Online Appendix for:

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A. Chapter 2: On-line Appendix:
Medium-N Analysis of all of the Argentine Concession Contracts

This appendix provides information regarding the operationalization of key independent and dependent variables used in the medium-N analysis of contractual outcomes for the Argentine provinces. It also contains empirical assessments of alternative explanations.

General Coding Information:

The evidence described below is drawn from regulatory documentation, local press coverage, and data provided by concessionaires. Variable definitions and coding criteria are contained in this document, whereas the raw data used to create the tables is included in "replicationdata.csv" and "replicationdata2.csv." R code for replicating the analysis is included in "replicationcode.R".

- The variable investor type is coded based on the characteristics of the lead investor in the consortium controlling the concession. A lead investor is the firm controlling at least 50% of the concessionaire's shares. When a concession is managed by a joint venture in which each partner possesses 50% control, the partners are both considered lead investors and an observation for each investor is included and weighted by 0.5 in the analysis. A lead investor is coded as "domestic with diversified local holdings" if the investor is domestic and it possesses significant holdings in multiple sectors within the jurisdiction granting the concession contract (a provincial government, except in the case of the Aguas Argentinas contract, which was granted by the national government). The coding for each case is included below.
- Investor exit can take two different forms: exit via a sale of the firm's equity stakes in a concession (a change that requires the permission of political authorities) or contract cancellation by the host government, investor, or both parties following allegations of contract noncompliance that provide legal grounds for cancelling the contract. Both phenomena are counted as exits in the analysis in this dataset.
- Contract renegotiation is coded as an ordinal variable capturing the degree of progress towards a full agreement regarding a revised contract, the formality of this agreement, and whether or not this agreement is enforced. Fully enforced, formal renegotiation agreements score as a 1. Informal, enforced negotiation agreements receive a 0.75. Formal, yet partial, agreements that are enforced receive a 0.5. Full, formal agreements that are not enforced receive a 0.25. Finally, a 0 is assigned if no accord is reached. The contract negotiation for the Catamarca (Aguas del Valle) concession is coded as a failed negotiation because though the firm and provincial government concluded an agreement, the agreement centered on the investor's timeline and conditions for exiting the market rather than on conditions for a continuing working relationship. Note that this means that when rates of contract renegotiation are calculated, this can yield fractions in the numerator and denominator.
- Tariff increase estimates represent averages across different categories of residential users. The increases summarized in the text do not take inflation into account.

Documentation of Diverse Local Holdings for Cases:

Portfolios of Domestic Investors with Diverse Local Holdings

Jurisdiction	*Concessionaire*	*Investor*	*Additional Holdings in Jurisdiction*
Corrientes Province	Aguas de Corrientes	Chamas Group (1996 – present)	Holdings in agriculture, construction, real estate, tourism, and the media[1]
Córdoba Province	Aguas Cordobesas	Roggio Group (2006 - present)	National economic group based in Córdoba. Provincial holdings in construction, waste management, casinos, real estate, software sectors. [2]
Mendoza Province	Obras Sanitarias de Mendoza	Sielecki Group (2004 – present) held 50% of private shares	The Sielecki family, the owners of Sagua S.A., had been working in the province of Mendoza for decades in sectors as diverse as pharmaceuticals, petrochemicals, and wineries [3]
Salta Province	Aguas de Salta	J.C. Relats (1998 – present) held 50% of private shares	Highway contracts and a petroleum extraction facility[4]

Documentation of Renegotiation Agreements:

Province	*Concession*	*Renegotiation Coding*	*Relevant Legislation*	*Investor in place at time of agreement*
AMBA	Aguas	No Accord	N/A	Suez

[1] ENOHSA-COFES (1999: 89). Interviews with various Chamas Group employees. See also: "Aguas hace periodismo." *El Litoral*. April 14, 2005; "Trabajos fabulosos y transparencia cero." *El Litoral*. Mary 29, 2005.

[2] "Roggio asume la conducción de Aguas Cordobesas." *La Voz del Interior.* December 22, 2006; "El software aporta a Roggio el 10% de sus ingresos." *La Nación.* March 2, 2005; "Qué pasa." *La Nación.* April 16, 2005; "Cordobeses sufriran incremento en pago de tasa por recolección de residuos y limpieza." Agencia Diarios y Noticias. May 13, 2005.

[3] "South Water compró acciones de OSM." *Diario UNO*. January 8, 2004; "South Water formaliza su interés por las acciones de Saur en OSM." *Los Andes.* April 17, 2007.

[4] "Necon se quedó con las aguas de Salta." *La Nacion.* February 12, 1998. J.C. Relats is the owner of Necon, now J.C.R.; "Rutas en abandono tras el fuerte recorte." *La Nación.* May 14, 1999.

	Argentinas			
Santa Fe	APSF	No Accord	N/A	Suez
Buenos Aires	ABGA	No Accord	N/A	Impregilo
Córdoba	Aguas Cordobesas	Full Accord	Acta Acuerdo Transitoria, Oct. 2004;[5] Oct. 13, 2006. Convenio de Modificación del Acuerdo de Renegociación. Ratified via Law 9339.	Suez (2003 – 2005); **Roggio (2006 – 2009)**
Mendoza	OSM	Partial Accord	Oct. 2005, Carta Entendimiento Poder Ejecutivo, ratified via Law 7491	SAUR/ Enron (2003); **SAUR/Sielecki (2004 – 2009)**
Misiones	SAMSA	Partial Accord	Jan. 2007[6]	**ACS**
Corrientes	Aguas de Corrientes	Full Accord	Initial accord ratified by Decree 2962/04.[7] Acuerdo Marco, ratified by Decree No. 2940, Dec. 7, 2005	**Chamas Group**
Catamarca	Aguas del Valle	Partial Accord	Acta Acuerdo approved by Decree No. 2.311, 2004; Subsequent accord in 2005 (Decreto No 124/05) represented an agreement regarding the terms under which the investor could exit[8]	**Vivendi/ FCC**
Salta	Aguas de Salta	Full Accord	First accord, Acta Acuerdo of June 20, 2003, ratified in October by	**Latinaguas/JCR**

[5] Azpiazu *et al.* (2008: 73).
[6] "Samsa se queda y aumentan las tarifas desde febrero." El Territorio. Jan. 11, 2007.
[7] Azpiazu *et al.* (2008: 70).
[8] Azpiazu *et al.* 2008: 71.

			decree 1841. Full accord July 1, 2004, ratified by law 7178.[9]	
Formosa	Aguas de Formosa	No Accord	N/A	Sagua (Sielecki Group)
La Rioja	Aguas de la Rioja	Partial Accord	2002: took form of new concession contract replacing management contract.[10]	Latinaguas
Santiago del Estero	Aguas de Santiago	Informal Accord	Accord reached with Zamora following the ouster of Juarez.[11]	Sagua (Sielecki Group)

Rates of Contract Renegotiation with Binary Coding:
If contract renegotiations are simply coded in a binary fashion (formal and informal enforced full agreements =1/ others =0), results are similar. Domestic investors with diverse local holdings renegotiate their contracts 83% (2.5/3) of the time, domestic investors without local holdings 43% (1.5/3.5) of the time, and international investors 0% (0/7) of the time. A one-way analysis of variance for factor "investor type" and this dichotomous renegotiation variable suggests that these between-group differences are also strongly significant ($F(2,13) = 7.86$, $p = 0.006$.) Results are also strongly significant according to a Fisher exact test.

