

UC Berkeley

UC Berkeley Previously Published Works

Title

Home Court Advantage

Permalink

<https://escholarship.org/uc/item/7xh1825g>

Journal

Politics & Society, 42(1)

ISSN

0032-3292

Author

Post, Alison E

Publication Date

2014-03-01

DOI

10.1177/0032329213512981

Peer reviewed

**Home Court Advantage:
Investor Type and Contractual Resilience
in the Argentine Water Sector**

Keywords: Regulation, privatization, infrastructure, business group, water, foreign direct investment

Author Information:

Alison E. Post
U.C. Berkeley
210 Barrows Hall
Berkeley, CA 94720-1950
aepost@berkeley.edu
phone: 510-642-1434
fax: 510-642-9515

Article Acknowledgments:

I thank Bernardo Deregibus, Ben Allen, Lindsay Mayka, and Pedro Peterson for excellent research assistance for this paper. For helpful comments on this paper, I am grateful to Jorge Domínguez, Steven Levitsky, Jeffrey Frieden, Robert Fannion, Ruth Berins Collier, Eugenia Giraudy, Steven Vogel, Jonah Levy, Peter Evans, Katerina Linos, Stephan Haggard, Victor Shih, María Victoria Murillo, Tim Büthe, and participants in the Political Economy and Comparative Politics research seminars at Harvard and the Junior Faculty Fellowship program at the Institute for International Studies at U.C. Berkeley.

Abstract:

A large body of scholarship in political economy suggests economic growth, and foreign direct investment in regulated industries in particular, is more likely to occur when formal institutions allow states to provide credible commitments regarding the security of property rights. In contrast, this article argues that we must instead examine differences in firm organizational structure to explain variation in the resilience of privatization contracts in weak institutional environments. Domestic investors—or, if contracts are granted at the subnational level, domestic investors with diverse local holdings—work most effectively in the developing world. Domestic investors are better able to negotiate mutually beneficial adaptations to their formal contracts with host governments because they can draw on informal contractual supports that derive from cross-sector diversification in their home market. This article finds strong support for this argument through an analysis of 14 water privatization contracts in Argentina.

The Washington Consensus' emphases on foreign direct investment, market liberalization, privatization, and property rights protections converged most dramatically in the infrastructure sectors of the developing world. International institutions, academics, governments, and mass publics expected multinational corporations to transform aging systems whose services often failed to reach large portions of the population and suffered from severe quality deficits. Multinationals' access to international finance and new technology, it was argued, would allow them to achieve these improvements.

Reassured by new international property rights protections enacted through bilateral investment treaties and political risk insurance, a large number of multinationals found the infrastructure privatization wave appealing (Wells & Ahmed, 2007). Firms assumed these protections would help insure against the "obsolescing bargain," or the gradual erosion of firm leverage once investments had been made (Vernon, 1971). Between 1990 and 2009, 133 low- and middle-income countries privatized in telecommunications, 107 in the energy, 82 in the transportation, and 61 in water and sanitation (PPIAF-World Bank, 2011). Foreign direct investment in infrastructure in developing countries leapt from US\$1.9 billion in 1989 to US\$27 billion in 1997.¹

"Credible commitments" approaches to the study of property rights and development, including applications to investment in regulated industries, offer a set of concrete predictions regarding the likely fate of these privatization contracts. A first set of analyses suggests that where domestic political institutions do not provide checks and balances upon one another, property rights protections will be weak (e.g., North & Weingast, 1989; Weingast, 1995; Levy & Spiller, 1996; Henisz, 2002; Acemoglu *et al.*, 2003). Anticipating expropriation, firms will be reluctant to invest. As a result, contracts

Alison Post 2/8/13 2:15 PM

Comment: Marcus, I keep moving back and forth between using the term "institutionalist" and "Credible Commitments" here. Thoughts?

are likely to yield few benefits for local populations, firms providing infrastructure will become unpopular, and contracts will be vulnerable to cancellation by governments.

A second set of analyses suggests that countries without strong systems of checks and balances can improve their credibility with investors by signing treaties that impose financial or reputational costs on governments if they renege on their commitments (e.g. Neumayer & Spess, 2005; Elkins, Guzman, & Simmons, 2006; Büthe & Milner, 2008; Kerner, 2009). Bilateral investment treaties, which typically allow investors to take states into international arbitration, are a prime example of this type of alternative commitment mechanism. The reasoning is that treaties tie governments' hands when interacting with multinational corporations. Extending this line of reasoning, one could argue that multinationals would be more likely to invest than domestic firms working in similar industries because they enjoy supplemental treaty protections, and would be less likely to see their contracts cancelled prematurely. Similarly, treaty protection would also increase multinationals' leverage with host governments during contract renegotiations, so that they would not follow the logic of the "obsolescing bargain."

Patterns of investment and contract durability in the water and sanitation sector in the developing world do not conform to these predictions. They vary dramatically among countries with weak checks and balances, and even within single countries (Gassner *et al.*, 2009, pp. 4, 42; Andrés *et al.*, 2008, Chapter 7; Harris, 2003, p. 23; Marin 2009). Moreover, contracts held by domestic firms are proving to be more viable politically and financially in the long run than those held by multinationals. Over the past 15 years, water and sanitation investment contracts held by multinationals in low- and middle-income countries have been cancelled prematurely at almost four times the rate of

contracts held by consortia led by domestic investors.ⁱⁱ The stark difference in cancellation rates is striking given that multinationals often won what were perceived to be the most lucrative contracts because award processes privileged capital requirements, expertise, and experience. Developing country companies working in their home market, in contrast, maintained smoother relationships with host governments while achieving similar rates of service improvements as foreign firms: the most comprehensive large-N study on factors contributing to privatization success did not find evidence suggesting that foreign firms improved services more consistently than domestic investors (Andrés *et al.*, 2008, pp. 215-216). Moreover, the continuing eagerness of developing country investors to enter contracts in their home markets in the 2000s suggests they have managed to make water and sanitation projects work in financial terms. Following the Argentine economic crisis, 27 out of 29 new investment contracts in Latin America were awarded to consortia led by domestic firms. Domestic firms bought stakes in existing projects as well (PPIAF-World Bank, 2008). In other words, domestic firms in the sector have been less vulnerable to the “obsolescing bargain.”

This article proposes that firms’ organizational structure affects their ability to maintain long-term contracts with the state in weak institutional environments. In such environments, the *cross-sector*—rather than cross-country—organizational form typically adopted by developing country firms offers important advantages in capital-intensive sectors. Cross-sector diversification facilitates negotiations with host governments regarding levels of contractual compliance and adaptations to original, long-term contracts, which are inevitably incomplete. It leads the typical developing country investor to exhibit greater patience, entertain a wider range of negotiation outcomes, and

access a wider set of negotiating strategies, including informal bargains involving trade-offs between operations in different sectors. In contrast to domestic firms, MNCs tend to specialize in particular sectors and diversify across countries. Sector specialization decreases the range of acceptable negotiating outcomes and reduces investor patience. It also limits MNCs to more legalistic negotiating strategies that increase the salience of regulatory politics, rendering their contractual relationships less durable. In summary, *informal* contractual supports stemming from cross-sector diversification offer important advantages over formal institutional supports.

