor Amy Chua for supervising this Note and for her thoughts and suggestions on earlier drafts. I would also like to thank Lindsay Brewer, Steven Levy, and the rest of the *Yale Journal of International Law* editorial board and staff for their comments and assistance throughout the publication process. Lastly, I convey my thanks to Kristian Sookal, who read this Note prior to final publication. All errors, of course, are my own. I dedicate this Note to my parents, Shiv and Aarti Kapoor, who have supported me along the way.

INTRODUCTION

Facing water scarcity and shortages, governments in developing nations have turned to water privatization.¹ Once implemented, however, water privatization programs have overwhelmingly been met with public hostility and “anti-privatization protests and riots.”² In some water privatizations, the privatizers themselves have become bankrupt³ or have failed to meet investment and expansion targets.⁴

Similarly, while most privatizations are supposed to deliver Pareto improvements—results “that make one party to a deal better off without making another party worse off”⁵—water privatizations have largely delivered the opposite. Water privatizations have caused cholera outbreaks among consumers,⁶ insurmountable costs for both consumers and privatizers,⁷ and additional transaction costs for governments.⁸ Despite such outcomes, the World Bank still supports water privatization,⁹ sometimes only lending to countries if they privatize their water systems.¹⁰

Unlike the World Bank, scholars are cautious about water privatization’s potential. Even though water seems like the perfect target for privatization—drinking water is a capital- and infrastructure-intensive industry¹¹ presumably better managed by a private company than by a public entity—scholars largely believe that privatization is unlikely to transform water and sanitation services

1. See Timothy O’Neill, Note, *Water and Freedom: The Privatization of Water and Its Implications for Democracy and Human Rights in the Developing World*, 17 COLO. J. INT’L ENVTL. L. & POL’Y 357, 358 (2006).

2. Itzhak Kornfeld, *A Global Water Apartheid: From Revelation to Resolution*, 43 VAND. J. TRANSNAT’L L. 701, 710-11 (2010); see Craig Anthony Arnold, *Water Privatization Trends in the United States: Human Rights, National Security, and Public Stewardship*, 33 WM. & MARY ENVTL. L. & POL’Y REV. 785, 798 (2009); Chris Kraul, *Protests Stymie Peru’s Drive To Raise Capital*, L.A. TIMES, July 14, 2002, <http://articles.latimes.com/2002/jul/14/business/fi-peru14> (illustrating the broader point that privatizations have led to riots and populist backlash).

3. See Xun Wu & Nepomuceno A. Malaluan, *A Tale of Two Concessionaires: A Natural Experiment of Water Privatisation in Metro Manila*, 45 URB. STUD. 207, 213-17 (2008).

4. See *Water Privatization Fiascos: Broken Promises and Social Turmoil*, PUB. CITIZEN 7 (Mar. 2003), <http://www.foodandwaterwatch.org/doc/Fiascos.pdf>.

5. John S. Brubaker, Note, *A Realistic Critique of Freedom of Contract in Labor Law Negotiations: Creating More Optimal and Just Outcomes*, 5 WASH. U. JURISPRUDENCE REV. 107, 115 (2012); see also Raúl González Pietrogiovanna, *The Benefits of Privatization? The Mexican Experience in the Telecommunications Industry 2* (unpublished manuscript), http://www.lse.ac.uk/europeanInstitute/events/2008-09/Gonzalez_Pietrogiovanna.pdf (last visited Dec. 4, 2014).

6. See Jacques Pauw, *The Politics of Underdevelopment: Metered to Death—How a Water Experiment Caused Riots and a Cholera Epidemic*, 33 INT’L J. HEALTH SERVICES 819 (2003).

7. See *id.* at 821-23, 829; Wu & Malaluan, *supra* note 3, at 217.

8. See Karen Bakker, *Trickle Down? Private Sector Participation and the Pro-Poor Water Supply Debate in Jakarta, Indonesia*, 38 GEOFORUM 855, 860 (2007).

9. *Group to World Bank: Stop Funding Water Privatization*, GLOBAL POL’Y FORUM, <https://www.globalpolicy.org/component/content/article/98-links-and-resources/51513-group-to-world-bank-stop-funding-water-privatization-.html> (last updated Apr. 16, 2012).

10. Maude Barlow & Tony Clarke, *Water Privatization*, GLOBAL POL’Y FORUM, <https://www.globalpolicy.org/component/content/article/209/43398.html> (last updated Jan. 2004).

11. James Salzman, *Thirst: A Short History of Drinking Water*, 18 YALE J.L. & HUMAN. 94, 96 (2004).

in the developing world.¹² Other scholars have studied the outcomes of specific water privatizations, focusing their study on privatizations that have failed.¹³ Several publications have discussed water privatization in terms of class dynamics. Scholars, however, have yet to analyze how various factors—for example, class dynamics, in tandem with other political and economic factors—enable and/or hinder water privatizations from delivering Pareto improvements.¹⁴ Moreover, privatization experts have yet to critique development banks' privatization policies¹⁵ and have not addressed how development banks can structure water privatizations to deliver Pareto improvements.

This Note critiques development banks' privatization policies by analyzing water privatizations in Bolivia, South Africa, and the Philippines.¹⁶ This Note analyzes each privatization across three factors—class dynamics, business and deal structure, and political climate—to determine why certain water privatization and development policies fail and why others succeed. The majority of scholars have studied one of the three factors—class dynamics,¹⁷ business and deal structure,¹⁸ or political climate¹⁹—in the context of a single privatization, but have not conducted an in-depth analysis of all three factors in the context of multiple privatizations.²⁰

This Note makes three claims. First, water privatization programs are highly unlikely to deliver Pareto improvements if privatizers charge

12. For example, Budds and McGranahan argue that water privatization is unlikely to be relatively more effective than the status quo in the developing world. Jessica Budds & Gordon McGranahan, *Are the Debates on Water Privatization Missing the Point? Experiences from Africa, Asia, and Latin America*, 15 ENV'T & URBANIZATION 87 (2003).

13. See, e.g., OSCAR OLIVERA & TOM LEWIS, ¡COCHABAMBA! WATER WAR IN BOLIVIA (2004) (focusing on the shortcomings of the water privatization in Cochabamba, Bolivia); PUB. CITIZEN, *supra* note 4 (describing several water privatization “fiascos”).

14. See, e.g., OLIVERA & LEWIS, *supra* note 13; O'Neill, *supra* note 1, at 168. Several scholars have focused their analysis on class dynamics and others have explored how business and deal structure influence privatizations. See, e.g., Wu & Malaluan, *supra* note 3, at 213-17. None of these publications, however, discuss how multiple factors influence water privatizations.

15. As mentioned above, development banks are usually pro-privatization. In particular, the World Bank and IMF have conditioned the receipt of development loans on privatization. See Barlow & Clarke, *supra* note 10.

16. See *infra* text accompanying notes 27-30 (explaining the rationale for studying privatizations in Bolivia, South Africa, and the Philippines in this Note).

17. See Susan Spronk, *Roots of Resistance to Urban Water Privatization in Bolivia: The “New Working Class,” the Crisis of Neoliberalism, and Public Services*, 71 INT'L LAB. & WORKING-CLASS HIST. 8 (2007).

18. See Wu & Malaluan, *supra* note 3, at 214-19.

19. See Alexander J. Loftus & David A. McDonald, *Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires*, 13 ENV'T & URBANIZATION 179 (2001). In their paper, Loftus and McDonald primarily discuss the government's response to the Argentinian regulatory agency involved in Buenos Aires's water privatization; an Argentinian minister prohibited regulators from intervening on behalf of Argentinian citizens during a contract renegotiation. See *id.* at 193.

20. Only one article has analyzed two privatizations. See Wu & Malaluan, *supra* note 3. Wu and Malaluan's article, however, features two privatizations in a single city, Manila, as opposed to analyzing privatizations in different countries. Budds and McGranahan's article also briefly discusses water privatizations across the world, but focuses on the economics and regulatory structure underlying water privatizations. See Budds & McGranahan, *supra* note 12.

impoverished and wealthy populations the prevailing market rate. Instead of charging fixed prices, privatizers should engage in progressive pricing, whereby the poorest consumers pay well below the market rate. In tandem with other programs,²¹ progressive pricing can reconcile the tension between resource allocation and poverty alleviation, leading to Pareto improvements.

Second, consumers' interests must be represented during the negotiation and drafting phases. Concession agreements that prioritize consumers' interests are more likely to succeed. Even in the developing world, governments can represent consumers' interests by promoting economic transparency in the bidding process. For example, governments can require prospective concessionaires to submit due diligence findings and financial projections before the bidding process starts. Disclosure and economic transparency will further increase governments' bargaining power—and consumers' bargaining power—during negotiations.

Third, because water is a public resource, privatization works best if a regulatory agency can monitor, evaluate, and inspect water quality and rates even after a deal is closed.²² Such efficient and proactive administrative bodies, however, are icons of the developed world and are largely absent from the developing world's political systems.²³ When such administrative bodies are established in developing nations, they usually become prime targets for corruption, diminishing their efficacy as regulating agents. Nevertheless, third-party funding, if restructured as a regulatory mechanism, can strongly incentivize governments to regulate privatizations on behalf of their citizens. Currently, the World Bank provides governments financial incentives to privatize, usually in the form of a single payment when the concession agreement is signed.²⁴ Rather than providing a lump sum payment, the World Bank should tie funding to targeted development goals. Such an arrangement—known as “impact funding”—realigns governments' incentives: instead of being paid to privatize, governments are paid to privatize well, focusing on specific objectives throughout the privatization.

To make these three claims, this Note proceeds in five parts. Part I describes the methodology underlying my analysis. In particular, I focus on how this Note will define each of the three factors (“the three-factor model”)—class dynamics, business and deal structure, and political climate—used to analyze each privatization. Part I also describes my rationale for selecting each

21. See *infra* Section V.A.

22. See Budds & McGranahan, *supra* note 12, at 93.

23. Cf. Ruben Lamdany, *Foreword* to Navin Girishankar & Migara De Silva, *Strategic Management for Government Agencies: An Institutional Approach for Developing and Transitional Economies* v (World Bank Discussion Paper No. 386, 1998) (noting that Girishankar and De Silva's discussion paper points out ways in which administrative agencies in the developing world can become more efficient); *id.* at 10 (“[I]t is difficult to hold managers in developing countries responsible for outcomes of policies.”).

24. See, e.g., O'Neill, *supra* note 1, at 362; Peru: *Access to Clean and Affordable Water*, FOOD & WATER WATCH, <http://www.foodandwaterwatch.org/global/latin-america/peru/peru-access-to-clean-and-affordable-water> (last visited Dec. 4, 2014).

privatization. Parts II, III, and IV use the three-factor model to analyze water privatizations in Cochabamba, Bolivia; KwaZulu-Natal, South Africa; and Manila, Philippines, respectively. Part V synthesizes my findings, outlining policies that can enhance the efficacy of water privatizations in the developing world.

I. METHODOLOGY

This Note studies three water privatizations: Cochabamba, Bolivia; KwaZulu-Natal, South Africa; and Manila, Philippines. Although governments in the developing world have conducted a plethora of water privatizations in the past two decades,²⁵ this Note only examines these three privatizations for two reasons. First, these three privatizations provide a global and cross-continental framework to analyze the successes and failures of water privatizations. Second, these three case studies illustrate the dynamics underlying both successful and failed privatizations—scholars have deemed the privatizations in Bolivia²⁶ and South Africa²⁷ failures, but scholars and authorities have universally regarded the privatization in Manila, Philippines as a success.²⁸

Before discussing the particularities of each privatization, this Part will define the three-factor model this Note will use to analyze each privatization. As mentioned in the Introduction, this Note primarily uses three factors—class dynamics, business and deal structure, and political climate—because scholars have often studied all three factors in the context of a single privatization. Before delving into each factor, it is important to acknowledge that this Note analyzes each factor independently and without weighting each against the others.