Assessing Alternative Explanations:

Partisanship/Alignment:
The Gervasoni dataset covers the 2004 -2007 period. For this reason, I examine tariff increases, contract renegotiations, or investor exits that occurred during that window. Drawing on Post and Murillo (2011), I group governors into one of two categories utilizing a cut-off of three, which corresponds to the relatively neutral survey response of "somewhat" aligned. I have imputed scores for Santiago del Estero and Corrientes based on partial coding in the Gervasoni dataset. The national government (which presided over the Aguas Argentinas contract) is coded as aligned. For cases in which two sets of investors controlled a contract during the 2004 - 2007 window, both observations are included in the analysis. For this time period, only the administrations in Salta and Córdoba were unaligned.

[9] Post (2008).
[10] Coded as agreement in 2003 because this is when dataset begins; omitted as robustness check for all analyses.
[11] Not-for-attribution interview.

Table A.II.1. Alignment Between Provincial and National Governments and Regulatory Outcomes During the 2004-2007 Period

Alignment with National government	*Contract renegotiated*	*Investor exit*	*Average tariff increase*
Aligned	37.5% (3.75/10)	30% (3/10)	14%
Not aligned	83% (2.5/3)	33% (1/3)	24%

Note: The difference between investors located in aligned and non-aligned provinces is statistically insignificant for all three outcomes.

Table A.II.2. Percentage of Investors *Exiting* Contracts in Aligned and Unaligned Provinces Between 2004 and 2007

	Alignment	
Investor type	Aligned	Unaligned
Domestic *with* local holdings	0% (0/1.5)	0% (0/1.5)
Domestic *without* local holdings	0% (0/3)	0% (0/0.5)
International	55% (3/5.5)	100% (1/1)

Table A.II.3. Percentage of Investors *Renegotiating* Contracts in Aligned and Unaligned Provinces between 2004 and 2007

	Alignment	
Investor type	Aligned	Unaligned
Domestic *with* local holdings	83% (1.25/1.5)	100% (1.5/1.5)
Domestic *without* local holdings	42% (1.25/3)	100% (0.5/0.5)
International	23% (1.25/5.5)	50% (0.5/1)

Provincial Checks and Balances Analysis:

The analysis employs averages for Agustina Giraudy's dispersion of authority index for the 1983-2006 period. (See Giraudy (2010) for a discussion of the construction of the index, which is continuous and runs between 0 and 1.) Raw scores were used to calculate correlations between provincial scores and rates of contract renegotiation and investor exit. Though I used Giraudy's raw data in the analysis for this paper, the scores in the charts below are presented in categorical form because I do not have permission to share the raw data. Giraudy's dataset does not include a score for Catamarca province or for the national government (which granted the Aguas Argentinas contract), reducing the number of cases in this analysis. Correlational coefficients were calculated using the Kendall, Spearman, and Pearson's Product Moment methods for the dispersion index score for the provincial political environment for each contract and a) and whether an investor exited the contract in question; progress towards a contract renegotiation achieved by any lead investor in that contract; and total tariff increases granted following

the crisis for a given contract. A negative correlation between dispersion of authority and contract renegotiation is marginally significant.

Table A.II.4. Provincial Checks and Balances and Regulatory Outcomes

Dispersion of authority	*Contract renegotiated post-crisis (2003-2010)*	*Investor exit (1991 – 2010)*	*Average tariff increase (2002 – 2010)*
Low (0 – 40)	50% (1.5/3)	75% (3/4)	76%
Medium (41- 60)	75% (3.75/5)	50% (3/6)	91%
High (> 60)	14.3% (0.5/3.5)	100% (4.5/4.5)	6%

Note: Unit of analysis is an "investor regime," or a particular lead investor in a given concession contract. If control is passed on to a new investor, a new unit is created. Cases of joint venture control are weighted by 0.5.

Table A.II.5. Percentage of Investors *Exiting* Contracts in Provinces with Low, Medium, and High Levels of Dispersion of Authority, 1991 - 2010

	Dispersion of authority		
Investor type	Low	Medium	High
Domestic *with* local holdings	0% (0/1)	33% (0.5/1.5)	100% (0.5/0.5)
Domestic *without* local holdings	100% (3/3)	33% (0.5/1.5)	No cases
International	No cases	67% (2/3)	100% (4/4)

Table A.II.6. Percentage of Investors *Renegotiating* Contracts in Provinces with Low, Medium, and High Levels of Dispersion of Authority, 2003 - 2010

	Dispersion of authority		
Investor type	Low	Medium	High
Domestic *with* local holdings	100% (1/1)	100% (1.5/1.5)	50% (0.25/0.5)
Domestic *without* local holdings	50% (1/2)	83% (1.25/1.5)	No cases
International	No cases	37.5% (0.75/2)	8.3% (0.25/3)

Note: This table contains fewer cases than the previous table because two contracts were cancelled prior to the onset of contract renegotiations following the Argentine crisis.

Table A.II.7. Provinces by "Dispersion of Authority" Score Category

Dispersion of authority score	*Provinces*
Low (0-40)	Corrientes, Formosa, La Rioja,
Medium (41-60)	Córdoba, Misiones, Salta, Santiago del Estero, Tucumán
High (> 60)	Buenos Aires, Mendoza, Santa Fe

Local State Capacity Analysis:

The measure of local state capacity utilized in this chapter is based on sector-specific measures. It incorporates measures reflecting two important aspects of state capacity: the

ability to manage utilities in financial terms (collection efficiency, or the percentage of billed revenue actually collected), and the ability to execute investments (measured in terms of urban water coverage in 1991, prior to privatization). For the two measures (collection efficiency and urban water network coverage), a score of 1-3 is assigned based on the following cut-offs:

- Collection efficiency: above 80% High (3), between 50% and 80% Medium (2), and below 50% Low (1)
- Urban water coverage in 1991: above 75% coverage High (3), between 50 and 75% Medium (2), and below 50% Low (1).