This article assesses this argument through an empirical investigation of *concession contracts*, or long-term management and investment contracts, in the water and sanitation sector. This sector is particularly well suited to this analysis because of the significant presence of both domestic (i.e., developing country) investors and multinationals. Privatization typically occurred at the sub-national level, allowing for the comparison of contracts held by different types of investors within particular countries while holding the national political environment and privatization program design constant.

The study combines an aggregate analysis of 13 provincial and one national contract in Argentina with a close examination of firm-government relations in two concessions controlled at different points in time by contrasting types of investors. Argentina represents a textbook “weak institutional environment” (Levitsky and Murillo, 2005) and provincial income levels vary considerably. The country therefore provides appropriate terrain for the preliminary assessment of an argument developed to explain regulation in the developing world.

The first section of this article provides a general argument regarding why regulatory politics becomes contentious following privatization in volatile political and economic environments, and why different types of investors enjoy varying levels of informal contractual supports. The second section provides an empirical assessment of the theoretical argument focused on the Argentine case. The third section discusses the implications of these findings.

FIRM STRUCTURE AND REGULATORY BARGAINING

Long-term infrastructure contracts are inevitably incomplete, especially in the developing world. Not only are economic environments typically volatile (Wibbels, 2006), but the political sphere also tends to be less institutionalized than in the developed world, making it impossible to specify how every contingency might be dealt with beforehand. In the wake of unforeseen events or changes in firm or government preferences, firms and host governments face strong incentives to negotiate regarding levels of compliance with contractual terms, as well as revisit the formal terms of privatization agreements themselves. In institutional environments with few checks and balances, there are usually no parties both governments and firms would view as unbiased arbiters, leading to high rates of contract renegotiation. For instance, Latin American water and sanitation concession contracts have been renegotiated on average within 1.6 years of contract award, despite the fact that most contracts are for 20 to 30 year periods (Guasch, 2004, p. 14).ⁱⁱⁱ

For privatization contracts to survive in volatile environments, governments and firms must be able to negotiate levels of compliance and contractual adaptations to

changing circumstances that both parties can accept. One can imagine a spectrum of contract trajectories ranging between a) brittle contractual relationships characterized by highly contentious investor-government interactions, an inability to reach revised agreements, and premature contract cancellation by one or both parties; and b) more resilient contractual relationships characterized by less conflict, an ability to adapt contracts to changing circumstances (including political turnover and economic shocks), and the persistence of privatized service provision.

These contrasting patterns of firm-government contractual relations lend themselves to alternative interpretations. On the one hand, successful negotiations over investment responsibilities, rate formulae, or subsidies can produce outcomes that both parties can accept. The extent to which agreements reduce uncertainty, they provide frameworks for renewed investment, and thereby represent a prerequisite for continuing improvements in service quality.^{iv} On the other hand, while important in maintaining contracts' political and financial viability, such renegotiations often reduce firm and state investment commitments and decrease the transparency of the regulatory process.

The Volatile Political Context for Contract Negotiations

Bargaining over compliance with and adaptation of original contractual provisions typically takes place in a highly politicized context, particularly when contracts for private sector investment apply to systems previously managed by the public sector. The privatization process sets in motion a contentious post-privatization politics through two institutional changes. First, privatization separates the political establishment and the private provider in the eyes of the public, especially in the case of

monopolies (Rhodes, 2006, pp. 27, 33; Savedoff & Spiller, 1999, p. 7). Whereas political appointees typically run state companies, voters attribute responsibility for service quality following privatization to private service providers rather than the government. This offers opportunities for regulatory agency directors, ombudsmen, and legislators (even of the governing party) to gain political prominence by highlighting service problems and noncompliance with contractual goals, especially during periods of intense political competition. Second, individuals receiving services feel themselves entitled to higher quality services following privatization because of companies' comparatively greater efforts to make consumers pay their bills. This tendency becomes more marked as memories of poor service quality under public provision fade and prices rise (Baker, 2009). The fact that private operators earn profits by delivering services, meanwhile, has become increasingly controversial in light of international campaigns advocating a human right to basic services such as water (Conca, 2006).

The greater incentives for politicians and other actors to campaign against providers and greater consumer consciousness create a "volatile politics of accountability" in which providers are subjected to high degrees of scrutiny by the mass public, especially during competitive political periods (Murillo, 2009, pp. 43-4). This scrutiny makes it politically difficult for politicians to uphold contractual and regulatory provisions designed to help privatized utilities recover costs. In addition, high salience creates challenging conditions for firm-government negotiations; if conflict becomes too intense, it is difficult for governments to grant benefits to firms, even when compensating for contractual changes advocated by consumers.

Firm Structure and Contractual Adaptation

This article proposes that differences in *firm structure* affect investors' policy preferences and negotiating strategies in the regulatory arena, which in turn influence their ability to bargain effectively with the state. While multinationals tend to diversify across countries and specialize in particular sectors—particularly within sectors like infrastructure—large firms of the developing world tend to diversify across sectors, particularly within their home market.^v Cross-sector diversification helps developing country investors insure against political and economic volatility.

Domestic investors' diverse and significant interests in their home market encourage them to approach their investments with long time horizons and make relatively moderate demands upon the state with respect to single assets at single points in time. Developing country firms, after all, value investments that afford flexibility in volatile environments. Therefore, investments that keep open lines of business that may be profitable in the future are worth suffering short-term losses to preserve. This means that diversified domestic investors are likely to possess longer time horizons than multinationals in negotiations with host governments. In addition, developing country investors possessing holdings in many industries weigh the costs and benefits of lobbying for *all* of the sectors in which they operate, which moderates their demands. Finally, developing country firms are less likely to contract debt in foreign currency to finance investments than multinationals because of their strong exposure to the domestic market. They instead prefer to insure themselves against currency volatility and to avoid high domestic interest rates by investing out of retained earnings. This makes their contracts less vulnerable in periods of economic crisis. As a result, domestic firms typically need

not push as strongly for concessions from host government during negotiations as multinationals.

A diversified structure also enables many developing country firms or business groups to draw upon informal negotiating strategies that keep infrastructure policy out of the newspaper headlines.^{vi} Negotiations may be facilitated by the opportunity for trade-offs between sectors. In other words, they can be furthered by what international relations scholars have termed “issue linkage,” rather than the issue-specific lobbying emphasized in much of the political economy literature (Alt & Eichengreen, 1989; Eichengreen & Frieden, 1993; Lohmann, 1995; Davis, 2004). Deal elements benefitting firms’ operations in other sectors can allow both politicians and firms to avoid controversial measures within the infrastructure sectors, such as large consumer rate hikes, strict enforcement of payment or explicit subsidies for private firms. For instance, politicians might avoid politically costly rate increases by granting investors offsetting measures benefiting their construction or real estate arm. Depending on the legislation in place, such agreements might be illegal. Regardless of their legality or hidden costs, negotiations involving issue linkage can help ensure the infrastructure sector does not become a political liability for elected officials and thereby contribute to the resilience of contractual relationships.