A. *Class Dynamics*

Scholars have adopted and rejected several definitions of social class.²⁹ Because this Note analyzes how privatizations influence existing class dynamics, this Part will construe class dynamics vis-à-vis Pareto

25. See Budds & McGranahan, *supra* note 12, at 101.

26. See OLIVERA & LEWIS, *supra* note 13, at 7; see also sources cited *infra* Subsection II.B.3 (discussing the aftermath of the privatization in Cochabamba, Bolivia).

27. See Patrick Bond, *Water, Health, and the Commodification Debate*, 42 REV. RADICAL POL. ECON. 445, 455-56 (2010); see also sources cited *infra* Subsection III.B.3 (discussing the aftermath of the privatization in KwaZulu-Natal, South Africa).

28. See Wu & Malaluan, *supra* note 3, at 207, 217 (claiming the water privatization in eastern Manila, Philippines, was a success because the privatizer prospered and ultimately became a publicly-listed company several years after the privatization); Jude Esguerra, *Manila Water Privatization: Universal Service Coverage After the Crisis?*, U.N. RES. INST. SOCIAL DEV. 39-40 (June 2005), [http://www.unrisd.org/80256B3C005BCCF9/httpNetITFramePDF?ReadForm&parentunid=7B90D9FACCE6689C1257A52005900D4&parentdoctype=paper&netitpath=80256B3C005BCCF9/\(httpAuxPages\)/7B90D9FACCE6689C1257A52005900D4/\\$file/desguerr.pdf](http://www.unrisd.org/80256B3C005BCCF9/httpNetITFramePDF?ReadForm&parentunid=7B90D9FACCE6689C1257A52005900D4&parentdoctype=paper&netitpath=80256B3C005BCCF9/(httpAuxPages)/7B90D9FACCE6689C1257A52005900D4/$file/desguerr.pdf); see also sources cited *infra* Subsection IV.B.3 (discussing the aftermath of the privatization in Manila, Philippines).

29. See M. Reza Nakhaie et al., *Social Inequalities, Social Capital, and Health of Canadians*, 39 REV. RADICAL POL. ECON. 562, 568 (2007).

improvements—a proxy for a privatization’s success—instead of presenting a precise definition of social class.³⁰ In the context of this Note, a privatization positively influences class dynamics if it delivers Pareto improvements.³¹ Conversely, a privatization negatively influences class dynamics if it causes a detriment to one party to the deal, whether that may be the privatizers, government, or general public. For example, a privatization may fail to deliver Pareto improvements if the privatization intensifies existing economic differences or further limits access to the privatized good. Likewise, a privatization may fail to deliver Pareto improvements if the privatizer or the government does not realize a profit from the deal.

Privatization literature supports this Note’s construction of class dynamics vis-à-vis Pareto improvements. Privatization experts support the idea that Pareto improvements can be used as a proxy for a privatization’s success, with one scholar noting that “any denationalisation programme should be designed to seek Pareto improvements, meaning that employees, consumers, [the] government and new owners will be better off, or at least no worse”³²

B. *Business and Deal Structure*

To evaluate each privatization’s business and deal structure, this Note will employ the methodology used in Xun Wu and Nepomuceno Malaluan’s article, *A Tale of Two Concessionaires: A Natural Experiment of Water Privatization in Metro Manila*.³³ In their article, Wu and Malaluan primarily examine each privatized company’s (1) corporate governance structure and (2) water rates to evaluate business and deal structure.³⁴ This Note applies Wu and Malaluan’s methodology because Wu and Malaluan have used corporate governance and water rates to critique privatization policies and differentiate between successful and unsuccessful privatizations. According to Wu and Malaluan’s analysis, corporate governance can influence the price a water company charges for water, affecting a privatization’s impact on class dynamics. In addition to employing Wu and Malaluan’s definition, this Note will also explore which constituencies—privatizers, consumers, or

30. See *infra* notes 31-32 (describing authorities that agree that Pareto improvements are a marker of a privatization’s success). Pareto improvements make at least some members of society “better off,” but no one “worse off.” Robert N. Stavins et al., *Interpreting Sustainability in Economic Terms: Dynamic Efficiency Plus Intergenerational Equity*, 79 ECON. LETTERS 339, 341 (2003).

31. As suggested in the Introduction, a policy delivers Pareto improvements if no party is worse off or all parties are better off compared to the status quo. See Brubaker, *supra* note 5, at 115 (defining Pareto improvements as results “that make one party to a deal better off without making another party worse off”).

32. Pietrogiovanna, *supra* note 5, at 2; see also, e.g., Ingo Vogelsang, *Micro-Economic Effects of Privatizing Telecommunications Enterprises*, 13 B.U. INT’L L.J. 313, 314 (1995) (“The ideal result of an economic policy measure is a Pareto improvement whereby at least one group of agents . . . experiences an improvement, and no group experiences a deterioration.”).

33. See Wu & Malaluan, *supra* note 3.

34. See *id.*

governments³⁵—were represented in the drafting and negotiation phases of the privatization deal.

C. *Political Climate*

In studying the political climate during water privatizations, scholars have focused on the government's regulatory regime, or lack thereof, after the privatization deal is closed.³⁶ Alexander Loftus and David McDonald, for example, emphasize the inherent tension between government and administrative oversight in their article.³⁷ More importantly, Loftus and McDonald demonstrate that in the developing world, when a government-appointed regulator monitors water privatizations, the regulator is incapable of safeguarding consumers' interests in the privatization due to immitigable conflicts of interest.³⁸ Although privatizations are inherently designed to eliminate governmental control, some vestige of oversight is necessary to ensure that the privatization does not create greater inefficiencies. In the case of water, where the privatized good itself is the lifeblood of the human race, the case for regulation becomes stronger. Therefore, given other scholars' construction of "political climate" and the intrinsic need for regulation in water privatizations, this Note will focus on (1) the existence, (2) the role, and (3) the political independence of each country's regulatory authority in each water privatization.

II. COCHABAMBA, BOLIVIA

Scholars regard the water privatization in Cochabamba, Bolivia, as a failure.³⁹ This Part describes the background of the privatization and the aftermath of the privatization. In addition, this Part will apply the three-factor model to analyze the privatization in Cochabamba.

A. *Background*

Bolivia began a wave of privatizations in 1985,⁴⁰ following the election of Víctor Paz Estenssoro's right-of-center government.⁴¹ To stabilize inflation, Estenssoro implemented a "New Economic Policy," a plan to deregulate and

35. These three constituencies are derived from Pietrogiovanna's construction of privatization and Pareto improvements. *See* Pietrogiovanna, *supra* note 5, at 2.

36. *See, e.g.*, Loftus & McDonald, *supra* note 19, at 187-88.

37. *See id.* at 188 (describing the politicization of regulators and the government's "lack of respect" for regulators in privatizations).

38. *See id.* at 187-88.

39. *See, e.g.*, OLIVERA & LEWIS, *supra* note 13; Willem Assies, *David Versus Goliath in Cochabamba: Water Rights, Neoliberalism, and the Revival of Social Protest in Bolivia*, 30 *LATIN AM. PERSP.* 14, 30 (2003).

40. OLIVERA & LEWIS, *supra* note 13, at 7.

41. Juan Antonio Morales & Jeffrey D. Sachs, *Bolivia's Economic Crisis*, in *DEVELOPING COUNTRY DEBT AND THE WORLD ECONOMY* 57, 74 (Jeffrey D. Sachs ed., 1989).

privatize state-owned enterprises (SOEs).⁴² In addition to the Estenssoro government, the International Monetary Fund, World Bank, and United States also pressured the Bolivian government to privatize SOEs in the mid-1980s.⁴³ Following two waves of privatizations in 1992⁴⁴ and 1994,⁴⁵ the Bolivian government sold state-owned oil and gas, telecommunications, airlines, power generation, and railroad companies.⁴⁶ Nevertheless, unemployment surged as unionized workers in SOEs were left jobless. In response to populist riots in 1997, the government declared a state of siege, and the government continued its policies of economic liberalization.⁴⁷ According to scholars, Bolivia's privatization plans crescendoed in 1999 with the water privatization in Cochabamba.⁴⁸

B. *The Cochabamba Privatization*

1. *Background*

Decades before the privatization, Cochabamba and its surrounding areas underwent a "socioeconomic transformation."⁴⁹ The city, previously agrarian, became a hub of commerce and industry.⁵⁰ As a result, Cochabamba's population grew from 205,000 in 1976 to 414,000 in 1992, and only fifty-seven percent of the city's population had potable water coverage.⁵¹ The remaining forty-three percent obtained water from "tanker trucks, privately constructed wells, or self-help organizations such as cooperatives, associations, and water communities."⁵² Consequently, the Bolivian government used a number of "stopgap measures" to alleviate Cochabamba's water shortage.⁵³ Because of the city's dynamics, one scholar has stated that Cochabamba was "overdetermined to become the scene of [a] water war."⁵⁴

Servicio Municipal de Agua Potable y Alcantarillado (SEMAPA) ran Cochabamba's potable water systems.⁵⁵ Because of a flawed pricing scheme, SEMAPA charged the heaviest water users "much less per unit of water than low-volume users," leading the poorest users to seek water from other

42. *Id.*

43. BENJAMIN KOHL & LINDA C. FARTHING, *IMPASSE IN BOLIVIA: NEOLIBERAL HEGEMONY AND POPULAR RESISTANCE* 107 (2006).

44. Benjamin Kohl, *Privatization Bolivia Style: A Cautionary Tale*, 28 INT'L J. URB. & REGIONAL RES. 893, 897-98 (2004).

45. KOHL & FARTHING, *supra* note 43, at 107.

46. Kohl, *supra* note 44, at 898.

47. Assies, *supra* note 39, at 14-15.

48. KOHL & FARTHING, *supra* note 43, at 9.

49. Assies, *supra* note 39, at 18.

50. *Id.*

51. *Id.* at 19.

52. *Id.*

53. *Id.* For example, the Bolivian government drilled wells in Quillacollo, a rural town near Cochabamba, leading to future rural-urban conflicts. *Id.*

54. *Id.* at 18.

55. O'Neill, *supra* note 1, at 363.

sources.⁵⁶ Moreover, because of faulty infrastructure, SEMAPA lost over half of the water it carried to Cochabamba and was saddled with over US\$35 million in debt.⁵⁷ In response to SEMAPA's gross inefficiency and Cochabamba's acute water shortage, the World Bank advocated for a privatization program. To compel Bolivia to privatize, the World Bank conditioned the approval of loans to Cochabamba in exchange for the Bolivian government's privatization of SEMAPA.⁵⁸

The Bolivian government followed the World Bank's advice. Before signing the contract with the concessionaires, the government amended its water laws. Under a previous law, which was passed in 1906, Bolivian landowners owned any water that crossed their lands.⁵⁹ To privatize water in Cochabamba, the Bolivian government changed water ownership: under Law 2029, all water in Bolivia was now owned by the state, and the state could sell its rights to third parties.⁶⁰ While the 1906 law emphasized affordability and universal access, Law 2029 was primarily concerned with "economic efficiency" and "financial sufficiency."⁶¹ Scholars have concluded that Law 2029 allowed third parties (privatizers) to charge rates "high enough to cover operational costs."⁶²

2. *The Concession*

The Bolivian government began soliciting bids for SEMAPA's privatization in 1999. Due to the privatization's high cost, however, the government only received one bid.⁶³ The single and winning bid came from a consortium named Aguas del Tunari, a Cayman Islands corporation whose majority shareholder was International Water Limited.⁶⁴ International Water Limited was a subsidiary of Bechtel Corporation, an American engineering company that has managed "more than 25,000 extraordinary projects . . . in 160 countries on all seven continents."⁶⁵ Other members of the Aguas del Tunari consortium included a Spanish corporation named Bengoa and four or five Bolivian companies.⁶⁶

Even though it championed SEMAPA's privatization, the World Bank began to doubt that the concession agreement was negotiated in the best

56. *Id.*

57. *Id.* at 363-64.

58. Maria McFarland Sánchez-Moreno & Tracy Higgins, *No Recourse: Transnational Corporations and the Protection of Economic, Social, and Cultural Rights in Bolivia*, 27 *FORDHAM INT'L L.J.* 1663, 1748-49 (2004).