These scores are then added to one another to create an overall score for state capacity in the sector prior to privatization. The raw data is included in Table 3.1 earlier in the chapter.

High: (5): Buenos Aires Metropolitan Area, Santa Fe, Córdoba, Mendoza, Tucumán
Medium: (4): Corrientes, La Rioja, Santiago del Estero
Low: (3): Formosa, Catamarca, Buenos Aires province

Table A.II.8 Local Sector State Capacity and Regulatory Outcomes

Provincial state capacity in sector	*Contract renegotiated post-crisis (2003-2010)*	*Investor exit 1991 - 2010*	*Average tariff increase (2002 – 2010)*
Low	25% (1/4)	80% (4/5)	41% average tariff increase
Medium	75% (2.25/3)	50% (2/4)	106% average tariff increase
High	46% (3/6.5)	87% (6.5/7.5)	37% average tariff increase

Note: Unit of analysis is the concession contract. Scores are presented in categorical form in this chart for simplicity; raw scores were utilized to calculate correlations. Provincial scores for each contract are uncorrelated with post-crisis tariff increases, contract renegotiation, or investor exit. Correlations between state capacity score and investor exit and contract renegotiation by contract are statistically insignificant. There is also no statistically significant difference in rates of exit according to a Fisher exact test.

Table A.II.9. Percentage of Contracts where Investors Exit in Provinces with Low, Medium, and High Levels of Local Sector State Capacity, 1991 - 2010

	Local state capacity		
Investor Type	Low	Medium	High
Domestic *with* local holdings	No cases	0% (0/1)	50% (1/2)
Domestic *without* local holdings	100% (1/1)	67% (2/3)	100% (0.5/0.5)
International	75% (3/4)	No cases	100% (5/5)

Table A.II.10. Percentage of Contracts where Investors *Renegotiate* in Provinces with Low, Medium, and High Levels of Local Sector State Capacity, 2003 - 2010

	Local state capacity		
Investor type	Low	Medium	High
Domestic *with* local holdings	No cases	100% (1/1)	88% (1.72/2)
Domestic *without* local holdings	0 (1/1)	62.5% (1.25/2)	100% (0.5/0.5)
International	33% (1/3)	No cases	19% (0.75/4)

Note: This table contains three fewer cases than the previous table because three contracts were cancelled prior to the onset of contract renegotiations following the Argentine crisis.

Table A.II.11. Provinces by Local Sector State Capacity Score Category

Sector state capacity score	*Provinces*
Low	Buenos Aires province, Misiones, Catamarca, Formosa
Medium	Corrientes, La Rioja, Santiago del Estero
High	Santa Fe, Córdoba, Mendoza, Salta, Tucumán

Regulatory Agency Design:

While all provinces that privatized in the water sector created legally independent bodies, the provincial laws that established some of the provincial agencies allow firms (or other groups) to appeal regulatory decisions to the executive branch. (The Spanish term for provisions for appeals is the "recurso de alzada.") Following Post and Murillo (2011), this analysis draws on Azpiazu *et al.*'s 2008 classification of the provincial regulatory frameworks with respect to whether or not they allowed for repeals.

Table A.II.12. Regulatory Independence and Negotiation Outcomes in the Water Sector

	Contract renegotiated?	*Investor exit*	*Average tariff increase by 2010*
Framework does not allow appeals	55% (3/5.5)	85% (5.5/6.5)	44%
Framework does not allow appeals	41% (3.25/8)	70% (7/10)	60%

Note: Unit of analysis is an "investor regime," or a particular lead investor in a given concession contract. If control is passed on to a new investor, a new unit is created. Cases of joint venture control are weighted by 0.5. All differences are not statistically significant.

Table A.II.13. Percentage of Investors *Exiting* Contracts in Provinces Where Regulatory Agency Decision Can and Cannot Be Appealed, 1991 - 2010

	Regulatory independence	
Investor type	Does not allow appeals	Allows appeals
Domestic with local holdings	50% (1/2)	0% (0/1)
Domestic without local	100% (0.5/0.5)	75% (3/4)

holdings		
International	100% (4/4)	80% (4/5)

Table A.II.14. Percentage of Investors *Renegotiating* Contracts in Provinces Where Regulatory Agency Decisions Can and Cannot Be Appealed, 1991 - 2010

	Regulatory independence	
Investor type	Does not allow appeals	Allows appeals
Domestic with local holdings	88% (1.75/2)	100% (1/1)
Domestic without local holdings	100% (0.5/0.5)	42% (1.25/3)
International	25% (0.75/3)	25% (1/4)

Table A.II.15. Provinces by Type of Regulatory Institution

Formal regulatory agency independence	*Provinces*
Allows appeals (not independent)	Santa Fe, Misiones, Corrientes, Catamarca, Formosa, La Rioja, Santiago del Estero, Tucumán
Does not allow appeals	Buenos Aires, Córdoba, Mendoza, Salta

B. Chapter 3. On-line Appendix: Causal Process Observation Measurement

Chapter 3 provides a brief discussion of the measures used to differentiate between brittle and resilient contractual trajectories in the case study chapters. This on-line appendix provides additional discussion of the considerations that led to the adoption of particular measurement strategies.

- Government Compliance with Contractual Obligations: While the Argentine concession contracts varied somewhat with respect to the exact obligations included—poorer provinces generally having to contribute more consumer rate and investment subsidies than higher-income provinces—many provisions are included in every single contract and stem from ideas widely held among engineers and development bank policy personnel regarding the measures required to move utilities to a cost-recovery operational basis. Typical measures designed to improve collective efficiency were: a) permission to regularize clandestine connections provided service was improved to meet quality guidelines; b) the right to update property valuations (used as a proxy for household ability to pay) upon which consumer rates were based; and c) permission to pressure delinquent users to pay their bills via fines, judicial proceedings, and service cut-offs.[12] Governments privatizing less lucrative systems also tended to include various other forms of financial assistance to ensure that companies would bid for contracts. In some cases, governments provided for tariff (that is, rate or user charge) increases to correct for years of depreciation; they tended to schedule such increases for a year or two into the contract period, so as to allow concessionaires to demonstrate quality improvements before demanding more for services. In other cases, governments provided for state subsidies for rates for poor or retired users. Finally, in yet other cases, governments promised to contribute particular pieces of infrastructure that would help the companies meet their expansion or quality targets. Contracts also included provisions for measures that would come into effect in the medium to long run, such as inflation adjustments to tariffs or annual commitments to reimburse firms for user subsidies. Because of such differences in government obligations across contracts, government compliance is always assessed as a fraction of commitments.