Multinationals’ typical cross-country, as opposed to cross-sector, organizational structure precludes them from deals involving tradeoffs between sectors. Their structure instead positions them to take advantage of more formal, legalistic bargaining strategies. In the many countries that have provided investors with recourse to international arbitration through bilateral investment treaties, domestic investment law, or individual contracts, multinationals can force host governments to the bargaining table through

threats to initiate arbitration proceedings. Such threats are likely to further politicize negotiations rather than yield stable settlements given because they recall histories of exploitation by foreign firms and colonial powers (Wells & Ahmed, 2007). Moreover, it is more difficult to find politically palatable agreements with firms working purely in infrastructure sectors, given that the main policy concessions that could be made to firms—such as rate hikes, public subsidies, or downward revisions to investment commitments—are likely to be controversial with consumers.

While this general logic suggests a divergence in the trajectories of nationwide infrastructure contracts held by domestic and multinational investors, the argument has distinct observable implications for subnational privatizations. When contracts are regulated at the subnational level, only a subset of domestic investors holding contracts will possess a strong diversified presence in their contract jurisdiction. We must therefore distinguish between three investor types: foreign, domestic *without* local holdings, and domestic *with* local holdings. We would expect firms with diverse local holdings to exhibit patience, make more moderate demands at a single point in time, and possess opportunities for “issue linkage” than other types of investors. While domestic firms *without* additional local holdings will be less likely to legalize conflict with host governments than multinationals, they will typically not possess opportunities for issue linkage or strong incentives to moderate their claims.

The observable implications of this argument for cases of subnational privatization are summarized in Table 1. One would expect multinationals to experience major difficulties reaching agreements with host governments regarding levels of contract compliance and contractual amendments in the wake of changed economic and political

circumstances. As a result, the risk of investor exit through contract cancellation by one or both parties or investor share sale is high. Domestic investors *without* local holdings constitute a middling case. Less inclined to utilize formal, legalistic negotiating tactics than multinationals, they will reach revised accords with host governments more frequently and be less likely to exit than multinationals. Finally, domestic investors *with* significant, diverse holdings in their contact jurisdiction would reach accords most frequently, concessions would stand the greatest chance of remaining politically and financially viable, and as a result, investors would be least likely to exit their contracts.

[INSERT TABLE 1 ABOUT HERE]

Before continuing, it is important to note two scope conditions for this argument, which is designed to explain variation in contract durability in weak institutional environments. First, these tendencies are likely to take on their strongest form in political systems with electoral contestation. In such environments, post-privatization politics becomes more contentious because privatized service providers become easy targets during campaigns. In addition, political turnover occurs frequently in such contexts, and new officeholders often desire to revise long-term contracts. Second, the relationship between domestic ownership, diverse local holdings and contractual resilience over the long haul is also more likely to occur when privatizations assign firms investment obligations and put investors in direct contact with consumers. Contractual provisions designed to move utilities to cost recovery, such as stricter enforcement of payment and tariff adjustments to compensate for inflation, will become politicized when utilities have direct contact with households.

AN EMPIRICAL ASSESSMENT OF THE ARGUMENT IN ARGENTINA

This section examines whether the predictions derived above characterize the evolution of water and sanitation concession contracts in Argentina. It first considers the relationship between investor type and contractual resilience in the full population of contracts. It then examines in greater detail the evolution of the two Argentine contracts controlled at varying points in time by different types of investors, thereby allowing for the comparison of different investors' abilities to negotiate effectively with host governments while holding contractual and provincial characteristics constant.^{vii} (Case studies of all 14 concessions are included in the author's forthcoming book manuscript, which allows for the comparison of concessions held by different types of investors in similar provinces at single points in time.) This section concludes by considering alternative explanations emphasizing partisanship, institutional variation, and selection effects.

Argentina's water and sanitation privatization program was promoted by the central government as part of an over-arching "state reform" program intended to reduce public expenditure. Twelve of the 24 Argentine provinces privatized their systems over the course of the 1990s, while the national government privatized the system serving Greater Buenos Aires (Table A.I, on-line appendix)^{viii}. The format for privatization was quite similar across cases: governments awarded concession contracts to consortia of private firms. Foreign participation in consortia was encouraged, but not required. Provinces established formally independent regulatory agencies to monitor firm compliance with contractual obligations.

Argentina offers particularly appropriate terrain for this analysis. First, Argentina presided over one of the largest privatization programs in the sector beginning in the early 1990s. Because of its broad scope and early start, the Argentine privatization program represents a unique opportunity to observe the evolution of a significant number of contracts under a variety of political and economic conditions over a 15-year period. These varied conditions included an economic and political crisis and, subsequently, a commodity boom. Long-term infrastructure contracts will inevitably encounter economic and political turbulence, so it is important to examine the circumstances under which contracts survive such episodes. Second, privatization occurred at the subnational level, thereby allowing one to differentiate between the empirical implications of an explanation centered on cross-sector diversification and those of alternative explanations attributing the failure of international investors to nationalism. Importantly, all three types of investors secured contracts. Third, the fact that privatizations and regulatory agencies were established at the provincial level allows for the comparison of a significant number of cases controlling for the effect of national privatization program design, macroeconomic conditions, and political institutions.^{ix} It also allows for the comparison of contracts in a wide set of socio-economic environments; while Argentina is an upper middle income country, some of its provinces have per capita income levels comparable to those of the much poorer Central American countries.^x Finally, Argentina signed bilateral investment treaties with the home governments of multinationals operating in the utilities and infrastructure sector, thereby providing foreign investors with institutional protections typical in emerging markets.

The regulatory experience in Argentina should be conceptualized in terms of two periods divided by Argentina's 2001-2002 crisis. During the 1990s, investors vied for concession contracts after the macroeconomic environment had been stabilized, reassured by the Menem government's overall reform package and its successful effort to halt inflation through pegging the peso to the U.S. dollar. The national government pushed for water and sanitation system privatization and supported regulated private provision during this first period. Firms and provincial governments only needed to negotiate circumscribed contractual revisions in response to unexpected economic developments or the arrival of new governors with different political priorities. Firms, due to their superior access to finance, exercised a great deal of leverage during these negotiations.

Investors lost leverage with provincial governments after the 2001-2002 crisis. During the crisis, the government removed the exchange rate peg and the value of the peso plummeted, creating an income shock for both consumers and private service providers. For providers, the cost of imported inputs increased between three and fourfold, and an ensuing period of significant inflation triggered price increases for key domestic inputs such as labor. Consumers, meanwhile, struggled to pay their bills as the economy contracted by 16%, unemployment levels reached 25%, and the middle class saw their savings decimated when bank accounts were frozen. The same public emergency law (25,561) that ended the exchange rate peg to the dollar stipulated that all concession contracts be renegotiated and that utility rates could no longer be pegged to the dollar. Investors pushed provincial governments to address their financial concerns stemming from the devaluation and subsequent bouts of inflation through contract renegotiations. Provincial governments exercised greater leverage during the ensuing negotiations than

they did prior to the crisis because of increasing national funds for infrastructure from the taxation of agricultural commodities and decreasing levels of public support for private provision.