59. 28 Nov. 1906, Ley de Dominio y Aprovechamiento de Aguas de 1906 [Domain Act and Water Use Law], LA GACETA OFICIAL (Bolivia).

60. Ley No. 2029, 29 Oct. 1999, Ley de Servicios de Agua Potable y Alcantarillado Sanitario [Potable Water and Sewerage Law], LA GACETA OFICIAL (Bol.).

61. O'Neill, *supra* note 1, at 367.

62. *Id.*

63. See Sánchez-Moreno & Higgins, *supra* note 58, at 1750-51.

64. O'Neill, *supra* note 1, at 365.

65. *About Us*, BECHTEL, <http://www.bechtel.com/about-us> (last visited Dec. 4, 2014).

66. O'Neill, *supra* note 1, at 365.

interest of Bolivian citizens.⁶⁷ Because Aguas del Tunari was the sole bidder, the World Bank feared that the consortium “had been able to strong-arm the Bolivian government into a bad bargain.”⁶⁸ The concession leased Cochabamba’s water supply to Aguas del Tunari for a period of forty years. Throughout the term of the concession, the consortium was guaranteed a profit of fifteen to seventeen percent per year.⁶⁹ Aguas del Tunari could also install meters to monitor the water usage of those operating their own private wells.⁷⁰ In exchange, Aguas del Tunari was to supply water to existing SEMAPA customers and expand SEMAPA’s infrastructure.⁷¹ The consortium took over SEMAPA on November 1, 1999.⁷² During the first two months of operation, Aguas del Tunari increased Cochabamba’s water supply by thirty percent.⁷³ On January 1, 2000, rates increased by thirty-five percent.⁷⁴ Throughout the duration of the concession, water rates increased by an aggregate of four hundred percent to compensate the consortium for large-scale repairs.⁷⁵

3. *The Aftermath*

Although Aguas del Tunari’s price hikes were not arbitrary, Cochabamba’s residents believed they were. By January 1, 2000, some people’s water bills had doubled, and ordinary workers’ water bills “amounted to a quarter of their monthly income.”⁷⁶ Moreover, residents who had only used their own private water wells now feared rising water bills, too; as part of the concession, Aguas del Tunari had the right to charge those who were using their own private wells.⁷⁷

On December 28, 1999, Cochabamba residents staged the first mass protest against the Aguas del Tunari concession.⁷⁸ Approximately 15,000 to 20,000 Bolivians mobilized in Cochabamba’s central plaza, demanding that the Bolivian government repeal Law 2029 and renegotiate the contract with Aguas del Tunari.⁷⁹ In response to the uprising, the Bolivian government promised to renegotiate the concession and amend the new water law, but declined to

67. *Id.*

68. *Id.* at 365-66.

69. *Id.* at 366.

70. Sánchez-Moreno & Higgins, *supra* note 58, at 1756.

71. O’Neill, *supra* note 1, at 364.

72. *Perspective: Cochabamba and the Aguas del Tunari Consortium*, BECHTEL (Dec. 2005), <http://www.bechtel.com/files/perspective-aguas-del-tunari-water-concession> [hereinafter Bechtel Fact Sheet].

73. *Id.*

74. Bechtel Fact Sheet, *supra* note 72.

75. O’Neill, *supra* note 1, at 367; William Finnegan, *Letter from Bolivia: Leasing the Rain*, NEW YORKER, Apr. 8, 2002, http://www.newyorker.com/archive/2002/04/08/020408fa_FACT1.

76. Finnegan, *supra* note 75.

77. O’Neill, *supra* note 1, at 368; see *supra* text accompanying note 70.

78. O’Neill, *supra* note 1, at 368.

79. *The Fight for Water and Democracy: An Interview with Oscar Olivera*, 21 MULTINATIONAL MONITOR, June 2000, <http://multinationalmonitor.org/mm2000/00june/interview.html> [hereinafter *Oscar Olivera Interview*].

reduce Cochabamba's water rates.⁸⁰

Unsatisfied with the government's response, Cochabamba residents "refused to pay their water bills for the next two months."⁸¹ In February 2000, violence erupted. Even though the protestors peacefully blockaded Cochabamba's plaza, the Bolivian government sent more than one thousand soldiers who used tear gas, beatings, and bullets against the protestors.⁸² After the protest in February, the Bolivian government finally agreed to reduce water rates and froze them until November 2000.⁸³ Aguas del Tunari agreed to refund those who had previously paid higher rates.⁸⁴ Nevertheless, the government's compromise did not appease Cochabamba's residents. In early April, protestors staged a strike to demand that the Bolivian government rescind the concession agreement with Aguas del Tunari.⁸⁵ The Cochabamba regional government agreed to meet with the protestors, but Bolivia's president sent soldiers to interrupt negotiations, fearing that any agreement between the protestors and the regional government "would jeopardize the contract."⁸⁶ Before interrupting negotiations, the soldiers and protestors fought on the streets, and Bolivia declared a "national state of emergency."⁸⁷ In the midst of the protest and fighting, however, Aguas del Tunari voluntarily left Bolivia, and SEMAPA regained control of Cochabamba's water system.⁸⁸ The government repealed Law 2029 on April 11.⁸⁹ In November 2001, Aguas del Tunari, and in particular Bechtel, pursued arbitration to recover US\$25 million in the World Bank's International Center for the Settlement of Investment Disputes (ICSID).⁹⁰ Ultimately, Bechtel dropped its claim in exchange for Bolivia absolving Aguas del Tunari of any potential liability.⁹¹

C. *The Model Applied*

1. *Class Dynamics*

Social class is deeply entrenched in Bolivian society.⁹² Even before

80. O'Neill, *supra* note 1, at 369; *Oscar Olivera Interview*, *supra* note 79.

81. O'Neill, *supra* note 1, at 369.

82. Sánchez-Moreno & Higgins, *supra* note 58, at 1769-70.

83. O'Neill, *supra* note 1, at 369.

84. Bechtel Fact Sheet, *supra* note 72.

85. See Sánchez-Moreno & Higgins, *supra* note 58, at 1770.

86. O'Neill, *supra* note 1, at 370.

87. *Id.*

88. *Id.* at 370-71.

89. *Id.* at 371.

90. Bechtel Fact Sheet, *supra* note 72.

91. Damon Vis-Dunbar & Luke Eric Peterson, *Bolivian Water Dispute Settled, Bechtel Forgoes Compensation*, INVESTMENT TREATY NEWS (Jan. 20, 2006), http://www.iisd.org/pdf/2006/itn_jan20_2006.pdf; see also *Cochabamba – Victory over Bechtel*, FOOD & WATER WATCH, <http://www.foodandwaterwatch.org/global/latin-america/bolivia/cochabamba-%E2%80%93-victory-over-bechtel> (last visited Dec. 4, 2014) [hereinafter *Victory over Bechtel*] (noting that Bechtel's only compensation from the breach of the concession agreement was symbolic, a mere five bolivianos, equivalent to one U.S. dollar).

92. DENIS LUCY AVILÉS IRAHOLA, POPULAR PARTICIPATION, DECENTRALISATION, AND

Bolivian independence, predominantly white *mestizos* owned land through the *hacienda* system.⁹³ In 1952, however, Bolivian peasants who were “disenfranchised for centuries,” began to reclaim land.⁹⁴ These “peasant workers,”⁹⁵ called *campesinos* in Bolivian society, seized the land belonging to the landowners, or *patrones*,⁹⁶ beginning a revolutionary movement that swept the Bolivian countryside like “a wild fire.”⁹⁷ The government could not control the *campesino* movement and validated the *campesinos*’ actions by passing the Agrarian Reform Decree of August 2, 1953, a land redistribution bill.⁹⁸

Class differences intensified as Estenssoro’s government pushed the New Economic Policy. As a result of privatizations, Bolivian mines closed,⁹⁹ and many working-class miners left rural areas for urban areas.¹⁰⁰ Along with supporting the New Economic Policy, the U.S. government supported Bolivian President Hugo Banzer Suárez’s war on drugs, which led to the closure of several coca farms and more economic plight.¹⁰¹ Consequently, urban crowding increased: poor Bolivians congregated in *barrios*, neighborhoods located on the fringes of urban areas.¹⁰²

In Cochabamba, the poor were systematically excluded from the city’s water system even before the Aguas del Tunari concession was signed. Because of SEMAPA’s pricing scheme, the poor were priced out of a municipal-owned water system. Nevertheless, the poor managed, retrieving water from private wells or other sources.¹⁰³ When Aguas del Tunari took over for SEMAPA, it delivered services to the same group that SEMAPA had excluded through its pricing: the poor. Aguas del Tunari’s emphasis on universal access at the prevailing market rate, however, intensified class differences. The poor were accustomed to retrieving water after tendering a minimal payment.¹⁰⁴ With the concession, water prices increased. For example, “a teacher who made \$80 a month . . . saw his bill go up from \$5 to \$25 a month.”¹⁰⁵

LOCAL POWER RELATIONS IN BOLIVIA 159 (2005) (noting that white *mestizos* “still enjoy[ed] social supremacy” despite being “displaced from their dominant position in social affairs”).

93. *Id.* at 159-60.

94. James V. Kohl, *Peasant and Revolution in Bolivia*, 58 HISP. AM. HIST. REV. 238, 242 (1978).

95. See Assies, *supra* note 39, at 15. Some sources also call *campesinos* “farmers.” Richard Patch, *Bolivia: U.S. Assistance in a Revolutionary Setting*, in SOCIAL CHANGE IN LATIN AMERICA TODAY 108, 119 (1961).

96. *Patrones* were the land-owning class in Bolivia. See Kohl, *supra* note 94, at 255.

97. Patch, *supra* note 95, at 122.

98. Kohl, *supra* note 94, at 242.

99. JUNE C. NASH, PRACTICING ETHNOGRAPHY IN A GLOBALIZING WORLD: AN ANTHROPOLOGICAL ODYSSEY 173 (2007).

100. NICOLE FABRICANT, MOBILIZING BOLIVIA’S DISPLACED: INDIGENOUS POLITICS & THE STRUGGLE OVER LAND 36 (2012).

101. Kohl, *supra* note 44, at 900.

102. KOHL & FARTHING, *supra* note 43, at 159.

103. Assies, *supra* note 39, at 19.

104. Finnegan, *supra* note 75.

105. Oscar Olivera Interview, *supra* note 79.

Aguas del Tunari's rate hike primarily caused a detriment to *campesinos*, the group most affected by the consortium's right to charge well owners for operating their own private wells.¹⁰⁶ Because *campesinos* had a "deeply textured tradition of water management dating from pre-colonial times,"¹⁰⁷ they did not believe that water could be commoditized and thus collectively managed water in neighborhoods, called *barrios*, just outside of Cochabamba.¹⁰⁸ Water wells were methodically constructed, with the future of the *campesino* community in mind. Despite the deep-rooted inequality in Bolivian society, water was one item that the *campesinos* controlled. For example, in Villa San Miguel, a *barrio* outside of Cochabamba, residents communally funded and dug a well from 1994 to 1997 to service the *barrio*'s water needs.¹⁰⁹ Because of their collective efforts, Villa San Miguel residents obtained clean water and only paid the water cooperative two to five U.S. dollars a month.¹¹⁰ After the concession agreement was signed, however, the consortium effectively priced Villa San Miguel's residents—*campesinos*—out of their own water. Thus, in the context of this Note's model, the Aguas del Tunari concession negatively influenced class dynamics, intensifying existing economic disparities and limiting *campesinos*' access to water.