- Firm Financial Health: There are different strategies for comparing investor returns across cases. This book focuses primarily upon returns on sales and returns on equity, which are simple to calculate with the data that it was possible to obtain for the Argentine cases. The annual return on sales (ROS), which is the ratio of returns to net sales (sales – taxes), is a figure that is scaled based on the size of the business. Return on equity (ROE) is a ratio of the return in a given year to the amount of equity residing in the company. I did not employ another

[12] There was often a tacit understanding that service cut-offs would be applied selectively with a focus on those who had greater ability to pay their bills (or applied most vigorously in these cases.) See, for example, the discussion of the Formosa case in chapter 4.

common measure—return on assets (ROA)—because it can be misleading when analyzing concession contracts. In such contracts, the majority of system assets remain under government ownership, which means that the ratio of returns to concessionaire assets would appear artificially high.

- Firm Retaliatory Strategies: To identify more "legalistic" and "formal" retaliatory strategies, I start by defining a range of tactics available to all three types of investors working in the water and sanitation sector. "Legalistic" and retaliatory strategies range in severity and visibility but tend to go hand in hand. Possibly the least threatening and public type of pressure a firm can apply is to withhold payment of fines levied by the regulatory agency, usually through formal appeals through administrative channels. A slightly more public approach is to sue the regulatory agency in the local courts if the firm feels that a resolution violates its contractual rights and appeals to the provincial executive yield no results.[13] A more confrontational measure, presuming significant funds are involved, would be to withhold payment of funds owed to the provincial government under the contract, such as lump sum (canon) payments for market access. A yet more public action, likely to bring conflict to the public eye, would be to threaten to take the government into or actually file for international arbitration. Such actions, after all, open up companies to charges that they are part of an exploitative international economic system. Investors' utilization of these tactics are tallied and compared in tables in chapters 3 through 6. Each case is categorized as "low," "medium," or "high."

- Firm Compliance with Their Obligations: The book focuses on the fraction of net revenues devoted to investment as a measure that is comparable across cases. This is a particularly tractable way of comparing concessionaire compliance with their original contractual obligations as well as their general level of commitment to a provincial system. Concession contracts in the Argentine context tended to specify detailed quality and coverage targets that companies should reach at specific points in time rather than monetary values for investment in a given year. Because consumer income and underlying hydrological conditions—such as proximity to water sources and water quality—varied from case to case, these targets varied in ambitiousness; consultants drafting model contracts had to walk a fine line between defining targets demanding enough that government officials would see important benefits from privatization yet reasonable enough that companies would consider the concessions attractive and submit bids.[14] The sheer number of metrics against which firm compliance would need to be measured and the difference in targets across cases makes defining a comparable metric very

[13] Contracts usually specified that certain types of regulatory decisions be appealed via an administrative channel (to the governor) and others be appealed through the local courts. The exact division between these two routes varied from case to case, and usually there was some discretion exercised. One would only expect firms to pursue cases in the local courts, however, if the courts were viewed as having a degree of political independence. This would have been the case in more "modern" provinces.

[14] In the Argentine case, model contracts were written before the competitive bidding process; by submitting a bid, firms were committing to meeting the targets defined in the model contracts, at least until a first round of renegotiations took place.

difficult. To make matters yet more complicated, frequent contract renegotiations often substituted new investment commitments for old ones or rate increases, therefore making original contractual requirements a problematic metric against which to benchmark firm performance. One could, potentially, use data on fines levied by regulatory agencies. Given the leeway enjoyed by regulators in setting the value of fines levied in particular cases, however, fine totals tend to more closely reflect levels of conflict between regulatory agencies and firms than actual levels of firm noncompliance. Moreover, original contractual obligations were suspended at the start of contract renegotiations following the crisis. For this reason, it is simplest and least problematic to focus on investment as a fraction of earnings.

C. Chapter 7 On-Line Appendix

A.1 Coding for Arbitration Variables:

Governments can consent to international arbitration in the event of investor-state disputes over inequitable treatment or expropriation through a number of vehicles: a) bilateral investment treaties (BITs); b) BIT-like treaties such as regional investment and free trade agreements; c) domestic investment law; d) articles within individual contracts between states entities and foreign investors (Yackee 2007, 2008). As Yackee notes, most empirical work on the effects of BITs on foreign direct investment fails to acknowledge both variation in the extent to which BITs provide arbitration options and alternative legal means by which states can consent to arbitration.

When constructing a dummy variable that reflects an investor's ability to take claims against a state into international arbitration, it is necessary to consult each of the various means by which a state might consent to arbitration described. The coding criteria used in each case are outlined below.

Consent through a bilateral investment treaty:
For each project, the relevant investor-host country pair is determined. The nationality of the foreign investor with the largest share in the project in percentage terms determines which treaty is of relevance. Bilateral investment treaties are not considered valid unless they have been both signed *and* ratified by both governments (Yackee 2007: 105). (In just four cases, treaties were ratified a year or two after the start of a project; in such cases, these treaties are still treated as valid since they have been in place for the vast majority of the project's lifespan.) The list of treaties and ratification dates comes from UNCTAD (1999) and UNCTAD's website cataloging treaties currently in force: http://www.unctadxi.org/templates/DocSearch____779.aspx. These relevant treaties are then coded according to whether they include a valid arbitration clause. (If the treaty only provides for arbitration via ICSID, the World Bank's arbitration body, both countries must have also signed the ICSID convention for the arbitration clause to be valid.)

Arbitration clauses are also coded for their strength according to the criteria used by Yackee (2007: 27-28): from strongest to least strong as a) comprehensive; b) partial (usually only covering expropriation and not equitable treatment); c) promissory; d) nonexistent. For country dyads examined by Yackee (2007), his codings are used. For country dyads not treated by Yackee (2007), I have examined the treaties and coded arbitration provisions according to the same criteria. Full-text versions of the treaties were found on the UNCTAD website listed above and in: International Centre for the Settlement of Investment Disputes. *Investment promotion and protection treaties.* New York : Oceana Publications,1983-2009 (latest installment, November 2009). In four cases, the above publications did not contain full-text copies of the treaties: China-Malaysia, Czech Republic-Slovakia, India-Cyprus and Hungary-Germany. In these cases, the treaties signed by the larger economy were examined in the two years preceding and the two years following the contract, and a value imputed based on these other treaties. This is a logical approach, given that major economies take widely publicized "Model BITs" as starting points during treaty negotiations.