Investor Type and Contract Resilience in Argentina: Overall Correlations

A brief examination of all 14 contracts in Argentina suggests that patterns for these cases are consistent with the argument. Table 2 presents the correlation between control by particular types of investors and three indicators of the extent to which firm-government negotiations yielded benefits for both firms and governments that are reasonably comparable across cases.^{xi} Column 1 reports whether or not concessionaires were able to conclude contract renegotiations following the Argentine crisis—thus focusing on a time period with a common prompt for renegotiation.^{xii} Domestic investors with diverse local holdings concluded contract renegotiations that reconfigured concessionaire responsibilities following the crisis at a higher rate than other investors (92% compared with 50% for domestic firms without local holdings and 14% for foreign firms). Column 2 reports total post-crisis rate increases granted to firms through contract renegotiations and other regulatory resolutions. The fact that concessions led by domestic investors with a strong local presence on average received rate adjustments more in line with inflation (77% compared with 28% and 30%) suggests that these consortia were not simply being held hostage by provincial governments, but actually negotiated more effectively than other types of investors. Column 3 reports that rates of exit for domestic investors with local holdings are far lower than those for domestic firm *without* local holdings and multinationals. It summarizes all cases of exit for 1991-2010, thus capturing

the extent to which contractual relationships were viable both prior to and after the crisis. Domestic firms with diverse local holdings, however, exited at lower rate than other investors during both the pre- and post-crisis period (on-line appendix, Table A.II.1).

[INSERT TABLE 2 ABOUT HERE]

It is important to highlight that three-quarters of investor exits occurred during presidencies of Néstor and Cristina Kirchner, 2003 - present (Table A.I). Both presidents, emboldened by increasing commodity revenues, pressured governors to avoid granting significant rate increases to private providers. As the case studies below will illustrate, it was easiest for governors to conclude contract negotiations under these conditions with domestic firms possessing diverse local holdings because of their concern for and capacity to earn from operations in related sectors. Investors that could not reach agreements pulled out (Table A.II.2, on-line appendix). In almost all cases, heads of government canvassed for investors that would be willing to take over the concessions, and only took services back under state control when they failed to find interested investors. Given that long-term infrastructure contracts will inevitably encounter periods of strong government leverage such as that enjoyed by the Kirchners, the fact that domestic investors with diverse local holdings weathered this period suggests that they possess a comparative advantage in the long run.

Case Studies of the Concession Contracts in the Provinces of Corrientes and Córdoba

While the vast majority of the Argentine concessions were controlled by a single set of investors, discontented domestic and foreign investors sold their stakes to domestic investors already possessing diverse local holdings on three occasions: in Corrientes in

1996, in Mendoza in 2004, and in Córdoba in 2006. Comparing the way in which firm-government negotiations unfold over time between types of investors within the same contractual framework and provincial political environment allows one to trace the causal process—or sequences of steps—through which investor type affects the durability of contractual relationships.^{xiii}

This section focuses on contracts in the provinces of Corrientes and Córdoba, each of which contained two sets of investors. This allows one to examine the causal process in contrasting social and political environments; Córdoba is wealthier and less patrimonial than Corrientes, and possessed a stronger regulatory system.^{xiv} In Corrientes province, a group of domestic investors with few local ties first controlled the concession, but then sold their stakes to a local business group. In the province of Córdoba, the French multinational Suez first won the contract, but then transferred its stake to a domestic investor with significant local operations.^{xv} Two of the four cases of investor control represent “hard” cases for the theory. While we would expect international investors to not perform as well as other investors on average, one would expect them to encounter fewer difficulties in Córdoba because the governor was ideologically predisposed to support private service provision. In contrast, while we would expect investors with diverse local holdings to on average outperform other investors, one would expect them to experience more difficulties than usual in Corrientes province because of elite factionalization and party system instability.

The Corrientes Province Concession

During the 1991 – 1995 period, when nearly all of the Corrientes concession shares were owned by a set of Argentine firms lacking a significant local presence, one

would expect the relationship between the host government and firm to be easily derailed by unexpected economic developments or changes in politicians' preferences. The arrangement did indeed prove to be fragile. The initial consortium, led by the Buenos Aires-based Sideco—a subsidiary of the Macri group—reinforced local perceptions regarding their 'outsider' status. Local employees resented a lack of respect for regional customs, such as breaks to drink the traditional mate tea. Efforts to enhance efficiency through layoffs only accentuated the difficulties with staff. The firm's relationship with the local chapter of the water and sanitation union grew so tense by 1995 that the union lobbied to have the concessionaire's contract revoked (Artana, Navajas, & Urbiztondo, 1999, p. 238). Sideco also failed to develop strong relations with the political establishment, preventing it from finding joint resolutions to unexpected political and financial difficulties arising during the mid-1990s. These difficulties included a backlash against service cut-offs provided for under the concession contract as a means of achieving higher payment rates, higher than expected population growth within the concession area (22% between 1991 and 2001) which made it difficult for the firm to meet its coverage goals, and an unexpectedly high drop in consumption following the introduction of the water meters required by the contract, which sparked a 24% drop in revenue (Artana et al., 1999, p. 237).^{xvi} Consortium members were discouraged by their inability to work effectively with the provincial administration to address these unexpected problems, as well as the award of the Buenos Aires concession to a different group of investors. They had assumed that investments would primarily be financed through retained earnings once efficiency savings had been introduced, and refused to contribute additional funds to the project after the initial pool of capital constituted as part

of the bidding process had been exhausted.^{xvii} This meant that the concessionaire could not invest sufficiently during 1994 and 1995 to meet its contractual goals: investment as a fraction of revenues averaged a mere 4% during the 1992-1995 period.^{xviii} As a result, while the concessionaire reportedly met its obligations in terms of coverage expansion for water, it lagged well behind its sewerage access and treatment targets (Banco Interamericano de Desarrollo [BID], 1996, p. 96).

With few other investments at stake in the Corrientes province, Sideco and its partners chose to pull out of what increasingly appeared to be a business with few prospects. Tellingly, however, local investors saw the concession as promising. A Corrientes based business group that had joined the original consortium in 1991 with only 6% of the concessionaire's shares decided that it could manage relations with the provincial government more effectively than Sideco.^{xix} The Chamas brothers, owners of a local economic group that operated in diverse sectors such as agriculture, construction, real estate, and the media, gradually bought up the shares of the Buenos Aires-based investors during 1995 and 1996 (ENOHSA-COFES, 1999, p. 89). Between 1996 and 2001, the new owners forged a much more workable relationship with the provincial administration, despite turnover in the governor's mansion. The regulatory agency did not block Aguas de Corrientes' household census within the concession area in 1997, an effort to improve their consumer database and collections efforts (ENOHSA-COFES, 1999, pp. 93-97). A system of mutual accommodation developed: while the company did not actually pay many of the fines levied by the regulatory agency, the government also rarely paid its water bills.^{xx} In addition, the new owners were better positioned than the previous ones to take advantage of synergies with their local operations in other sectors

and thereby increase their earnings. The concessionaire could—and did—contract with the group’s construction and service companies for projects funded out of tariff revenues.

With improving revenues and a long-term commitment to the jurisdiction, the firm invested approximately 13% of revenues during the 1996–2000 period, compared with the 4% spent by the previous owners during the 1992-1995 period.^{xxi} Coverage rates rose from 66% to 90% in water and 31% to 68% in sewerage over the 1991-2001 period, with the majority of this investment occurring under the new owners.^{xxii} The company managed to stay in the black and retain the improved investment rates described above until the 2001-2002 economic crisis.^{xxiii} While the sector continued to be characterized by political contention, the situation never grew so volatile as to threaten either the public or private sector’s willingness to continue the arrangement, as had occurred with the Buenos Aires investors.