2. *Business and Deal Structure*

Aguas del Tunari's business structure is difficult to examine because the consortium only operated for six months. Moreover, the consortium presumably lagged behind initial revenue projections due to mass protests over water rates.¹¹¹ Therefore, unlike other Parts, which discuss consortia that operated for several years, this Part will use the company's financials as a proxy for the company's business structure.

a. *Business Structure and Water Rates*

Upon assuming service in Cochabamba, Aguas del Tunari was required to pay US\$1 million of SEMAPA's trading debts, rent fixed assets from SEMAPA, and buy SEMAPA's moveable assets and inventory.¹¹² In only six months of operation, Aguas del Tunari had invested US\$10 million in capital in Cochabamba's water system, and after the Bolivian government unilaterally rescinded the concession, the consortium claimed lost profits of US\$25

106. See Sánchez-Moreno & Higgins, *supra* note 58, at 1756; *supra* Section I.A (discussing how the model defines class dynamics).

107. Erik J. Woodhouse, Note, *The "Guerra del Agua" and the Cochabamba Concession: Social Risk and Foreign Direct Investment in Public Infrastructure*, 39 STAN. J. INT'L L. 295, 304 (2003).

108. O'Neill, *supra* note 1, at 364.

109. Finnegan, *supra* note 75.

110. *Id.*

111. As a result of protests, the Bolivian government instituted a rate freeze, and Aguas del Tunari refunded those users who had paid higher rates in January. See *supra* text accompanying notes 86-87.

112. Bechtel Fact Sheet, *supra* note 72.

million.¹¹³ Given these (limited) financials, it is highly likely that the consortium was in a precarious financial position. Despite Aguas del Tunari's increase in costs, revenues remained the same or possibly decreased; the consortium had agreed to a nine-month rate freeze, further limiting the consortium's future revenues and cash flow. Although the consortium voluntarily left Bolivia,¹¹⁴ Aguas del Tunari's underlying financials would have maintained increased water rates for several years, had the consortium continued operating Cochabamba's water system.

b. *Bargaining Power in Deal Structure and Negotiations*

From the beginning, Bolivian citizens were procedurally and substantively disadvantaged by the Aguas de Tunari concession agreement. Bolivian citizens' interests were poorly represented during the passage of Law 2029, which legalized water privatization in Bolivia. The subject matter of Law 2029 was extremely controversial in Bolivia, especially for *campesinos* and rural Bolivians.¹¹⁵ Because of Law 2029's title, Ley de Servicios de Agua Potable y Alcantarillado (Law on Potable Water and Sanitary Sewage Services), rural farmers believed the law did not apply to them.¹¹⁶ The Bolivian Congress passed Law 2029 in a forty-eight hour session, leaving opposition groups no time to react.¹¹⁷ Therefore, Bolivian citizens were procedurally powerless even before the privatization deal was closed: they had no opportunity to debate or question the legitimacy of Law 2029 and, by extension, the legal legitimacy of the concession agreement.

In terms of this Note's model, Bolivian citizens were also poorly represented in the negotiation and drafting phases of the concession. Because Aguas del Tunari was the only bidder, the Bolivian government—the only party capable of representing the Bolivian public's interests—lacked bargaining power in the negotiation process. Substantively, the terms of the agreement disadvantaged Bolivian citizens. For example, Aguas del Tunari could control Cochabamba's water supply for forty years and was guaranteed a profit of fifteen to seventeen percent per year.¹¹⁸ Thus, the concession only further handicapped Bolivian citizens' bargaining power.

3. *Political Climate*

Even though the Bolivian people's interests were not well-represented in the concession agreement, the Bolivian government did create a regulatory authority to oversee water privatizations. The regulatory agency, called the

113. *Id.*

114. Bechtel Fact Sheet, *supra* note 72.

115. Sánchez-Moreno & Higgins, *supra* note 58, at 1759.

116. *See id.* (“[I]rrigators did not realize that Law 2029 would affect them because it was supposed to be a law about urban water services.”).

117. *Id.* at 1760.

118. O'Neill, *supra* note 1, at 366.

Sectoral Superintendency of Basic Sanitation (SSBS), played a rather passive role in the Cochabamba privatization.¹¹⁹ SSBS was not politically independent from the Bolivian government, leaving the agency incapable of adequately representing the Bolivian public's needs throughout the privatization.¹²⁰ Moreover, SSBS had significant budget constraints and lacked trained staff.¹²¹ Because the Bolivian government negotiated on behalf of the Bolivian people, SSBS was effectively barred from negotiations over water rates and the underlying deal's terms.¹²² Hence, SSBS was ineffectual throughout the privatization, leaving mass protestors and the government to negotiate by means of violence.¹²³ SSBS's role corroborates Loftus's and McDonald's regulatory theory advanced in Section I.C: because of the inherent tension between government and administrative oversight, government-appointed regulators are largely ineffective in overseeing privatizations in developing nations.¹²⁴

III. KWAZULU-NATAL, SOUTH AFRICA

Scholars regard the water privatization in KwaZulu-Natal as a failure.¹²⁵ Although the privatization in KwaZulu-Natal did not result in mass protests, the privatization led to severe public health problems. This Part will describe the consequences of privatization and apply the three-factor model to the Siza privatization in KwaZulu-Natal.

A. Background

After holding its first post-apartheid elections in 1994, South Africa turned to privatization.¹²⁶ By 1999, the African National Congress (ANC) had privatized assets worth approximately 11 billion South African rand and had yet to sell SOEs worth approximately R 120 billion.¹²⁷ Although privatization is generally thought to disadvantage the working class and the poor,¹²⁸ South Africa's privatization was designed to benefit blacks; in the apartheid era, SOEs were designed in part to benefit the wealthy, providing employment opportunities for "otherwise unemployable whites."¹²⁹ The South African

119. *Cochabamba, Bolivia, Urban Water Expansion: Case Study (Water)*, ÉCOLE SUPÉRIEURE DE COMMERCE DE PAU 4 (Nov. 2012), http://www.esc-pau.fr/ppp/documents/featured_projects/bolivia.pdf.

120. *Id.* at 9.

121. *Id.*

122. *Id.*

123. *See supra* text accompanying notes 84-85.

124. Loftus & McDonald, *supra* note 19, at 188 (describing the politicization of regulators and the government's "lack of respect" for regulators in privatizations).

125. Pauw, *supra* note 6.

126. *See The Painful Privatisation of South Africa*, ECONOMIST, Sept. 9, 1999, <http://www.economist.com/node/238407> [hereinafter *Painful Privatisation*].

127. *Id.*

128. *See* Kohl, *supra* note 44.

129. *Painful Privatisation*, *supra* note 126.

government used privatization as a means to deliver services to poor areas and to encourage black ownership of privatized businesses.¹³⁰ For example, in the privatization of Telkom, a South African telecommunications company,¹³¹ the ANC reserved a tranche of shares for blacks.¹³²

B. *The KwaZulu-Natal Privatization*

1. *Background*

Bordered by Lesotho, Swaziland, and Mozambique, KwaZulu-Natal is South Africa's third-smallest¹³³ and second-richest province.¹³⁴ Nevertheless, approximately half of KwaZulu-Natal's residents live in poverty, and approximately fourteen percent of households lack access to running tap water.¹³⁵ As of the 2011 census, approximately eighty-seven percent of the province's population identified as black, and approximately four percent identified as white.¹³⁶

KwaZulu-Natal had undergone multiple water crises even before water privatization in the late 1990s. For example, in 1982, the province suffered a major cholera outbreak: approximately twelve thousand cases and twenty-four deaths were reported. In response, the province's apartheid government constructed nine communal taps, which revolutionized water access for the province's residents.¹³⁷ Residents made connections to these communal taps and had free access to clean water for seventeen years.¹³⁸

In 1994, however, the entire country experienced a water crisis. Because of droughts, a third of South Africa lacked access to safe and convenient drinking water.¹³⁹ Thus, when the ANC won the 1994 elections, access to clean drinking water became a priority for the new government.¹⁴⁰ The post-apartheid South African Constitution formally provided the right to access sufficient water and permitted the government to "take reasonable legislative

130. *Id.*

131. *About Us*, TELKOM, <https://secureapp.telkom.co.za/wholesale-web/information/index.jsp> (last visited Dec. 4, 2014).

132. *Painful Privatisation*, *supra* note 126.

133. *KwaZulu-Natal Province, South Africa*, SOUTHAFRICA.INFO (Nov. 19, 2012), <http://www.southafrica.info/about/geography/kwazulu-natal.htm>.

134. *KwaZulu Natal Region*, INDUS. DEV. CORP., <http://www.idc.co.za/kwazulu-natal/kwazulu-natal-regional-director.html> (last visited Dec. 4, 2014).

135. *KwaZulu-Natal Facts & Figures*, ASS'N FOR RURAL ADVANCEMENT, http://www.afra.co.za/jit_default_975.html (last visited Dec. 4, 2014); *Census 2011*, STAT. S. AFR. 59 fig.3.50 (2012), <http://www.statssa.gov.za/publications/P03014/P030142011.pdf>.

136. *Census 2011*, *supra* note 135, at 17 tbl.3.3. The remainder of KwaZulu-Natal's population is identified as "Indian/Asian," "coloured," and "other." *Id.*

137. Pauw, *supra* note 6, at 822.

138. *Id.*

139. Mike Muller, *Parish Pump Politics: The Politics of Water Supply in South Africa*, 7 PROGRESS DEV. STUD. 33, 34 (2007).

140. Stephen Greenberg, *The Rise and Fall of Water Privatization in Rural South Africa: A Critical Evaluation of the ANC's First Term of Office, 1994-1999*, in THE AGE OF COMMODITY: WATER PRIVATIZATION IN SOUTH AFRICA 206, 206-07 (David A. McDonald & Greg Ruiters eds., 2005).

. . . measures, within its available resources, to achieve the progressive realisation of [the right to water].”¹⁴¹ Even though the private sector did not manage or operate any part of South Africa’s water system at the time,¹⁴² the South African government employed privatization to fulfill its constitutional mandate.

2. *The Concession*

Water privatization began in KwaZulu-Natal in 1999.¹⁴³ Four companies bid for the concession.¹⁴⁴ Ultimately, the South African government agreed to a thirty-year concession with Siza. Siza’s majority shareholder was SAUR, a French company specializing in water management for local governments.¹⁴⁵ SAUR held a fifty-eight percent stake in the consortium, and Metropolitan Life, Women’s Development Bank Investment Holding, the Investment Progress Group Holdings, and NANO Investment Holdings—South African companies managed by professionals from “previously disadvantaged communities”—held the remaining forty-two percent.¹⁴⁶ The concession was worth more than R 500 million, with “half being raised by SAUR and half by South African banks.”¹⁴⁷

As part of the concession, Siza agreed to “maintain, rehabilitate, redesign[,] . . . improve[,] and expand” existing infrastructure.¹⁴⁸ The South African government signed the concession despite opposition from labor unions.¹⁴⁹ According to several experts, the concession was signed on terms that were “very favourable to the private sector.”¹⁵⁰

3. *The Aftermath*

To monetize water usage in KwaZulu-Natal, Siza and local government authorities installed prepaid meters on the province’s nine communal taps and on private taps in dwellings.¹⁵¹ Water—previously free for KwaZulu-Natal’s residents—now carried a fee.¹⁵² Several residents could not pay Siza’s fees or

141. S. AFR. CONST. ch. 2 § 27, 1996.

142. Greenberg, *supra* note 140, at 209.

143. Pauw, *supra* note 6, at 820.

144. DAVID HEMSON & HERBERT BATIDZIRAI, PUBLIC PRIVATE PARTNERSHIPS AND THE POOR: DOLPHIN COAST WATER CONCESSION 45 (2002), http://www.ucl.ac.uk/dpu-projects/drivers_urb_change/urb_infrastructure/pdf_public_private_services/W_DFIG_WEDC_HemsonPPP_and_Poo_Dolphin_Coast.pdf.

145. Greenberg, *supra* note 140, at 211; *Saur: Comprehensive Delegated Management of Public Services for Local Authorities*, SOCIÉTÉ D’AMÉNAGEMENT URBAIN ET RURAL, <http://www.saur.com/en/index.php/group/profile> (last visited Dec. 4, 2014).

146. HEMSON & BATIDZIRAI, *supra* note 144, at 48; Pauw, *supra* note 6, at 821.

147. Greenberg, *supra* note 140, at 211.

148. HEMSON & BATIDZIRAI, *supra* note 144, at 49.

149. *Id.* at 41-42.