Consent through alternative, BIT-like treaties:
Governments can consent to international arbitration not only through bilateral investment treaties, but also through free trade agreements and other international investment agreements. Yackee (2007) identifies FCNs (Friendship, Commerce, and Navigation Agreements) and FTAs (Free Trade Agreements) in the appendix for his sample of countries and codes them according to whether or not they contain arbitration provisions. To see if any of the water and sanitation

contracts included in the analysis for this chapter are covered by clauses in such alternative treaties, I first identify the set of contracts not covered by BITs containing arbitration clauses. If Yackee covers the relevant country dyads in his analysis, I see whether or not he identifies an alternative treaty-like instrument. Only one country dyad receives coverage through such an alternative treaty: contracts held by American investors in Mexico, through NAFTA, which contains a strong arbitration clause. He does not cover the following dyads contained in this dataset in his tables, however: Brazil-Portugal, Philippines-Hong Kong, Colombia-Cuba, and China-Malaysia. Treaties affecting these cases were identified and examined in the WTO's regional trade agreement database: http://www.wto.org/english/tratop_e/region_e/region_e.htm. None of the treaties identified through these means provided for arbitration for projects in the dataset. Yackee identifies four additional treaties that affect investments in broad swathes of countries: the Energy Charter Treaty, the European Convention on Human Rights, EU membership applications, and the OECD Declaration on investments.[15] Of these, the human rights convention provides explicitly for investment arbitration, and in this dataset, this affects the Swiss investors in a Georgian project, German investors in Hungarian and Polish projects, Austrian and Slovak investors in two Czech projects, and British investors in a Bulgarian project. For these cases, the treaty is coded as providing "partial" protection according to Yackee's categories.

Consent through domestic investment law:
Most legal scholars who work in the field of international arbitration option see provisions in domestic investment law as increasingly weak, especially because domestic courts can find laws to be unconstitutional (e.g., in Venezuela). To be thorough, I surveyed the domestic investment laws for the host countries in the dataset that did not consent to international arbitration through BITs or BIT-like treaties. The most comprehensive directory of domestic investment laws is "Investment Laws of the World," a paper publication by ICSID/Oceana (2009), which surveys the laws of Brazil, China, Colombia, Georgia, Honduras, Kazakhstan, the Philippines, Hungary, Poland, Bulgaria, and the Czech Republic. Arbitration provisions were found only in the cases of: a) Georgia as of 1996; b) Indonesia (partial provision for arbitration from 1967 and comprehensive provision for arbitration from 2007).

Consent through individual project contracts between states and investors
Privatization contracts can also hypothetically provide for international arbitration in the event of disputes. To see if this would potentially affect the projects in this dataset, I collected a nearly complete set of contracts for Colombia and a sample of contracts from Brazil – countries in which treaties and domestic investment law do not provide for international arbitration – through visits to regulatory agencies and other site visits. I found no arbitration provisions in this sample.

Variable coding and definitions:
Two different arbitration variables are defined to encapsulate the information collected via the coding exercise described above. The first is a dummy variable that reflects whether or not investors in a given project have access to international arbitration through a BIT, BIT-like treaty, or domestic investment law. The second is a dummy variable that only recognizes "strong" arbitration protections or provisions.

[15] While Brazil has assented to the declaration's principles, the arbitration clause only appears in the guidelines for multinational firms, and therefore does not represent state consent to arbitration.

A.2 Variable Definitions and Sources

Variable	Definition	Source
Contract Termination Before Term (Dependent Variable)	Contract terminated by one or both parties in a given year	From the Private Participation in Infrastructure database, PPIAF/World Bank (2008)
Arbitration	Dummy variable indicating if the main foreign investor in a project has access to international arbitration through a BIT, BIT-like treaty, or provisions in the host country's domestic investment law.	Coded by author drawing on Yackee (2007) and texts of treaties and domestic investment laws (see above).
Strong Arbitration	Dummy variable indicating if the main foreign investor in a project has access to international arbitration through a strong arbitration clause, or through one that does not restrict the clause's scope to expropriation and that firmly establishes a host country's "pre-consent" to arbitration.	Coded by author drawing on Yackee (2007) and texts of treaties and domestic investment laws (see above).
≥ 25% Foreign	Dummy variable indicating if 25% or more of project shares are held by a foreign investor	Coded by author using investor profiles for particular projects from the PPI database, PPIAF/World Bank and additional research in the business press (2008).
≥ 50% Foreign	Dummy variable indicating if 50% or more of project shares are held by a foreign investor	Coded by author using investor profiles for particular projects from the PPI database, PPIAF/World Bank and additional research in the business press (2008).
GDP per capita	From 1991 (the latest possible year that is pre-treatment for all cases). In 2000 dollars.	World Development Indicators, 2007
Democracy (Polity)	Integer score between -10 and 10 representing where the host country lies on the spectrum between authoritarians (-10) and full democracy (10). Score reflects conditions in the year of contract award.	Polity IV database
Rule of Law (World Bank)	Score between -2.5 and 2.5 based on a compilation of expert assessments and surveys, referring to the enforcement of property rights. The score is	World Bank Governance Indicators (1996 scores).

	based on a number of sources, including the ICRG, Heritage Foundation, etc. Scores for 1996 used, the earliest year available.	
Law and Order (ICRG)	Score between 1 and 6. Ratings created by experts.	International Country Risk Guide, PRS Group (1995 scores)
Property Rights	Score between 0 and 100 created by experts. "An assessment of the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state."	Heritage Foundation (1995 scores).
Size Category	Ordinal variable ranging from 1 to 4, with projects divided according to the following criteria: 1 for 0 – 499,999 individuals receiving water or sewerage service, 2 for 500,000 – 999.999 receiving service, 3 for 1,000,000 to 4,999,999 receiving services, and 4 for above 5 million receiving service.	Coded from "population served" and "number of household connections" data from the Private Participation in Infrastructure Database. (Multiplier for household connection data is 4.)
Multilateral Participation	Dummy variable indicating if a multilateral development bank has awarded a loan, syndication, or guarantee, or purchased an equity stake in a project.	Coded from project profiles in the Private Participation in Infrastructure Database, PPIAF/World Bank
Joint Venture	Dummy variable indicating if shares in the project are owned by both foreign and domestic investors.	Coded using investor profiles for individual projects from the Private Participation in Infrastructure Database, PPIAF/World Bank (2008)
After Crisis	Dummy variable coded for a particular project as 1 if it has passed a crisis. A crisis is defined as GDP growth at time t-1 of less than -5%, growth in the consumer price index greater than 50% at time t-1, or a drop in the bilateral exchange rate with the U.S. dollar of greater than 25% at t-1.	Base data from the World Development Indicators (2007)
Checks	Integer score between 1 and 6 indicating the number of institutional checks upon the executive branch	From the World Bank Database on Political Institutions ("Checks")
Left Government	Dummy variable indicating whether or not the executive branch is held by a left-leaning	Ideology scores for the executive from the World Bank Database on Political Institutions

	party	(calculated from the "Execrlc" variable)
Civil Liberties	Integer score between 1 and 7 suggesting the strength of civil liberties in a given country in a particular year	Freedom House
Press Freedom	Integer score between 1 and 7 suggesting the strength of press freedom in a given country in a particular year	Freedom House