The Argentine economic crisis of 2001-2002 ushered in major challenges for the concession. The devaluation and a subsequent bout of inflation more than tripled in the cost of imported inputs, eroded consumers’ willingness to pay for services, and increased the prices of important domestic inputs. These economic challenges coincided with an implosion of the provincial political party system and a temporary federal government takeover of the provincial administration. With other investments and social relationships at stake in the province, the owners of Aguas de Corrientes refrained from pushing the provincial government into contract renegotiations through legal appeals and public threats to exit the concession as foreign investors were doing in other provinces. The company President stressed that the group’s local ties offered them access to local

officials, but also forced them to moderate their requests.^{xxiv} As a result, the firm made modest but repeated appeals for tariff increases.

Over time, these negotiations yielded a reconfigured set of contractual responsibilities that avoided raising consumer rates to the extent that would be required to fully address the devaluation and inflation. The firm received rate increases of roughly 10% annually, an amount that compensated for about half of the inflation of the post-crisis period.^{xxv} The firm and governor also agreed that the state would begin to fund the majority of the concessionaire's investment program and to subsidize services for low-income consumers in 2005.^{xxvi} The lead investor's diverse holdings in the province also offered it opportunities to find mutually-agreeable ways forward: the province-funded investment fund for the concession established in 2005 allowed the concessionaire to contract with related companies, and the province has actively involved the Chamas group in other state contracts as well, including contracts for two water treatment plants and a management contract for the provincial electricity service.^{xxvii} According to firm records, Aguas de Corrientes invested on average 9% of its revenues between 2002 and 2006, its 2005 and 2006 investments far exceeding amounts in previous years.^{xxviii} (In addition, the state has been funding approximately \$2.5 million per year as well since the 2005 agreement, roughly the same amount as the concessionaire.)

The long-run evolution of the Corrientes concession is consistent with the argument advanced in this paper: the government and local investor negotiated adaptations to the concession contract in the wake of economic and political volatility, reconfiguring the investment program and tariff structure. While the Chamas Group did

not earn good returns consistently from the concession itself, it stood to benefit by contracting with related companies and obtaining new contracts in other sectors. The fluid relationship we see in this case is not a model of transparency and has not brought about the sort of massive jump in investment levels often undertaken by large multinationals. Nevertheless, it has proven to be politically resilient under difficult circumstances and yielded sustained investment and impressive service improvements.

The Córdoba Province Concession Contract

The 1997 Córdoba concession, first controlled by the French multinational Suez and subsequently by a domestic investor with significant local holdings, also allows one to compare the respective performance of a two investors within the same concession. It also provides an instructive example of similar dynamics in a wealthier and less patrimonial political environment.^{xxix}

Prior to the Argentine crisis, the Córdoba concession did not encounter major technical or commercial surprises, alleviating the need for the sorts of negotiations that were important during the first years of the Corrientes concession. While a governor from the opposition Radical party originally privatized in Córdoba, power turned over in 1999 to José Manuel de la Sota, an ally of ex-President Carlos Menem (1989-1999), who had launched the country's privatization program. Buoyed by a reasonably supportive regulatory climate and generous returns in its Buenos Aires contract, Suez invested heavily during the initial years of the concession, pursuing the customary strategy of large multinationals in infrastructure sectors.^{xxx}

Because of the Córdoba concessionaire's heavy reliance on debt contracted outside the country, the Argentine crisis—and the subsequent devaluation of the peso—brought about even more significant challenges than for its domestically controlled counterpart in Corrientes. The value of its debt in local currency more than tripled and the concessionaire reported losses in 2002 almost as large as its annual revenue stream.^{xxxvi} Focused primarily on the profitability of its water concessions—its main investment in Argentina—Suez pursued an aggressive and legalistic method of pushing for contract renegotiations to help it cope with the effects of the crisis, efforts that offered a stark contrast with the incremental, informal lobbying efforts of the Chamas group in Corrientes. In July of 2003, it registered a complaint under the French-Argentine bilateral investment treaty. It proceeded to push for a comprehensive renegotiation that would include a rate increase yielding a 50% increase in its revenue stream.^{xxxvii} The concessionaire also scaled back investments as an additional means of bringing the province to the bargaining table.^{xxxviii}

Suez finally did manage to reach an agreement with the governor in 2005, but its insistence on a single large rate increase—rather than the sorts of staged, and individually more modest tariff increases pursued by concessionaires controlled by domestic investors—ultimately proved its downfall.^{xxxix} There was a public outcry in February 2006 when households received bills including the increases.^{xl} De la Sota backed down in the face of pressure from political opponents and the public.^{xli} Over the next few months, De la Sota's vice governor worked out an alternative agreement under which one of Suez's minority partners, the Roggio Group, assumed control of the concession. The Roggio Group had grown from a small, Córdoba-based firm into one of the largest

Argentine business groups, active in construction, rail and highway concessions, and garbage collection.^{xxxvii} Like the Chamas Group in Corrientes, the Roggio group was confident it could handle the political side of concession operations more effectively than its predecessor in a province where it possessed many operations.^{xxxviii}

After assuming control, the Córdoba-based firm has pursued a very different bargaining strategy than its predecessor. More committed to the province and interested in maintaining a foothold in the concession market because it may offer returns when the state has few funds to spend on construction contracts—another important source of revenue for the group—Roggio has eschewed the public, brinksmanlike negotiating strategies employed by Suez. It has focused on pushing for series of small tariff increases to allow the firm to cope with inflation while investing amounts twice as large as its predecessor in the post-crisis period, suggesting a longer time horizon.^{xxxix} Whereas Suez made formal, written appeals, the Roggio group prefers informal conversations.^{xl}

This approach yielded results. Since 2006, the new owners negotiated a transfer of investment responsibilities to the state and a series of small tariff increases that have returned the concession to profitability.^{xli} Like the Corrientes concession, the Córdoba case illustrates the greater ability and willingness of domestic investors with diverse local holdings to arrive at workable compromises with host governments within a volatile political and economic environment. These negotiating successes are striking when compared with efforts by multinationals and domestic firms with few local ties. The outcome in Córdoba is particularly striking because we would expect foreign investors to have a higher probability of working successfully with the provincial administration than in most other Argentine provinces: the contract was first overseen by the government that

privatized and then by a set of governors receptive to neoliberal policies and foreign capital.

Alternative Explanations of Observed Variation

The Argentine experience clearly provides support for an approach to regulation emphasizing the importance of *informal* supports for formal contracts derived from cross-sector diversification. Skeptics might argue, however, that the observed relationship between within-jurisdiction diversification and contractual resilience could instead stem from governor partisan affiliation or ideology, differences in local institutional environments, or selection effects.

One might assume that the observed correlation between investor type and regulatory outcomes actually reflects the partisan affiliation or ideological leaning of the governor presiding over the contract. Murillo (2009), for instance, has argued that while heads of government of all stripes are likely to cater to consumer interests during politically competitive periods, at other times left-leaning politicians—particularly if they did not oversee the privatization themselves—are more likely to privilege consumer interests than right-leaning politicians. One could also argue that national politicians may pressure governors or mayors of their party to fall in line with their policy preferences. Broad patterns in the Argentine case, however, do not suggest that such factors are driving the correlation between investor type and contractual resilience. To measure the extent to which governors in the post-crisis period would fall into Murillo’s “populist” or statist category, I turned to expert survey data compiled by Gervasoni (2010) in each of the Argentine provinces regarding governors’ alignment with President Néstor Kirchner,

who presided over a few high profile nationalizations. Domestic and particularly domestic investors with diverse local holdings concluded negotiations at far higher rates than foreign firms even in provinces governed by aligned governors between 2004 and 2007 (the period covered by Gervasoni's data).^{xlii} Furthermore, foreign firms exited their contracts at much higher rates than domestic investors with and without diverse local holdings in provinces governed by both aligned and nonaligned governors.