150. Greenberg, *supra* note 140, at 211.

151. *See* Pauw, *supra* note 6, at 822-23.

152. *Id.* at 821.

were gradually “cut off” from Siza’s water services as water rates increased.¹⁵³ The poorest residents “begg[ed] for water,” chanting “no money, no water.”¹⁵⁴ Additionally, Siza’s water infrastructure often needed repair; thus, even those who could afford Siza’s water rates lacked access to clean drinking water.¹⁵⁵ As a result, several residents used water from contaminated streams and ponds.¹⁵⁶

In 2000, South Africa’s worst cholera epidemic broke out in KwaZulu-Natal.¹⁵⁷ Public health experts attributed the outbreak to water privatization.¹⁵⁸ In contrast to the cholera outbreak in 1982, which claimed twenty-four lives,¹⁵⁹ three hundred people died from cholera in the 2000 epidemic.¹⁶⁰ The province had over 120,000 reported cases of cholera, and the epidemic spread to six other provinces.¹⁶¹ At the beginning of the epidemic, local governments in KwaZulu-Natal were rather indifferent.¹⁶² As the epidemic worsened, however, the local government removed prepaid meters from communal taps, water rates decreased, and the national government trucked in clean water to afflicted areas.¹⁶³

Because of the cholera epidemic, Siza increased water rates by fifteen percent in 2001.¹⁶⁴ Siza’s executives noted that the volume of customers was not enough to cover the consortium’s expenses.¹⁶⁵ SAUR renegotiated the concession in 2001 due to a lack of profits.¹⁶⁶

C. *The Model Applied*

1. *Class Dynamics*

At the turn of the millennium, a third of the KwaZulu-Natal’s residents earned less than two dollars a day and “only the luckiest . . . ha[d] jobs,” earning less than forty-five dollars a month—not enough to cover monthly food

153. Claire Provost, *Is the Stage Being Set for New Water Wars in Africa?*, GUARDIAN: POVERTY MATTERS BLOG (Nov. 26, 2010, 12:31 PM), <http://www.theguardian.com/global-development/poverty-matters/2010/nov/26/africa-water-privatisation>.

154. BARNALI CHOUDHURY, PUBLIC SERVICES AND INTERNATIONAL TRADE LIBERALIZATION 163 (2012).

155. *Id.*

156. Pauw, *supra* note 6, at 823; Trevor Ngwane, *Water Privatisation: The Case Against*, BBC NEWS, June 3, 2003, http://news.bbc.co.uk/2/hi/talking_point/2959396.stm.

157. Ginger Thompson, *Water Tap Often Shut to South Africa Poor*, N.Y. TIMES, May 29, 2003, <http://www.nytimes.com/2003/05/29/world/water-tap-often-shut-to-south-africa-poor.html>.

158. David T. McKinley, *The Struggle Against Water Privatisation in South Africa*, in RECLAIMING PUBLIC WATER 181, 184 (Belen Balanya et al. eds., 2005); Ngwane, *supra* note 156.

159. *See supra* text accompanying note 137.

160. McKinley, *supra* note 158, at 184.

161. *Id.*; Thompson, *supra* note 157.

162. McKinley, *supra* note 158, at 184.

163. *Id.*

164. Greenberg, *supra* note 140, at 211.

165. *Id.*

166. P. Bond & J. Duggard, *Water, Human Rights and Social Conflict: South African Experiences*, 8 L. SOC. JUST. & GLOBAL DEV. 3, 9 (2008).

and water costs.¹⁶⁷ When the consortium set water prices at five dollars per month, in municipalities like Ngwelezane only 700 households could afford water and “[t]wo thousand families remained unconnected.”¹⁶⁸ Towns offered prepaid cards to access communal taps, but the price of a prepaid card—nearly four dollars—was more than several KwaZulu-Natal residents could pay.¹⁶⁹ Citizens gradually turned to public water sources. For example, a mother of two in KwaZulu-Natal retrieved water from a “mud puddle,” not out of gross negligence, but out of sheer desperation.¹⁷⁰

Other residents were denied water access as they lost jobs. Siza curtailed households’ water access after several missed payments. For example, after a household missed a certain number of payments, the consortium installed a “trickler” into valves. The device caused water to flow at reduced pressures, further decreasing the household’s access to water.¹⁷¹ In addition to Siza, local authorities limited residents’ water access after several missed payments. For example, David Radebe, a KwaZulu-Natal resident who could initially afford water payments of US\$6.40 per month, was priced out of Siza’s water market after he lost his job. After authorities arrested Radebe for illegally installing a pipe that would circumvent Siza’s water meters, city officials disconnected his water meter.¹⁷²

Even in post-apartheid South Africa, social class—not race—priced several KwaZulu-Natal residents out of Siza’s water. Water was more accessible and cheaper during the apartheid era than the post-apartheid era.¹⁷³ Moreover, the province’s cholera epidemic—triggered by a lack of affordable water—started in a majority white town.¹⁷⁴ The provincial and local governments’ and Siza’s actions did not appear to be racially based; instead, governmental and corporate authorities targeted those priced out of the prevailing market rate. Thus, in the context of this Note’s model, the Siza concession negatively influenced class dynamics, causing a detriment to both blacks and whites and limiting KwaZulu-Natal’s access to water. Far from delivering Pareto improvements, the privatization resulted in a public health crisis.

167. Thompson, *supra* note 157.

168. Pauw, *supra* note 6, at 822.

169. *Id.* Four dollars was more than several residents could pay because a third of South Africans “live on less than [two dollars] a day.” See Thompson, *supra* note 157; see also Pauw, *supra* note 6, at 821-26 (documenting the experience of one KwaZulu-Natal resident who could not afford prepaid cards).

170. Thompson, *supra* note 157.

171. Pauw, *supra* note 6, at 822.

172. *Id.* at 821.

173. See *supra* text accompanying note 138.

174. Pauw, *supra* note 6, at 823.

2. *Business and Deal Structure*

To recover every cost associated with the upkeep of KwaZulu-Natal's water system, Siza charged consumers prohibitively expensive water rates.¹⁷⁵ This business policy of recovering all upkeep costs, known as total cost recovery, was "the brainchild of private water companies and World Bank economists."¹⁷⁶ Business executives and economists earnestly believed that total cost recovery could strengthen utility systems and developing economies, and Siza's deal was contingent on total cost recovery's successful execution.¹⁷⁷ Additionally, the South African government championed total cost recovery for two reasons. First, the policy allowed the government to phase out subsidies that were characteristic of the apartheid-era government.¹⁷⁸ Second, cost recovery enabled governments and consortia to recover the cost of water infrastructure projects.¹⁷⁹ In 1999, for example, water revenues were only R 6.6 million, as compared to costs of R 690 million.¹⁸⁰

Whatever total cost recovery's merits may be, the policy negatively influenced Siza's business structure and consumers' water rates. Scholars believe that Siza incurred costs and set prices without much foresight and due diligence. For example, Professor David McDonald, an expert on South African water privatization, noted that "[n]obody really ever bothered to find out if [KwaZulu-Natal residents] could afford [privatized water]. And, as it turn[ed] out, [they could not]."¹⁸¹ Given the overwhelming emphasis on total cost recovery, the consortium and local government created a deadweight loss in South Africa, destabilizing the consortium's business structure¹⁸² and the country's public health.

3. *Political Climate*

The South African Department of Water Affairs and Forestry (DWA) oversaw water infrastructure and delivery in post-apartheid South Africa.¹⁸³ The DWA supported water privatization with two goals in mind: total cost recovery and South African federalism.¹⁸⁴ Under the second goal, local governments would oversee water systems.¹⁸⁵ But functioning local

175. *Id.* at 820.

176. *Id.*

177. *Id.*

178. In the apartheid era, water services were provided by the national government, not local governments. *See* Greenberg, *supra* note 140, at 213.

179. *See* Pauw, *supra* note 6, at 825 (acknowledging that total cost recovery enabled the South African government to assume "a reduced role" and champion privatization).

180. Greenberg, *supra* note 140, at 213.

181. Pauw, *supra* note 6, at 821 (quoting Professor David McDonald, co-director of Canada's Municipal Services Project).

182. *See supra* text accompanying notes 171-73.

183. David A. McDonald & Greg Ruiters, *Theorizing Water Privatization in Southern Africa*, in *THE AGE OF COMMODITY: WATER PRIVATIZATION IN SOUTHERN AFRICA*, *supra* note 140, at 25.

184. Greenberg, *supra* note 140, at 213.

185. *Id.* at 211.

governments, especially elected local councils, were virtually nonexistent in rural areas like KwaZulu-Natal.¹⁸⁶ Thus, the DWAF built local governments “from scratch.”¹⁸⁷ Lacking requisite knowledge and funding, such local governments were ineffective at managing municipal water systems.¹⁸⁸ Experts regarded the DWAF’s “building of” local government capacity as “mixed at best and highly disappointing at worst, with poor value for money being obvious in too many cases.”¹⁸⁹

During the Siza privatization and subsequent cholera outbreak, the experts’ views were confirmed. For example, in early 2000, the Ngwelezane/Empangeni municipality had US\$10 million in reserves but chose not to address the ongoing cholera crisis.¹⁹⁰ The municipal government even refused to subsidize water services “to poor communities”; instead, the municipality’s subsidies went to the privatizers in the form of tax breaks. Throughout the cholera epidemic, local governments continued enforcing prepaid water meters.¹⁹¹ Only after the cholera epidemic reached Johannesburg—a city located outside KwaZulu-Natal—did local governments freeze water rates at US\$2.00 to US\$2.50 per month.¹⁹² Instead of the municipal government, the national government provided KwaZulu-Natal with US\$2.5 million in emergency funds.¹⁹³

In terms of the three-factor model, the national government’s transfer of regulatory oversight to local governments fits Loftus and McDonald’s regulatory theory introduced in Section I.C: government-appointed regulators are ineffective at overseeing privatizations on behalf of consumers. In South Africa, local governments lacked the requisite knowledge to monitor privatizations and supported the privatizers over consumers in the midst of a public health crisis. Ultimately, South Africa paid “tens if not hundreds of times more dealing with the health crisis” due to local governments’ steadfast support of privatization.¹⁹⁴ Because of the resulting inefficiencies and social costs, a government-appointed regulator mismanaged KwaZulu-Natal’s water privatization, giving further credence to Loftus and McDonald’s regulatory theory.¹⁹⁵

186. *Id.* at 212.

187. *Id.*

188. *Id.*

189. *Id.* (quoting S. AFR. DEP’T WATER AFFAIRS & FORESTRY, THE REVIEW OF THE NATIONAL BOTT PROGRAMME W 6018B – KWAZULU NATAL: DRAFT REPORT v (1998)).

190. Pauw, *supra* note 6, at 823.

191. *Id.*

192. *Id.*

193. *Id.*

194. *Id.* (quoting Professor David McDonald).

195. Loftus & McDonald, *supra* note 19.

IV. MANILA, PHILIPPINES

Scholars regard the Manila Water Company's privatization as a success.¹⁹⁶ Since its inception, Manila Water Company has served Manila residents for over fifteen years and it is now listed on Pamilihan Sapi ng Pilipinas (the Philippine Stock Exchange).¹⁹⁷

A. *Background*

Facing financial losses, tremendous inefficiencies, and monopolistic practices, the Philippines started a massive privatization program in the mid-1980s. Led by President María Corazón Sumulong Aquino, the Philippine government first privatized banks and 132 "nonfinancial corporations."¹⁹⁸ Due to privatization and economic liberalization, the Philippine economy boomed. In 1992, newly elected President Fidel Ramos, a supporter of former President Aquinas, released the "Philippines 2000" plan, a blueprint for economic growth that mobilized popular support for President Ramos's policies.¹⁹⁹ In 1993, the Ramos Administration introduced competitive bidding in privatizing public utilities.²⁰⁰ When the Manila Water Company deal was closed,²⁰¹ the Philippines was relatively well-off: year-end inflation decreased from eleven percent in the 1980s to nearly six percent in 1997, and domestic debts had decreased from eighty-five percent of GNP in 1993 to fifty-eight percent of GNP in 1996.²⁰²

B. *The Manila Water Privatization*1. *Background*

In 1997, the Philippine government decided to privatize Metropolitan Waterworks and Sewerage System (MWSS), a "heavily indebted, overstaffed, and inefficient" government agency.²⁰³ Prior to privatization, MWSS could only supply water seventeen hours per day to two-thirds of its coverage population in Manila.²⁰⁴ By contrast, water systems in other major Southeast Asian cities could supply a full day's worth of water to most of their coverage

196. See Wu & Malaluan, *supra* note 3, at 207; Esguerra, *supra* note 28, at 39-40.

197. Wu & Malaluan, *supra* note 3, at 207.

198. GIANNI ZANINI, PHILIPPINES: FROM CRISIS TO OPPORTUNITY: COUNTRY ASSISTANCE REVIEW 3 (1999).

199. *Id.* at 4.