A.3. Variable Profiles:

Variable	Minimum	Maximum	Mean	Standard Deviation
Arbitration Protection (any type)	0	1	0.74	0.44
Strong Arbitration Protection	0	1	0.35	0.48
≥ 50% Foreign	0	1	0.37	0.48
≥ 25% Foreign	0	1	0.57	0.50
GDP per capita (1991)	284	12970	3533	2905
Democracy (Polity)	-9	10	1.17	7.2
Rule of Law (World Bank)	-2.06	1.24	-0.14	0.51
Multilateral Participation	0	1	0.09	0.28
Joint Venture	0	1	0.12	0.32
After Crisis	0	1	0.40	0.49
Checks	1	6	3.3	1.76
Left Government	0	1	0.65	0.48
Civil Liberties	1	7	3.81	1.70
Press Freedom	1	7	3.91	2.28

A.4. Comparisons of Treatment and Control Groups

Measure		Majority Foreign mean (st.dev.)	Majority Domestic mean (st.dev.)
GDP per capita		$3737 ($2442)	$3452 ($2198)
Rule of Law (-2.5 to 2.5)		-0.01 (0.54)	-0.06 (0.48)
Polity (-10 to 10)		2.7 (7.03)	2.1 (7.15)
Project Size (1 to 4)	Most contracts in smaller-scale cities in both cases	1.8 (0.91)	1.3 (0.71)
Contract with National Government (0/1)	Most contracts with subnational governments in both cases	0.15 (0.37)	0.9 (0.29)
Multilateral Bank Participation (0/1)	Low levels of multilateral bank participation in both cases	0.14 (0.35)	0.02 (0.14)

D. Bibliographic Notes on Source Materials

There is no one archive for the water and sanitation sector in Argentina. The materials used in this book were primarily gathered from individuals working with a variety of institutions throughout Argentina due to the lack of centralized data collection in the sector. Appendix A outlines my main primary sources and where they were obtained. I first describe sources that provide information about all of the concession contracts in the country. I then discuss province-specific sources.

I. General Sources

Comparative sources reporting data for all of the Argentine concessions, particularly data that is consistent over time and across cases, are sparse. The one main secondary source on the provincial concessions cited in the book bibliography, Azpiazu et al. (2008), was published after the bulk of the empirical material was compiled for this book. It has, however, provided a means of cross-checking some of the data analyzed in the manuscript. ADERASA, the association of Latin American regulators, has collected firm-level data allowing it to benchmark the performance of public and private water utilities throughout Latin America, but data collection only began in 2003 and does not cover all firms consistently. Unfortunately, the number of Argentine firms reporting data has declined over time as well. The ENOHSA-COFES 1999 study provides an important compilation of firm data with respect to billing and tariffs that is fairly consistent across cases. Saravia (2010) provides a more recent summary report on tariff levels and increases across cases for the 2000s. Census data, while helpful in understanding the growth rates of urban areas in which concessionaires were working, is of little use in tracking concessionaire progress in meeting expansion goals because the census dates, 1991 and 2001, do not coincide with the start dates of most of the concessions. The ENOHSA website has reported information on projects in the sector which are financed by the national government. Its on-line database, SPIDES, is useful for identifying which municipalities fall within concession contract boundaries; the performance data reported appears not to have been collected in a methodologically consistent fashion. ENOHSA staff members provided access to records of the PRONAPAC loan program, which channeled World Bank and Inter-American Development bank loans to the Argentine water sector during the 1990s.

Provincial budget data was obtained from a variety of sources. The data from La Plata University is the most useful, as one can compare revenues and expenditures; data for both is highly disaggregated.

Regarding the provincial political environments, the most centralized source of information is Andy Tow's web compilation of election data. For the primary cases in my study, I also work with bloc membership data from provincial legislatures, which provides a measure of within-party fragmentation as well. Alberto Föhrig (Universidad de San Andrés) and I compiled this data through visits to the archives of the provincial legislatures in Buenos Aires, Formosa, Mendoza, Salta, Santa Fe, and Tucumán.

ADERASA (Asociación de Entes Reguladores de Agua Potable y Saneamiento de América Latina). 2003, 2004, 2005, 2006. *Ejercicio Anual de Benchmarking*. Datos procesados.

Dirección de Análisis de Gasto Público y Programas Sociales, Secretaría de Política Económica, Argentina. "Gasto Público de los Gobiernos Provinciales y GCBA." 1993 – 2004.

Dirección Nacional de Coordinación Fiscal con las Provincias, Argentina. "Ejecución Presupuestaria por Finalidad." 1991 – 2000.

ENOHSA. Documentation for PRONAPAC loan program, which included World Bank loan BIRF-3281 and Inter-American Development Bank loan 855.

Facultad de Economía, Universidad de la Plata. "Presupuestos Provinciales." 1983 – 1999. Data downloaded from the project website in 2006.

INDEC. Census of 1991, 2001.

Ministerio del Interior, Argentina. "Producto Bruto Geográfico." (Provincial GDP estimates). 1992 – 2000.

Provincial legislative archives, Buenos Aires, Formosa, Mendoza, Salta, Santa Fe and Tucumán. Bloc membership data collected with Alberto Föhrig, Universidad de San Andrés.

Saravia, Jorge Andres. 2010. *Conclusiones de los Seminarios de Tarifas y Sistemas Tarifarios de Aferas 2009-2010*. Serie de publicaciones sobre tarifas no 2. First ed. Córdoba, Argentina: Eudecor.

Tow, Andy. *Electoral Atlas: Elecciones en Argentina desde 1983.* www.towsa.com/andy

UNCTAD. 2000. *Bilateral Investment Treaties 1959-1999*. New York and Geneva.

World Bank. 2001. *Implementation Completion Report* (CPL-32810; SCL-3281A; SCPD-3281S). Report No. 21403.