The Corrientes and Córdoba case studies also suggest that partisanship does not explain the greater capacity of domestic investors with diverse local holdings to maintain stable relationships with provincial authorities in the Argentine case. In Corrientes, the concessionaire managed to negotiate effectively with governors from different political parties. Despite their alignment with President Kirchner, recent Radical governments not only refrained from nationalizing the service, but also willingly concluded renegotiation agreements with the concessionaire. In Córdoba, the French multinational Suez proved unable to secure a politically-workable agreement with De la Sota's market-friendly administration because of the sorts of negotiating tactics it pursued.

Institutionalist approaches to regulation, on the other hand, suggest that checks and balances in the political environment affect the ability of regulatory agencies to commit credibly to contracts and regulatory laws.^{xliii} The Argentine provinces vary in the extent to which institutions such as the judiciary and public prosecutors' offices possess *de facto* independence. To assess whether the relationship between investor type and contractual resilience in fact stems from differences in provincial institutional environments, I employ a proxy measure of provincial checks and balances: Giraudy's (2010) index of "dispersion of authority". This index weights equally a score reflecting

the average tenure of provincial supreme court justices, a measure of government patronage, and a measure of the governor's level of fiscal discretion. Rates of exit and contract renegotiation *conditional* on the dispersion index generally exhibit a similar association between ownership by domestic firms with diverse local holdings and higher rates of contract renegotiation and lower rates of exit.^{xliv} In addition, case studies of Córdoba, a province that obtains a “medium” score, and Corrientes, a province that attains a “low” score, suggest that governors and public ministers regularly overrule regulators in both types of environments. The observed correlation between investor type and contractual resilience appears not to be an artifact of differences in local institutional environments.

Finally, one might suppose that domestic firms possessing superior local knowledge secured more favorable contracts, thereby producing higher cancellation rates among contracts held by multinationals.^{xlv} The Argentine case, however, suggests that the pattern was if anything the reverse: provinces sought international investors and settled for domestic firms if they could not attract multinationals. Domestic firms, meanwhile, endeavored to enter all concessions, including those secured by multinationals that eventually failed.

CONCLUSIONS AND IMPLICATIONS

“Credible commitments” approaches to property rights suggest we should witness little investment in the infrastructure sectors of the developing world, or only by foreign investors possessing “policy substitutes” for strong domestic property rights protections. This article instead proposes that domestic investors—and, when contracts

are regulated at the subnational level, domestic investors with a significant presence in their contract jurisdiction—are better able to adapt contracts over time in ways that satisfy both politicians and firms in weak institutional environments. Because developing country firms tend to hold a range of businesses in their contract jurisdiction, they will exhibit greater patience, entertain a wider range of bargaining outcomes, and have better access to informal bargaining strategies than foreign firms. This allows them to bargain more effectively with host governments, which in turn helps them reach agreements ensuring contracts stay economically and politically viable as circumstances change. As a result, privatization is more likely to become institutionalized. While investors without these characteristics may invest heavily in the short term, particularly in stable periods, their relationships tend to be knocked off track during periods when politicians' time horizons shorten or state leverage increases.

The analysis of 14 provincial water and sanitation concession contracts in Argentina presented in this article provides compelling, initial support for this argument. In the Argentine case, domestic investors with diverse holdings in their contract jurisdiction were far less likely to exit their contracts prematurely, and far more likely to conclude contract renegotiations yielding improved operating conditions and rate increases following the Argentine crisis. Case studies comparing the tenures of a domestic investor with diverse local holdings and a foreign investor in Córdoba, and domestic investors with and without diverse local holdings in Corrientes, provide an illustration of the causal mechanisms posited in the argument. Event history analyses of premature contract cancellations for the full set of water concession contracts granted in low- and middle-income countries suggest that the patterns observed in Argentina hold

more generally: there is a strong association between foreign investor control and premature contract cancellation when controlling for national GDP per capita, domestic property rights protections, and political regime type (Article author, book manuscript accepted by major university press).^{xlvi}

These findings have important implications. First, they suggest that further research on economic growth has focused too heavily on formal institutions. Future research on weak institutional environments should examine informal supports for formal contracts, and particularly contracts with the state. In this sense, the study joins a growing group of scholars suggesting that crony capitalism can, under certain circumstances, yield economic growth.^{xlvii} The resilient firm-government bargaining relationships depicted in this paper, after all, recall the cozy relationships between infrastructure investors and the state in the United States during the nineteenth century. Private investors holding monopoly franchise contracts built much of the period's urban infrastructure, often earning more through related operations than through the networks themselves. For example, investors expanded streetcar networks at a faster rate in the U.S. than in Europe because of greater opportunities for investment in related sectors such as real estate (Sutcliffe, 1988, p. 35). While such arrangements may not be as cost effective or by-the-book as public *or* private service provision in contemporary Europe or America, they may represent second-best alternatives more viable in the developing world.

Second, in illustrating the greater ability and enthusiasm of developing country conglomerates to maintain long-term contracts with host governments in infrastructure sectors, particularly when operating in their own countries and in jurisdictions where they have other ongoing operations, this article should prompt a reexamination of the

privatization debate. The correct comparison may not be between status quo management of utilities by the public sector and management by a large multinational, bringing with it specialized, foreign expertise and superior access to finance. Rather, the comparison may be between management by a state-owned firm and management by a domestic conglomerate, which may only be able or willing to invest limited amounts at a time.

Bibliography

Acemoglu, D., Johnson, S., Robinson, J., & Thaicharoen, Y. (2003). Institutional Causes, Macroeconomic Symptoms: Volatility, Crises and Growth. *Journal of Monetary Economics*, 50, 49-123.

Alt, J. & Eichengreen, B. (1989). Parallel and overlapping games. Theory and application to the European gas trade. *Economics and Politics* 1(2), 119-44.

Andrés, L. A., Guasch, J. L., Haven, T., & Foster, V. (2008). *The Impact of Private Sector Participation in Infrastructure: Lights, Shadows, and the Road Ahead*. Washington, DC: The World Bank.

Artana, D., Navajas, F., & Urbiztondo, S. (1999). Governance and Regulation: A Tale of Two Concessions in Argentina. In W. Savedoff & P. Spiller (Eds.), *Spilled Water: Institutional Commitments in the Provision of Water Services* (pp. 197-248) Washington, DC: Inter-American Development Bank.

Baker, A. (2009). *The Market and the Masses in Latin America: Policy Reform and Consumption in Liberalizing Economies*. New York, NY: Cambridge University Press.

Banco Interamericano de Desarrollo. (1996). *Estudio del sector de agua potable y saneamiento en Argentina*. Buenos Aires.

Büthe, T. & Milner, H. V. (2008). The Politics of Foreign Direct Investment into Developing Countries: Increasing FDI through Trade Agreements? *American Journal of Political Science*, 52(4), 741-762.