200. *Id.* at 8.

201. See Wu & Malaluan, *supra* note 3, at 209.

202. ZANINI, *supra* note 198, at 8.

203. Int'l Finance Corp., *Philippines: Manila Water*, WORLD BANK GROUP 2 (May 2010), http://www.ifc.org/wps/wcm/connect/3f64d180498391a5856cd7336b93d75f/PPPStories_Philippines_ManilaWater.pdf?MOD=AJPERES.

204. Arthur C. McIntosh & Cesar E. Yñiguez, *Second Water Utilities Data Book: Asian and Pacific Region*, ASIAN DEV. BANK 3 tbl.1 (Oct. 1997), <http://www.ircwash.org/sites/default/files/McIntosh-1997-Second.pdf>.

populations.²⁰⁵ Unserved households in Manila paid rates that were thirteen times higher than MWSS's rates.²⁰⁶

Table 1: Water Supply and Coverage – Select Southeast Asian Cities²⁰⁷

City	Coverage (Hours/Day)	Coverage Population (%)
Manila	17	67%
Bangkok	24	82%
Kuala Lumpur	24	100%
Mandalay	24	80%
Singapore	24	100%

To grant itself the authority to privatize MWSS, the Philippine government passed the Water Crisis Act in 1995, two years before the privatization.²⁰⁸ In 1996, the government increased water rates by thirty-eight percent and decreased MWSS's labor force by thirty percent.²⁰⁹ Immediately before the privatization, the government split Manila into two zones: the east zone and the west zone. A single concessionaire was prohibited from operating water systems in both zones for three reasons: first, the government believed that regulators had more bargaining power over privatizers with the two-zone system; second, the arrangement allowed the government to monitor and compare the winning consortia's management styles; and third, if one consortium failed to deliver improvements, the other consortium could easily take over.²¹⁰

2. *The Concession*

Four concessionaires bid for each zone of Manila.²¹¹ In the east zone, the winning consortium was Manila Water—a joint venture²¹² consisting of Ayala, a Philippines conglomerate;²¹³ United Utilities, a U.K. corporation;²¹⁴ and Bechtel, the U.S. corporation that was heavily involved in the Cochabamba privatization.²¹⁵ Manila Water's winning bid, however, was “extremely

205. *See infra* Table 1.

206. *See* Wu & Malaluan, *supra* note 3, at 213.

207. McIntosh & Yñiguez, *supra* note 204, at 3 tbl.1.

208. An Act to Address the National Water Crisis and for Other Purposes, Rep. Act No. 8041, § 6, O.G. p. 1, 3 (June 7, 1995) (Phil.).

209. Wu & Malaluan, *supra* note 3, at 213.

210. *Id.*

211. Int'l Finance Corp., *supra* note 203, at 2.

212. Wu & Malaluan, *supra* note 3, at 215.

213. *About Ayala*, AYALA CORP., http://www.ayala.com.ph/about_us (last visited Dec. 4, 2014).

214. *Business Overview*, UNITED UTILS., <http://corporate.unitedutilities.com/united-utilities-business.aspx> (last visited Dec. 4, 2014).

215. *See supra* text accompanying notes 65; *see generally* Bechtel Fact Sheet, *supra* note 72 (noting Bechtel's involvement in the Cochabamba privatization). Since Bechtel was a seasoned privatizer, its involvement in both the Cochabamba and Manila privatizations may give credence to the

low.”²¹⁶ In fact, Mark Dumol, a Philippine government official involved with the privatization, thought the Manila Water bid “looked like a mistake . . . [and] was the discount” over MWSS’s water rates, not the actual water rate.²¹⁷ Nevertheless, the government accepted Manila Water’s bid after double-checking the bid’s accuracy,²¹⁸ believing that the private sector’s low bid confirmed MWSS’s inefficiency.²¹⁹

The Philippine government granted Manila Water the concession for twenty-five years.²²⁰ According to the terms of the concession, Manila Water was required to increase the east zone’s water coverage from sixty-seven percent to eighty-five percent in 2001. By 2006, Manila Water was expected to deliver coverage to ninety-six percent of the population.²²¹ Manila Water paid US\$1.2 billion to operate MWSS’s water system and was required to service the existing debts of MWSS.²²² Furthermore, Manila Water was responsible for funding the MWSS Regulatory Office, the regulatory authority involved in the privatization.²²³

Under the terms of the concession, Manila Water could only increase water rates under three scenarios: (1) inflation, (2) unforeseen circumstances, and (3) rate rebasing.²²⁴ To determine the rate of inflation, the Philippine government used an adjusted version of the Retail Price Index (*RPI*), accounting for efficiency gains (*X*) and investment costs (*Y*): $RPI - (X - Y)$.²²⁵ Unforeseen circumstances included force majeure events, such as currency devaluation or a sudden change in regulations.²²⁶ Lastly, rate rebasing was a process by which the government could ensure that Manila Water’s rate on investment met but did not grossly exceed a rate of fair return.²²⁷ The Philippine government calculated a “rate of fair return” using the rate of return for comparable infrastructure projects; the comparable rate would be adjusted to reflect the cost of equity for utility businesses in the Philippines and country and exchange rate risks.²²⁸ According to the concession agreement, the government could engage in rate rebasing every five years, with two exceptions.²²⁹ First, the government could unilaterally cancel the initial rate

argument that even experienced privatizers may not succeed if the policy prescriptions discussed in Part V are not applied.

216. Wu & Malaluan, *supra* note 3, at 215.

217. Mark Dumol, *The Manila Water Concession: A Key Government Official’s Diary of the Largest Water Privatization*, WORLD BANK GROUP 97 (July 2000), <http://web.mit.edu/urbanupgrading/waterandsanitation/resources/pdf-files/ManilaConcession.pdf>.

218. *Id.* at 98.

219. Wu & Malaluan, *supra* note 3, at 215.

220. *Id.*

221. *Id.*

222. *See id.* at 215, 226.

223. *Id.* at 215.

224. *Id.* For a definition of rate rebasing, see *infra* text accompanying notes 227-230.

225. Dumol, *supra* note 217, at 52-53.

226. Wu & Malaluan, *supra* note 3, at 215.

227. *Id.*

228. Dumol, *supra* note 217, at 54.

229. *Id.* at 52.

rebasings, preventing consortia from entering “extremely low” bids.²³⁰ Second, to ensure that the winning consortium’s rates of return were not unconscionably high before the first round of rate rebasing, the government required each bidder to reveal the discount rate used in the consortium’s financial projections.²³¹

3. *The Aftermath*

Immediately after the deal closed, Manila Water decreased water rates by roughly seventy-four percent throughout Manila’s east zone.²³² In 1997, however, the Asian Financial Crisis caused a sharp devaluation of the Philippine peso, and consequently, MWSS’s dollar-denominated debt doubled.²³³ Citing force majeure, the consortium increased water prices in 1999.²³⁴ From 1997 to 2008, rates increased by over one thousand percent,²³⁵ but through a program called “Water for the Community,” residents in the poorest neighborhoods paid below what MWSS charged its customer base.²³⁶

Manila Water missed several preliminary targets, but successfully reduced its non-revenue water usage, a source of inefficiency for utility companies.²³⁷ By 1999, Manila Water delivered profits, and in 2005, it was the first company listed on the Philippine stock exchange after the Asian Financial Crisis.²³⁸ Manila Water’s customer base doubled, and by 2006, ninety-nine percent of Manila Water’s customer base had twenty-four hour water access.²³⁹

230. *Id.* at 46; Wu & Malaluan, *supra* note 3, at 215. If a consortium entered extremely low bids and the government decided to forego the first round of rate rebasing, the consortium would face ten years of negative cash flow. Dumol, *supra* note 217, at 46.

231. Dumol, *supra* note 217, at 53-54.

232. *Recalibrating the Meter: A Ten-Year Overview of the MWSS Privatization Deal*, FREEDOM FROM DEBT COALITION 28 (Mar. 2009), <http://fdc.ph/resources/category/21-monographs?...61:recalibrating-the-meter> [hereinafter *Ten-Year Overview*].

233. Wu & Malaluan, *supra* note 3, at 215.

234. *Ten-Year Overview*, *supra* note 232, at 23-24.

235. *Id.* at 28 tbl.6; *see infra* Table 2 (quoting *Ten-Year Overview*, *supra* note 232, at 28).

236. *See* Wu & Malaluan, *supra* note 3, at 222; Int’l Finance Corp., *supra* note 203, at 2; *Ten-Year Overview*, *supra* note 232, at 28.

237. Wu & Malaluan, *supra* note 3, at 217; *see also Ten-Year Overview*, *supra* note 232, at 30 (comparing Manila’s nonrevenue water usage versus internal projections). Non-revenue water, a marker of inefficiency, is “the difference between water production and total metered sales.” Benedykt Dziegielewski & Jack C. Kieffer, *Appropriate Design and Evaluation of Water Use and Conservation Metrics and Benchmarks*, 102 AM. WATER WORKS ASS’N J. 1, 1 (2010).

238. Wu & Malaluan, *supra* note 3, at 217; *see also infra* Table 3 (listing Manila Water’s profits and profit margins).

239. Int’l Finance Corp., *supra* note 203, at 2.

Table 2: Manila Water Company's Rates²⁴⁰

Period / Year	Average water rate per m ³ (in Philippine pesos)
Pre-privatization	8.78
Bid rate (1997-1998)	2.32
1999 (First increase)	2.61
2002 (Rate Rebasing)	14.22
2005 (IPO year)	18.55
2008	26.98

Table 3: Manila Water Profits and Profit Margins²⁴¹

(All monetary figures are denominated in thousand Philippine pesos)

Year	Revenue	Profit/Loss	Profit Margin
1997	421,412	-38,008	-9.02%
1998	989,935	-67,000	-6.77%
1999	1,309,533	101,000	7.71%
2002 (Rate rebasing)	2,682,694	553,380	20.63%
2005 (IPO year)	5,763,102	2,011,521	34.90%
2008 ²⁴²	8,913,590	2,788,067	31.28%
2012 ²⁴³	14,533,068	5,451,306	37.51%

C. The Model Applied

1. Class Dynamics

In the Philippines, wealth is concentrated in relatively few hands. For example, Ayala, which held the majority stake in Manila Water,²⁴⁴ is one of three large family conglomerates in the Philippines.²⁴⁵ Ten families control more than fifty percent of all publicly held companies' market capitalization.²⁴⁶ Nevertheless, the privatization delivered Pareto improvements for two crucial reasons: (1) the Philippine government privatized before overcrowding in Manila became a severe problem; and (2) Manila Water used a two-tiered pricing scheme, whereby wealthy consumers subsidized poor consumers' water rates, thus reducing poor consumers' financial incentives to boycott the privatization.

240. *Ten-Year Overview*, *supra* note 232, at 28.

241. *Id.* at 38.

242. MANILA WATER CO., 2008 ANNUAL REPORT 70 (2009).

243. MANILA WATER CO., 2012 ANNUAL REPORT 72 (2013).

244. *Ten-Year Overview*, *supra* note 232, at 17.