The World Bank Group and the Private Participation in Infrastructure Advisory Facility. 2008. *Private Participation in Infrastructure Database.* Washington, D.C.: The World Bank Group.

www.enohsa.gov.ar/Licitaciones

II. Case-Specific Sources

This section outlines the main primary source materials consulted for each concession in Argentina. I assembled contracts, regulatory legislation, contractual amendments, and indicators of firm financial health and performance during provincial site visits. Much information comes from international, national, and provincial newspaper coverage; sources are listed at the end of this section. For publicly listed firms, additional information on firm structure and preferences was obtained from firm press releases and reviews by market analysts. Interviews were essential for interpreting this data. A list of interviewees follows this catalog of contract-specific sources.

Buenos Aires Metropolitan Area (Aguas Argentinas): It is far simpler to obtain secondary and primary source material about the Aguas Argentinas concession than any other in Argentina. Before the contract cancellation in 2006, the sector regulator, ETOSS, posted much official documentation on its website. Detailed historical material, such as the contract bidding documents, annual reports to the regulator, and regulatory resolutions, could be viewed through the "Despacho General," or the archives for the agency. Meanwhile, national newspapers provided coverage of the concession from a variety of viewpoints. Aguas Argentinas and its lead investor, Suez, have also been very open following the contract cancellation: the firm's "Aguas Argentinas 1993-2004," a compilation of annual report data, was an invaluable resource.

Aguas Argentinas. “Aguas Argentinas: 1993-2004.” (Compilation of audited annual report data.)

Aguas Argentinas. Annual Reports to ETOSS, years 1 - 11.

Aguas Argentinas. Bidding documents submitted to the privatization commission, 1993. O.S.N. expediente 25052.

Contrato de Concesión. April 23, 1993.

ETOSS Resolution 81/94. Expediente 010858.

ETOSS. 2003. *Informe sobre el grado de cumplimiento alcanzado por el contrato de concesión de Aguas Argentinas S.A.* Nota UNIREN No. 73 del 15 de agosto de 2003.
Ministerio de Economía y Obras y Servicios Públicos. 1991. “Privatización de OSN. Pliego de Bases y Condiciones.” SOPyC expediente 4-2-92.

Poder Ejecutivo Nacional. Decreto 149/97.

Buenos Aires Province (Azurix): In researching the Azurix concession, I obtained documentation through contacts with individuals who had at one point been involved with the concession. Because of the acrimony on both the firm and government sides, both parties proved very willing to share legal materials related to the concession as well as compilations of press coverage from municipal papers. Interviews with former and current decision-makers in the water and sanitation sector in the province proved to be invaluable, especially as I began to interpret the various legal and press materials collected alongside the ICSID ruling, which provides a very detailed summary of the case.

Centro Internacional de Arreglo de Diferencias Relativas a Inversiones (ICSID/CIADI). July, 2006. “Laudo en el Procedimiento entre Azurix Corporation y La República Argentina.” Caso CIADI No. ARB/01/12. Washington, D.C.

Ministerio de Obras Públicas, Provincia de Buenos Aires. “Contrato de Concesión del Servicio Público de Provisión de Agua Potable y Desagües Cloacales en la Provincia de Buenos Aires.” Zona de Concesión No. 1. 1999.

Ministerio de Obras Públicas, Provincia de Buenos Aires. “Licitación Pública Nacional e Internacional para la Concesión del Servicio Público de Provisión de Agua Potable y Desagües Cloacales en la Provincia de Buenos Aires. Pliego de Bases y Condiciones.”

Ministerio de Obras Públicas, Provincia de Buenos Aires. “Licitación Pública Nacional e Internacional para la Concesión del Servicio Público de Provisión de Agua Potable y Desagües Cloacales en la Provincia de Buenos Aires. Circulares. January – July 1999.

Provincia de Buenos Aires. Law 11,820. July 17, 1996.

Córdoba: The Córdoba concession has not attracted much attention from scholars; the cited study by Nickson was the only piece I could locate, and this short piece focuses primarily on

impacts of the privatization upon the poor. The majority of the information about the case discussed in this project is drawn from interviews with and data obtained from the provincial regulator and Aguas Cordobesas officials. I also relied on provincial news coverage of the concession and interviews with individuals in other provinces who had at one point participated in the Córdoba concession.

Contrato de Concesión del Servicio Público de Suministro de Agua Potable de la Ciudad de Córdoba. April 12, 1997.

Contrato de Concesion del Servicio Público de Suministro de Agua Potable de la Ciudad de Córdoba. Acuerdo de Renegociación Diciembre 2005.

Convenio de Modificación del Acuerdo de Renegociación (y sus apéndices y anexos) suscripto el 29 de diciembre de 2005 y aprobado por ley provincial no. 9279.

European Investment Bank. Loan reference 1998-066-EN.

Provincia de Córdoba. "Pliego de Bases y Condiciones para el Concurso Público de Iniciativas Nacional e Internacional para la Concesión del Servicio Público de Suministro de Agua Potable y de la Ciudad de Córdoba." January 1, 1994.

Corrientes: The BID 1996 study and two Artana et al. pieces cited in the references section cover the beginning of the concession. The sector regulator, A.O.S.C., has also published on its website a variety of indicators regarding the concession, including monthly revenues between 1999 and 2002, its judgment of the concessionaire's progress towards meeting its contractual goals by 2002, average tariff levels, and fines levied. I was able to obtain basic legal documentation for the concession from representatives of Aguas de Corrientes, including the bidding conditions for the concession (which includes a model contract) as well the "Acuerdo Marco" of 2005 that ushered in the dramatic changes to the contract following the Argentine crisis. Aguas de Corrientes officials provided detailed data on its annual investments and rate increases. Meanwhile, the print and on-line versions of the main provincial paper, *El Litoral*, provided a great deal of information about the politics of the concession, even if the reporting could be somewhat slanted. Interviews filled in many gaps and helped me interpret the legal and technical documentation.

Ministerio de Obras y Servicios Públicos, Gobierno de la Provincia de Corrientes. 1990. "Pliego de Bases y Condiciones de la Licitación para la Concesión Integral de Explotación de los Servicios de Aguas Potable y Desagües Cloacales en las Localidades de Corrientes (Capital), Goya, Curuzu Cuatia, Mercedes, Santo Tome, Poso de los Libres, Monte Caseros, Esquina, Bella Vista, y Saladas." Licitación Pública 01/90.

Data from ASOC, the provincial regulatory agency
http://www.corrientes.gov.ar/obraspublicas/entes-autarquicos/aosc/default.asp

Poder Ejecutivo, Provincia de Corrientes, Argentina. Decreto No. 2940. December 7, 2005. (Includes "acuerdo marco" in the appendix.)