Carvalho, O. E. (2003). Evaluación de algunos de los enfoques sobre la comercialización del servicio de agua potable y desagües cloacales, para el case del operador privado de este servicio público en la Provincia de Corrientes, República Argentina, desde el año 1998 al 2001. Unpublished MA thesis, Universidad Tecnológica Nacional, Resistencia

Conca, K. (2006). *Governing Water: Contentious Transnational Politics and Global Institution Building*. Cambridge, MA: MIT Press.

Davis, C. (2004). International Institutions and Issue Linkage: Building Support for Agricultural Trade Liberalization. *American Political Science Review* 98(1), 154-169.

Eichengreen, B. & Frieden, J. (1993). The Political Economy of European Monetary Unification: An Analytical Introduction. *Economics and Politics* 5(2), 85-104.

Elkins, Z., Guzman, A.T., & Simmons, B.A. (2006). Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960-2000. *International Organization* 60(4), 811-846.

ENOHSA-COFES. (1999). *La Cobrabilidad de los Servicios Sanitarios en Argentina*. Buenos Aires, Argentina.

Gassner, K., Popov, A. A., & Pushak, N. (2009). Does Private Sector Participation Improve Performance in Electricity and Water Distribution? An Empirical Assessment in Developing and Transition Countries. PPIAF Trends and Policy Series, Washington, D.C.

Gervasoni, C. (2010). Measuring Variance in Subnational Regimes: Results from an Expert-Based Operationalization of Democracy in the Argentine Provinces. *Journal of Politics in Latin America*, 2(2), 13-52.

Giraudy, A. (2010). The Politics of Subnational Undemocratic Regime Reproduction in Argentina and Mexico. *Journal of Politics in Latin America*, 2(2), 53-84.

Guasch, J. L. (2004). *Granting and Renegotiating Infrastructure Concessions: Doing It Right*. Washington, DC: World Bank Institute.

Harris, C. (2003). Private Participation in Infrastructure in Developing Countries: Trends, Impacts, and Policy Lessons. World Bank Working Paper No. 5. Washington, DC: World Bank Group.

Henisz, W. (2002). *Politics and International Investment: Measuring Risks and Protecting Profits*. Cheltenham, UK: Edward Elgar.

Kang, D. C. (2002). *Crony Capitalism: Corruption and Development in South Korea and the Philippines*. Cambridge, UK: Cambridge University Press.

Kerner, A. (2009). Why Should I Believe You? The Costs and Consequences of Bilateral Investment Treaties. *International Studies Quarterly*, 53(1), 73-102.

Khanna, T. & Yafeh, Y. (2007). Business Groups in Emerging Markets: Paragons or Parasites. *Journal of Economic Literature*, 45(2), 331-372.

Levitsky, S. & Murillo, M. V. (Eds.). (2005). *Argentine Democracy: The Politics of Institutional Weakness*. University Park, PA: Penn State University Press.

Levy, B. & Spiller, P. (Eds.). (1996). *Regulations, Institutions, and Commitment: Comparative Studies of Telecommunications*. New York, NY: Cambridge University Press.

Lohmann, S. (1995). Linkage Politics. *Journal of Conflict Resolution*, 41(1), 38-67.

Marin, P. (2009). *Public-Private Partnerships for Urban Water Utilities*. Washington, DC: World Bank-PPIAF.

Murillo, M. V. (2009). *Political Competition, Partisanship, and Policymaking in Latin America*. Cambridge, UK: Cambridge University Press.

Neumayer, E. & Spess, L. (2005). Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries? *World Development*, 33(10), 1567-1585.

North, D. C. & Weingast, B. (1989). Constitutions and Credible Commitments: The Evolution of the Institutions of Public Choice in 17th Century England. *Journal of Economic History*, 49, 803-832.

PPIAF-World Bank. (2008, May). *Private Participation in Infrastructure Database* [Online]. Available: <http://ppi.worldbank.org>.

Rhodes, S. (2006). *Social Movements and Free-Market Capitalism in Latin America: Telecommunications Privatization and the Rise of Consumer Protest*. Albany, NY: State University of New York Press.

Savedoff, W. & Spiller, P. (Eds.). (1999). *Spilled Water: Institutional Commitment in the Provision of Water Services*. Washington, DC: Inter-American Development Bank.

Schneider, B. R. (2008). Economic Liberalization and Corporate Governance: The Resilience of Business Groups in Latin America. *Comparative Politics*, 40(4), 379-397.

Schneider, B. R. (2010). Business Groups and the State. In A. Colpan, T. Hikino, & J. Lincoln (Eds.), *Oxford Handbook of Business Groups* (pp. 650-669) New York, NY: Oxford University Press.

Scott, W. R.. (2011). The Institutional Environment of Global Projects. In W. R. Scott, R. E. Levitt, & R. J. Orr (Eds.), *Global Projects: Institutional and Political Challenges* (pp. 52-85) New York, NY: Cambridge University Press.

Seawright, J. and Collier, D. (2010). Glossary. In H. E. Brady & D. Collier (Eds.), *Rethinking Social Inquiry: Diverse Tools, Shared Standards*. Lanham, MD: Rowman & Littlefield Publishers, Inc.

Sutcliffe, A. (1988). Street Transport in the Second Half of the Nineteenth Century: Mechanization Delayed? In J. A. Tarr & G. Dupuy (Eds.), *Technology and the Rise of the Networked City in Europe and America*. Philadelphia, PA: Temple University Press.

UNCTAD. (1999). *World Investment Report: Foreign Direct Investment and the Challenge of Development*. New York, NY: United Nations.

UNCTAD. (2009). *World Investment Report: Transnational Corporations, Agricultural Production, and Development*. New York, NY: United Nations.

Vernon, R. (1971). *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York, NY: Basic Books.

Weingast, B. (1995). The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development. *The Journal of Law, Economics, and Organization*, 11(1), 1-32.

Wells, L. T. Jr. & Ahmed, R. (2007). *Making Foreign Investment Safe: Property Rights and National Sovereignty*. Oxford, UK: Oxford University Press.

Wibbels, E. (2006). Dependency Revisited: International Markets, Business Cycles, and Social Spending in the Developing World. *International Organization* 60, 433-468.

Zelner, B., Henisz, W., & Holburn, G. (2009). Contentious Implementation and Retrenchment in Neoliberal Policy Reform: The Global Power Industry, 1989-2001. *Administrative Science Quarterly*, 54(3), 379-412.