245. Wu & Malaluan, *supra* note 3, at 217.

246. Wu Xun, *Political Institutions and Corporate Governance Reform in Southeast Asia*, in REFORMING CORPORATE GOVERNANCE IN SOUTHEAST ASIA: ECONOMICS, POLITICS, AND REGULATIONS 16, 22 (Ho Khai Leong ed., 2005).

First, unlike the Aguas del Tunari privatization in Cochabamba,²⁴⁷ Manila Water was privatized before Manila reached unsustainable population levels. The Philippine government passed the Water Crisis Act after reviewing several reports that rural Filipinos were migrating to certain parts of Manila.²⁴⁸ To alleviate inadequate water coverage in these areas, the Philippine government mandated specific coverage targets in the Manila Water concession.²⁴⁹

Second, Manila Water introduced a progressive revenue scheme to reduce the inherent tension between providing services to the poorest neighborhoods and maintaining profitable operations. As of 2010, Manila Water's poorest customers paid rates below the pre-privatization rate,²⁵⁰ 8.78 Philippine pesos/m³.²⁵¹ Through progressive pricing, Manila Water could serve 1.6 million poor customers,²⁵² and still deliver increasing profits to shareholders.²⁵³ Manila Water also implemented a program called "Water for the Community," which enabled the consortium to reach low-income areas of Manila; experts suggest the program made the poorest Manila residents Manila Water's "political allies."²⁵⁴

Because of the consortium's progressive pricing scheme, however, one could argue that Manila Water's privatization benefitted the poor at the expense of the wealthy. This argument, however, is undermined because Manila Water became a publicly listed company, primarily benefitting wealthy Filipinos.²⁵⁵ Ayala, for example, was the primary beneficiary of Manila Water's initial public offering (IPO).²⁵⁶ Furthermore, the consortium increased water coverage throughout Manila; by 2006, Manila Water's coverage in the east zone was on par with other Southeast Asian cities' water coverage.²⁵⁷

2. *Business and Deal Structure*

a. *Corporate Governance Initiatives*

Through its initial initiatives, Manila Water minimized the amount of internal corruption that could plague the consortium. Although Ayala did not have any "technical experience in operating urban water systems," all of Manila Water's contractors were hired based on expertise, not nepotism.²⁵⁸ Moreover, even though Manila Water missed preliminary targets set by the

247. *See supra* text accompanying notes 49-54.

248. Int'l Finance Corp., *supra* note 203, at 2.

249. Wu & Malaluan, *supra* note 3, at 215.

250. Int'l Finance Corp., *supra* note 203, at 2.

251. *Ten-Year Overview*, *supra* note 232, at 28.

252. Int'l Finance Corp., *supra* note 203, at 2.

253. *See supra* Table 3.

254. Wu & Malaluan, *supra* note 3, at 223.

255. *See id.* at 217 (noting that two family conglomerates, which control a substantial portion of the Philippines' total market capitalization, profited from Manila Water's success).

256. *See id.*

257. *See* Int'l Finance Corp., *supra* note 203, at 2; *supra* Table 1.

258. Wu & Malaluan, *supra* note 3, at 217-18.

concession agreement, the consortium directed its initial efforts toward reducing internal inefficiencies.²⁵⁹ For example, the consortium's use of non-revenue water steadily declined, trailing behind internal projections of nonrevenue water usage.²⁶⁰ Similarly, instead of incurring additional human resources costs, Manila Water retained and retrained MWSS's employees. Most of Manila Water's midlevel and senior managers were MWSS employees; consortium executives only held a few managerial positions.²⁶¹ Manila Water's corporate governance initiatives ultimately won the company outside recognition; in 2005, the year of Manila Water's IPO, Asia Money voted Manila Water the "best managed small cap company."²⁶²

b. *Water Rates and Bargaining Power*

Although Manila Water's water rates increased over a thousand percent from 1997 to 2008, the Philippine government took adequate measures to ensure that the consortium could not raise rates impulsively.²⁶³ As noted above, according to the terms of the concession agreement, Manila Water could only raise rates in three circumstances: inflation, force majeure, and rate rebasing.²⁶⁴ Most importantly, the Philippine government evaluated Manila Water's financial projections before allowing the consortium to participate in the bidding process.²⁶⁵ These actions enabled the Philippine government to act as a de facto agent for Manila residents during and after the negotiation process.

Although these practices appear to be anti-capitalist, nonintervention would have been fatal to privatizers. For example, in Bolivia, the government's laissez-faire policies led to populist riots and massive financial losses for Bechtel. Given the vast wealth disparity in the Philippines, unilaterally allowing a conglomerate like Ayala to price water would have been likely to spark a similar uprising among Manila's poor, potentially resulting in losses for Manila Water. Therefore, the government's intermediation was necessary for the consortium's long-term stability and success.

3. *Political Climate*

Instead of appointing a regulator, the Philippine government decided to take a hybrid approach. The government set up a regulatory authority—the MWSS Regulatory Office—through the concession agreement, but the consortium was responsible for funding the regulator.²⁶⁶ Thus, the regulatory authority was affiliated with both parties to the transaction and depended on

259. *Id.* at 220.

260. *See Ten-Year Overview*, *supra* note 232, at 30.

261. Wu & Malaluan, *supra* note 3, at 221.

262. *Awards*, MANILA WATER, <http://www.manilawater.com/Pages/Awards.aspx> (last visited Dec 4, 2014).

263. *See supra* Table 2.

264. *See supra* text accompanying notes 224-233.

265. Dumol, *supra* note 217, at 53-54.

266. Wu & Malaluan, *supra* note 3, at 215.

both to function; without the privatizer's funds, the authority could not meet its expenses, but without the government's authority, the regulator would not have any legal standing.

Even though governments and privatizers have been imperfect regulators in other privatizations,²⁶⁷ the hybrid approach worked well in the Philippines for two reasons. First, the Philippine government was genuinely interested in consumer protection throughout the privatization; an elaborate system of price control governed the consortium, and the government privatized Manila's water system to deliver superior services to Manila residents, especially the urban poor. Today, the MWSS Regulatory Office continues to meet the government's goals by testing Manila's water quality, overseeing rate rebasing, and monitoring Manila Water's concession.²⁶⁸ Second, much like regulatory agencies in the developed world, the MWSS Regulatory Office is governed by rather strict laws. For example, the regulator has strict transparency requirements, which include maintaining a publicly accessible website, maintaining audited financial statements, and enforcing a strict no-gift policy.²⁶⁹ Therefore, the MWSS Regulatory Office resembles a regulatory agency in the developed world, not the developing world. The hybrid origins and authorities governing the MWSS Regulatory Office enabled the regulator to become a positive force in the Manila water privatization. However, as I will explain in the next Part, the Philippine approach may not work for other countries, especially those countries that are forced by the World Bank to privatize.

V. AN OVERVIEW OF WATER PRIVATIZATION POLICIES

Although the previous Parts discussed the specifics of three privatization programs, this Part will (1) synthesize various government and business policies adopted in each privatization and (2) offer policy prescriptions for future water privatizations.

A. *Class Dynamics*

Class is entrenched in Bolivia, South Africa, and the Philippines. Nevertheless, the Philippine government and the consortium diluted potential class differences in the Manila Water privatization by introducing three moderating devices: (1) graduated rate increases, (2) progressive pricing schemes, and (3) poverty alleviation programs. If adopted by other countries, these three policies can mitigate class conflicts, assuaging populist fears that water privatization will harm the least well off in society.

267. See *supra* Subsection II.C.3 (Cochabamba); *supra* Subsection III.C.3 (KwaZulu-Natal).

268. See METRO. WATERWORKS & SEWERAGE SYS. REG. OFF., <http://ro.mwss.gov.ph> (last visited Dec. 4, 2014).

269. See *Code of Corporate Governance for GOCCs*, METRO. WATERWORKS & SEWERAGE SYS. REG. OFF., http://ro.mwss.gov.ph/?page_id=1499 (last visited Dec. 4, 2014).

1. *Graduated Rate Increases*

The Manila Water privatization was not a one-stage process. Unlike rates in KwaZulu-Natal or Cochabamba, rates in Manila did not rise overnight; instead, the Philippine government implemented a multistage privatization process. Rates rose one year prior to the privatization. Since MWSS was operating Manila's water system at the time, the increase allowed the government to simulate the worst possible outcome of the privatization—higher water rates and substandard service.²⁷⁰

The Philippine government continued to maintain graduated rate increases throughout the privatization. Manila Water's rates fluctuated in response to economic and political shocks or planned timetables.²⁷¹ Ultimately, such carefully planned rate increases enabled the privatization to win support from Manila's residents and legitimized Manila Water's business practices. By contrast, in South Africa, sudden rate increases decreased Siza's legitimacy among South Africans.²⁷² Similarly, in Bolivia, Bechtel lost its legitimacy and support after it suddenly introduced high water rates in Cochabamba.²⁷³ The lack of legitimacy continued to haunt Bechtel after it left Cochabamba—several human rights groups campaigned against the privatizer in arbitration proceedings.²⁷⁴

Graduated rate increases, therefore, are a useful policy tool for consumers, privatizers, and governments. If governments increase rates before the privatization, such increases may allow a government to sample public sentiment before signing a legally binding concession agreement. Furthermore, if pre-privatization rates are high enough, the incoming consortium can lower rates, instantly winning citizens' approval. Hence, pre-privatization rate increases can dilute populist backlash to privatization. Although some may argue that such a strategy may backfire—citizens may believe that the government and privatizer are attempting to deceive them into accepting the privatization's legitimacy—rate increases convinced Manila residents that the privatizers' rates would be lower than the government's rates.²⁷⁵

Second, graduated rate increases can bring transparency to the privatizer's pricing process. For example, rates that increase in tandem with economic shocks are less likely to alarm consumers because economic shocks affect all sectors of the economy, not just privatized water companies.²⁷⁶ Consumers will likewise anticipate rates that increase on a fixed schedule. Thus, by virtue of carefully orchestrated rate increases, consumers are less

270. See *supra* text accompanying note 209.

271. See *supra* Subsection IV.B.3.

272. See *supra* Section III.C.

273. See *supra* Subsection II.B.3.

274. See *Victory over Bechtel*, *supra* note 91.

275. See Dumol, *supra* note 217, at 43.

276. Adam Rose & Shu-Yi Liao, *Modeling Regional Economic Resilience to Disasters: A Computable General Equilibrium Analysis of Water Service Disruptions*, 45 J. REGIONAL SCI. 75, 83 (2005).

likely to believe that the consortium's pricing is arbitrarily determined.

Privatizers, in turn, experience more certainty and stability through graduated rate increases. Because consumers are more likely to accept graduated increases rather than unplanned increases, privatizers can use a narrower range of revenue projections, thereby reducing uncertainty and risk. A narrower range of projections can decrease the privatizer's volatility and increase the privatizer's financial standing among investors and creditors.²⁷⁷

2. *Progressive Pricing Schemes*

In contrast to Siza, which charged South African consumers prohibitively high rates,²⁷⁸ Manila Water adopted a progressive pricing scheme. Under the Manila pricing scheme, the poorest residents paid below the pre-privatization rate: 8.78 Philippine pesos/m³.²⁷⁹

Progressive pricing schemes primarily benefit poor consumers, but they also create positive externalities for governments and privatizers. The Manila pricing scheme introduces poor consumers to a market-based system, thereby increasing their loyalty to the free market²⁸⁰ and enabling governments to conduct future privatizations without inciting popular resistance. Moreover, the scheme allows privatizers—in this case, Manila Water—to monetize all socioeconomic segments of its customer base. In doing so, privatizers make the poor their political ally, sacrificing revenue in the short run for popular support in the long-run.²⁸¹

To execute a progressive pricing scheme, however, privatizers must charge another subgroup more for water.²⁸² Although charging certain groups more seems like a drawback, static pricing—the opposite of progressive pricing—actually decreases consumer welfare.²⁸³ In the developing world, where the poor vastly outnumber the rich, static pricing may also lead to backlash against privatization.²⁸⁴ Consequently, from a cost-benefit analysis standpoint, progressive pricing yields more benefits than costs.

3. *Poverty Alleviation Programs*

Poverty alleviation programs deliver water to the “extremely poor,”²⁸⁵ enabling the community to “play crucial roles in management, billing,

277. See Joshua Aizenman & Nancy Marion, *Volatility and Investment: Interpreting Evidence from Developing Countries*, 66 *ECONOMICA* 157, 158 (1999).

278. See *supra* text accompanying notes 175-180.

279. See *supra* Table 2.

280. See Wu & Malaluan, *supra* note 3, at 223.

281. *Id.*

282. See *supra* Section IV.B; *supra* Table 2.

283. See Ron Baiman, *Why Equity Cannot Be Separated from Efficiency: The Welfare Economics of Progressive Social Pricing*, 33 *J. RADICAL POL. ECON.* 203, 211 (2001).

284. See *supra* Section II.C.

285. *Who Are the Extremely Poor?*, WORLD BANK, <http://www.worldbank.org/en/news/video/2013/06/20/who-are-the-extremely-poor> (last visited Dec. 4, 2014).

collection, maintenance and monitoring.”²⁸⁶ As a result, poor consumers no longer have to spend “several hours a day” collecting water and can devote their time to more productive tasks. Poverty alleviation programs also promote sustainability within poor communities, thus allowing privatizers to decrease their nonrevenue water usage.²⁸⁷

Because water privatization programs aim to equalize a community’s access to water, poverty alleviation programs are crucial. While water privatization may equalize water access, equal water access does not automatically increase poor consumers’ ability to pay for water under a market-based system. Therefore, a privatizer must supplement its water privatization program with a poverty alleviation program. Manila Water did so by launching the “Water for the Community” program.²⁸⁸ The program allowed Manila Water to gain popular support and meet the government’s directives under the concession agreement.²⁸⁹

Although Manila Water used its poverty alleviation program in conjunction with progressive pricing, a privatizer may employ both policies separately, in a two-step process. For example, a privatizer may use a poverty alleviation program to reach poor consumers and build support for water privatization within the community. After establishing a relationship with the community, a privatizer can slowly introduce a progressive pricing scheme. Privatizers have not used this tactic before, but the infusion of poverty alleviation programs and progressive pricing can bolster privatization efforts.²⁹⁰

If a privatizer uses a two-step process, the poverty alleviation program can be an alternative means of conducting market research. A poverty alleviation program may also increase poor consumers’ loyalty to a privatizer before the privatizer introduces progressive pricing.

B. *Business Structure and Political Oversight*

In addition to popular support, internal financials and external regulatory regimes can influence privatizations. For example, due to increasing costs and little regulatory oversight, Aguas del Tunari raised rates;²⁹¹ by contrast, Manila Water achieved financial and political stability because of government-mandated cost oversight.²⁹² Therefore, this Section discusses two policies that can increase efficiencies in privatizers’ business and deal structures: (1) mandatory due diligence and cost oversight and (2) regulatory oversight. If adopted by governments and privatizers, these policies can increase the

286. Gerardo C. Ablaza, *Creating Ripples in Communities Manila Water’s Full Circle Approach*, LEAGUE CORP. FOUND. (Aug. 3, 2010), <http://lcf.org.ph/component/mna/view/88>.

287. *Id.*

288. Wu & Malaluan, *supra* note 3, at 223.

289. *Id.*

290. Although privatizers have not used poverty alleviation programs followed by progressive pricing schemes, privatizers have enacted both policies in tandem.

291. *See supra* text accompanying note 69-75.

292. Wu & Malaluan, *supra* note 3.

likelihood of a privatization's financial and political stability.

1. *Mandatory Due Diligence*

Even though due diligence is a common practice in other business transactions,²⁹³ Siza did not perform any due diligence in the KwaZulu-Natal privatization, thereby incurring massive costs.²⁹⁴ By contrast, the Philippine government required Manila Water to reveal its anticipated costs and financial projections before the consortium was allowed to bid.²⁹⁵ The Philippine government's oversight compelled the consortium to analyze its costs and charge consumers reasonable rates for water.

Thus, to curtail unanticipated and excessive costs, governments should require privatizers to engage in requisite due diligence, submit their due diligence findings to the government, and submit their financial projections to the government. These three steps should occur before the bidding process starts. Governments can utilize financial projections and due diligence in the drafting process. For example, through transparent due diligence records, the government and privatizer can allocate associated risks in the concession agreement. Moreover, in the current age of transparency, governments can also release due diligence and cost projections to the public to increase consumers' knowledge of the transaction.

Privatizers may also prefer stringent oversight for three reasons. First, mandatory and transparent due diligence will enable prospective privatizers to quantify risk appropriately before the bidding process starts. Second, an accurate measure of risk—either captured by the company's weighted average cost of capital or accurate financial projections—will reduce uncertainty and volatility. In return, the privatizer will obtain cheaper access to credit from banks and other financial institutions.²⁹⁶ Third, because a lack of due diligence has harmed privatizers in the past,²⁹⁷ mandatory due diligence may function as an insurance policy for prospective privatizers.

Although these reasons may incentivize any privatizer to conduct due diligence, privatizers such as Siza are not as stringent in conducting due diligence for two reasons. First, the government may incentivize the privatizer to proceed without sufficient due diligence through its economic policies. For example, KwaZulu-Natal implemented the policy of "total cost recovery," reassuring privatizers that they would be able to recapture whatever costs they incurred during the course of privatization.²⁹⁸ Second, given development

293. See Duncan Angwin, *Mergers and Acquisitions Across European Borders: National Perspectives on Preacquisition Due Diligence and the Use of Professional Advisers*, 36 J. WORLD BUS. 32, 33 (2001).

294. See, e.g., Greenberg, *supra* note 140, at 206, 212.

295. Dumol, *supra* note 217, at 53-54.

296. Aizenman & Marion, *supra* note 277, at 173.

297. See, e.g., Greenberg, *supra* note 140, at 212.

298. See *supra* Subsection III.C.2.

banks' lump sum funding structure,²⁹⁹ governments and privatizers may be concerned with short-term profits rather than long-term financial success.

2. *Regulatory Oversight*

In the three privatizations discussed above, each respective government adopted radically different regulatory regimes. Bolivia vested its regulatory authority in an official regulatory agency, but the agency had no power to negotiate on behalf of Cochabamba's residents.³⁰⁰ South Africa experimented with federalism, transferring federal authority to local governments.³⁰¹ The Philippines, however, chose a hybrid model: the privatizer derived its authority from the government, but was funded by the privatizer.³⁰² The Philippines was the most successful, but strict laws similar to those found in the developed world governed its regulatory regime.³⁰³

Regardless of the Philippines's success, scholars have found that state-sponsored regulatory authorities are ineffectual in monitoring privatizations.³⁰⁴ In particular, Loftus and McDonald note that in the developing world, when a government-appointed regulator oversees water privatizations, the regulator may be reduced to a government or an industry puppet, unable to safeguard consumers' interests in the privatization.³⁰⁵ For example, in a water privatization in Buenos Aires, the government renegotiated a concession agreement without seeking input from the government-appointed regulatory agency. In fact, the regulatory agency was rarely consulted in several concession-related matters, rendering the agency incapable of protecting consumers' interests.³⁰⁶

Third-party funding also exacerbates the principal-agent problem between governments and citizens.³⁰⁷ Development banks often incentivize governments to privatize.³⁰⁸ Although solutions outlined in Subsection V.B.1 can partially eliminate the underlying principal-agent problem, only a robust regulator can ensure that consumers' interests are represented throughout the duration of a concession.

Nevertheless, third-party funding can be restructured in a way that mimics regulatory oversight. Development banks currently award lump sum

299. See *infra* text accompanying note 309.

300. See *supra* Subsection II.C.3.

301. See *supra* Subsection III.C.3.

302. See *supra* Subsection IV.C.3.

303. *Code of Corporate Governance for GOCCs*, *supra* note 269 (transparency policy).

304. See, e.g., Girishankar & De Silva, *supra* note 23, at 10-11.

305. Loftus & McDonald, *supra* note 19, at 187-88.

306. *Id.* at 198.

307. In the context of this Note, the principal-agent problem refers to the inability of an agent to monitor the principal's conduct in a situation in which the agent "has an informational advantage over the principal and takes actions that impact both [parties]." Gary J. Miller, *The Political Evolution of Principal-Agent Models*, 8 ANN. REV. POL. SCI. 203, 203 (2005).

308. See Sánchez-Moreno & Higgins, *supra* note 58, at 1748-49.

payments for a signed concession agreement.³⁰⁹ Instead of tying funding to a signed agreement, development banks should tie funding to a privatization's success, thus imposing checks on the privatizer and the government. Through this arrangement, each tranche of funding can be tied to the achievement of certain milestones—for instance, increased coverage, strong financials, or poverty alleviation. Such an arrangement would function like a social impact bond, a popular development tool recently used in developed countries.³¹⁰

By tying funding to specific goals—known as impact funding—the World Bank and its peers can monitor privatizations across multiple metrics (or milestones). The metrics, of course, should be customized for every country—metrics for South African privatizations, for instance, may have stressed positive public health outcomes, while the metrics for Bolivia may have emphasized decreasing the number of populist uprisings. Moreover, the World Bank can select metrics that underscore long-term efficiency or well being, thereby conducting a longitudinal analysis of the privatization.

More importantly, impact funding realigns monetary incentives. Instead of being paid to privatize, governments are paid to privatize well. Because each tranche of funding is associated with a specific development goal, governments are compelled to scrutinize bids carefully and draft concession agreements thoughtfully. After the privatization deal closes, governments are further incentivized to regulate the winning consortium's operations and evaluate the consortium's impact on the community. In return, development banks receive a greater return on investing in underserved communities and developing countries.

Development banks should take three steps to implement an impact funding program. First, development banks should carefully study each country to determine and control potential sources of political or business instability. Such studies will enable development banks to tailor metrics or milestones to each country. A proper study of South Africa, for example, would prioritize public health over popular instability, but a proper study of Bolivia may have done the opposite. Second, development banks should verify the attainment of each metric. To do so, banks can either employ field experts to measure each metric or audit the government's records on each metric. Either option can reduce government-led fraud or corruption. Third, development banks should rank each metric in increasing order of difficulty, awarding funding for easy metrics before more difficult metrics. Such a sequence will motivate governments to work toward more difficult development goals—for example, renewing a successful concession agreement.³¹¹

309. See O'Neill, *supra* note 1, at 362; Peru, *supra* note 24.

310. MCKINSEY & CO., FROM POTENTIAL TO ACTION: BRINGING SOCIAL IMPACT BONDS TO THE U.S. (2012), http://mckinseysociety.com/downloads/reports/Social-Innovation/McKinsey_Social_Impact_Bonds_Report.pdf.

311. See, e.g., *Frequently Asked Questions*, METROPOLITAN WATERWORKS & SEWERAGE SYS. REG. OFF., http://ro.mwss.gov.ph/?page_id=453 (last visited Dec. 4, 2014).

CONCLUSION

In water privatization deals, resource allocation is in tension with poverty alleviation, and political interests often clash with citizens' (or consumers') interests. This Note discusses three water privatizations—Aguas del Tunari in Bolivia, Siza in South Africa, and Manila Water in the Philippines—to critique development banks' privatization policies. Out of these privatizations, only the latter has successfully diffused the conflict between resource allocation and poverty alleviation, harmonizing political interests with consumers' interests. Nevertheless, all three privatizations provide valuable policy prescriptions for development banks, governments, and future privatizers: for example, progressive pricing schemes, poverty alleviation programs, shared financial projections, and impact funding. The first two policies build trust among consumers. The third policy increases transparency during a privatization. The fourth policy regulates governments and winning consortia, rewarding governments for achieving specific development goals. In the past, governments and privatizers have implemented each of the first three policies singularly. In the future, however, governments and privatizers should adopt all three policies in tandem, exploring the implications of political and economic transparency on resource allocation, poverty, and development.