Table 1. Investor Type and Contractual Outcomes *When Contracts are Regulated at the Subnational Level*

<i>Lead Investor Type</i>	<i>Expected Level of Contract Adaptability</i>	<i>Expected Rate of Contract Cancellation and Investor Exit</i>
Foreign	Low	High
Domestic <i>without</i> Diverse Local Holdings	Medium	Medium
Domestic Investor <i>with</i> Diverse Local Holdings	High	Low

Table 2. Investor Type and Rates of Post-Crisis Contract Renegotiation, Post-Crisis Tariff Increases, and Investor Exit by 2010

<i>Lead Investor Type</i>	<i>Contract Renegotiation Rate 2002-2010</i>	<i>Average Tariff Increase 2002 – 2010</i>	<i>Investor Exit 1991 – 2010</i>
Foreign	13% (1/7)	30%	89% (8/9)
Domestic <i>without</i> Diverse Local Holdings	50% (1.75/3.5)	28%	78% (3.5/4.5)
Domestic <i>with</i> Diverse Local Holdings	92% (2.75/3)	77%	33% (1/3)

Note: Unit of analysis is the period during which a lead investor controls a particular contract. For cases of joint venture partnerships with 50/50 ownership, one observation is created for each investor and each are weighted by 0.5 in the analysis. (N=16.5 for 1991-2010, and N=13.5 for 2002-2010.) One-way ANOVA for “investor type” and post-crisis contract renegotiation is strongly significant (F(2,13)= 10.08, p=0.002), as is the relationship between “investor type” and total tariff increases granted after the crisis (F(2,13)=5.04, p=0.02). While the relationship between “investor type” and exit is statistically insignificant, an analysis of the difference between domestic investors with diverse local holdings and other types is statistically significant (F(1,17)=4.73, p=0.04). See the on-line appendix for coding criteria, data, and replication code.

ⁱⁱ Total FDI in electricity, gas, water, construction, transport, storage and communications.

Figures from UNCTAD (1999, p. 421; 2009, p. 220).

ⁱⁱⁱ The rate of premature contract cancellation for concession contracts and divestitures with majority foreign ownership is 19%, and for projects with majority domestic ownership is 5%. Data from PPIAF-World Bank (2008) for concession contracts and divestitures entered during the 1990-2008 period. This is a nearly comprehensive database of private infrastructure contracts in low- and middle-income countries.

ⁱⁱⁱ While empirical studies suggest that rates of contract renegotiation vary by infrastructure sector (Guasch, 2004, p. 81; Zelner, Holburn, & Henisz, 2009), all long-term infrastructure contracts will involve both negotiations over compliance *and* negotiations regarding contractual terms.

^{iv} In emphasizing that such negotiations can benefit both parties, this theoretical approach differs from much of current scholarship. International political economy scholarship generally assumes that ex-post negotiations typically prejudice firms - e.g. Vernon (1971); Henisz (2002); and Zelner *et al.* (2009). Recent scholarship on regulation assumes a contest between consumer and corporate interests; see Rhodes (2006) and Murillo (2009).

^v On multinationals in infrastructure, see Scott (2011, p. 74). On developing country business groups, see Khanna and Yafeh (2007) and Schneider (2008).

^{vi} Both types of investors can engage in bribery and make campaign donations, particularly when multinationals employ local managers.

^{vii} This section draws on archival sources, local press coverage, data collected from regulatory agencies and concessionaires, and interviews conducted in 2005, 2006 and 2010. Because of the controversial nature of the policy area and the fact that some contracts continue, I primarily cite publicly available information rather than interviews.

^{viii} In Buenos Aires, the governor divided the province into two concessions.

^{ix} Contracts for the provinces that privatized resembled each other closely because of the strong involvement of the national water agency, international financial institutions, and a small group of consultants during the drafting process.

^x Table A.I, On-line appendix.

^{xi} When an original set of investors sold their holdings to another set of investors, two different “ownership regimes” were recorded, yielding 17 cases from the 14 concession contracts.

^{xii} Contract renegotiations following the crisis followed a common format, tackled a common set of issues (the package of rate adjustments, subsidies, or changes to the investment program) that would allow firms adjust to Argentina’s 2001 devaluation and subsequent decision to freeze the rates charged by public utilities.

^{xiii} For definitions of process tracing, causal processes, and causal-process observations, see Seawright and Collier (2010).

^{xiv} The two concessions also both contained a main controlling investor, whereas the ownership transfer in Mendoza province involved joint venture control, making it more difficult to attribute negotiating strategies to one or the other investor.

^{xv} At the time of contract award, Suez was known as Lyonnaise des Eaux.

^{xvi} Drop in revenue calculated from sales figures for 1991 and 1995 reported in Artana *et al.*, 1999, p. 244.

^{xvii} Not-for-attribution interview with former consortium member, July 14, 2006.

^{xviii} Rate calculated as average investment as a fraction of net sales for the period drawing on data from Aguas de Corrientes and Carvalho (2003, p. 63).

^{xix} Interview, Pablo Langus, Commercial Director, Aguas de Corrientes, June 2010.

^{xx} After 1995, the vast majority of fines were appealed and not paid (Data from ASOC, the regulator). ENOHSA-COFES (1999, p. 98) reports that 44% of government users did not pay their bills within a year.

^{xxi} Ratios represent investments as a percentage of net sales. Calculated by author from data from Aguas de Corrientes.

^{xxii} Figures from ASOC. Data from 1996 suggests that the concessionaire had only achieved 73% coverage in water and 42% coverage in sewerage before the ownership transfer; see Artana *et al.* (1999), p. 244.

^{xxiii} Not-for-attribution interview, company official, August 2006.

^{xxiv} Interview, Pablo Chamas, President, Aguas de Corrientes, June 2010.

^{xxv} ASOC resolutions 042/03, 028/04, 144/04, 80/05, 078/07, 083/08, 189/08, 232/08, 032/09, 038/10 and gubernatorial decree 2533/08. The total increase was approximately 115%, whereas inflation was approximately 200%.

^{xxvi} Provincial decree 2940 (12/2005).

^{xxvii} *El Litoral*. December 23, 2006; *El Litoral*. December 27, 2006;

www.corrientesaldia.com.ar. February 11, 2008.

^{xxviii} Aguas de Corrientes records.

^{xxxix} Unlike other concession contracts in Argentina, this concession only encompassed water distribution.

^{xxx}In its first year, the Córdoba concessionaire invested 35 million pesos (US\$ 35 million), a sum that exceeded the amount proposed in its bid. *La Nación*. March 14, 1998.

^{xxxi} The firm's reported liabilities grew from 65 million pesos in 2001 to 192 million pesos in 2002. The concessionaire reported a net loss of 71 million pesos in 2002 against an income of 77 million.

^{xxxii} *La Nación*. December 23, 2005.

^{xxxiii} Whereas Suez invested roughly 35% of net sales before the crisis, it invested 11% following the crisis. (Aguas Cordobesas data.)

^{xxxiv} Law 9,829 (December 28, 2005).

^{xxxv} *La Nación*. February 19, 2006.

^{xxxvi} *La Nación*. February 24, 2006.

^{xxxvii} *La Voz del Interior*. December 22, 2006.

^{xxxviii} Not-for-attribution interview, June 2010.

^{xxxix} Investment data from Aguas Cordobesas.

^{xl} Not-for-attribution interview, June 2010.

^{xli} *La Voz del Interior*. September 17, 2007; *La Voz del Interior*. April 14, 2008. The Roggio group has secured tariff increases of 80% for residential consumers since December of 2007 (data from Aguas Cordobesas).

^{xlii} See the on-line appendix for greater detail.

^{xliii} Levy and Spiller (1996).

^{xliv} See the on-line appendix.

^{xlv} Henisz (2002, p. 110) and Schneider (2010) argue domestic investors have access to better information through their networks than foreign firms.

^{xlvi} It is important to note that some of the Argentine economic groups that have managed concessions successfully, such as the Chamas Group in Corrientes province, are quite small. One could reasonably expect to find groups of equivalent size in low-income countries that worked in sectors such as real estate, construction, services, etc.

^{xlvii} Among others, see Khan and Sundaram (2000) and Kang (2002).