Formosa: The province of Formosa is a much more closed political environment than Buenos Aires. A complete lack of secondary material on the concession also complicated matters. To obtain documents relating to the concession, it was necessary to get to know individuals who

have been involved with the concession, either during its formulation or its implementation. Representatives from both Aguas de Formosa and the multi-sector public services regulatory agency, E.R.O.S.P., were very helpful and willing to share information, including financial and technical data, once I was in the province. Two local papers, *La Mañana* and *El Comercial*, provided important additional information about the progression of the concession. In recent years, a number of more critical on-line publications have appeared, which allow one to obtain a more balanced set of perspectives on regulatory politics. It would have been impossible to write about the Formosa concession, however, without interviews with the main participants in the concession.

Auditoría General de la Nación, Argentina. 1999. "Informe de Auditoría de Gestión sobre los Contratos de Préstamos No. 3821/AR-BIRF, No. 621-OC/AR y 855-SF/AR – BID."

Contrato de Concesión. November 16, 1995.

Ministerio de Obras y Servicios Públicos, Provincia de Formosa. "Licitación Pública Internacional. Concesión de Servicios Actualmente Prestados por la Administración General de Obras Sanitarias de Formosa en la Ciudades de Formosa y/o Clorinda." Pliego de Condiciones Particulares. April, 1995.

Poder Ejecutivo, Provincia de Formosa. Decreto No. 447. March 23, 1998.

Mendoza: It was possible to gain access to a wealth of documentation about the concession once I had met a number of regulatory and company officials. Legal documentation for the concession was obtained from the provincial legislative archives and former company officials. Regulatory officials were kind enough to facilitate access to company balance sheet information, the firm's progress reports to E.P.A.S. (the regulator), regulatory resolutions, and internal reports assessing the firm's progress towards meeting its contractual goals and its appeals to the provincial Supreme Court. In addition, the presence of two quite respectable provincial papers made it possible to document how the concession unfolded. (While the owners of one of the papers had interests in the concession, the other paper had no ties to the concessionaire. This allowed for a comparison of competing points of view in the newspaper coverage.) Interviews with a range of participants in the concession were invaluable in helping me pull the various pieces together. Information about the primary investors in the concession, SAUR, Azurix, and Sagua, was obtained from firm directors (and ex-directors) as well as public statements reported in the business press and firm annual reports.

Bouygues Group. *Bouygues 2001*. May 31, 2001.

Contrato de Concesión de Obras Sanitarias Mendoza Sociedad Anónima. June 9, 1998.

EPAS. "Situación Plan de Operación y Expansión de OSM SA." Informe Técnico No. 173-02. October, 2002.

EPAS. Resoluciones del Directorio. No. 057-00, 094-00, 091-01, 153-01, 182-01.

EPAS. Resolución de Presidencia No. 147-00 POE (4/26/00).

EPAS. "Resumen documento." May 2, 2007.

Halcrow, Sir William & Partners Ltd. (subcontratada por Pistrelli, Díaz y Asociados y Balter & Asociados a dichos efectos). "Obras Sanitarias de Mendoza S.E. Estado de activos y pasivos a transferir al 31 de diciembre de 1993." July, 1994.

Law 6044/93. Published August 11, 1993 in the Boletín Oficial.

Law 7491/06. Published January 31, 2006 in the Boletín Oficial.

Obras Sanitarias de Mendoza. "Informe de Avance del Plan de Operación y Expansión." 2002 – 2005. (Submitted to E.P.A.S., the regulator).

Poder Ejecutivo. Decree 487/02. Published July 24, 2002 in the Boletín Oficial.

Misiones: Although there is, to my knowledge, no secondary material on the Misiones case, the greater national government involvement in the concession made it somewhat simpler to access documentation for the concession. ENOHSA officials, for instance, possessed a copy of the concession contract and SIGEN had audited the project. Other documents were obtained directly from individuals involved with the privatization process. While the bulk of my interpretation in the case comes from interviews in the province, I was able to cross-check main points with articles published in the main provincial paper, *El Territorio*, and more recently, in several on-line and less "oficialista" news sources.

"Contrato de Concesión. Licitación Pública Internacional No. 01/98: Concesión del Servicio Público de Agua Potable y Desagües Cloacales de las Ciudades de Posadas y Garupá." 1999.

European Investment Bank (2001). Press release reference #2001-003-EN.

Provincia de Misiones. "Pliego de Licitación. Concesión A.P.O.S., Posadas – Garupa." HYTSA estudios y proyectos s.a.. March, 1998.

SAMSA. *Servicios de Aguas de Misiones S.A. 2000*. Posadas, Argentina. (Pamphlet version of first year annual report for the general public)

Sindicatura General de la Nación (SIGEN). 2004. "Ente Nacional de Obras Hídricas de Saneamiento: Contrato de Préstamo BIRF 4484-AR." Buenos Aires, Argentina. (Audit of the loan program)

Salta: The Saltiel 2003 study cited in the bibliography provides a helpful summary of the technical and legal aspects of the concession in Salta. Regulatory and company officials were kind enough to share data regarding the firm's finances and its progress towards meeting contractual goals. The various gubernatorial decrees, laws, and regulatory resolutions cited in the text were obtained from the archives of the provincial chamber of deputies and senate, from government officials, and from the EN.RE.S.P. (regulatory agency) publications cited below. The main provincial newspaper, *El Tribuno,* provided a very helpful source of information regarding regulatory officials' public statements about the concession at various points in time. Interviews with firm representatives, government officials, and union leaders were invaluable in this case in terms of piecing together an interpretation of the case.

"Acta Acuerdo entre el Ministerio de la Producción y el Empleo y SPASSA." June 20, 2003

EN.RE.S.P., *Memoria*. Salta, Argentina. 1998, 1999, 2002, 2003, 2004.

Ministerio de la Producción y el Empleo, Gobierno de la Provincia de Salta. "Contrato para la Concesión Integral de Explotación de los Servicios de Agua Potable y Desagües Cloacales." Approved June 25, 1999 via Decree 2,934/99.

Poder Ejecutivo, Provincia de Salta. Decreto no. 1301. June 4, 2004.

Poder Ejecutivo, Provincia de Salta. Decreto no. 2523. December 20, 2005.

Santa Fe: The Santa Fe concession was better documented than many when I began my study. The cited Roitman and Ferro paper provides an accurate chronology and overview of technical matters. Legal documents relating to the privatization process are housed in the provincial archives. To obtain documentation of contract renegotiations, however, it was most straightforward to inquire through informal channels. ENRESS, the regulatory agency, supplied data on fines levied against the company. Representatives from Suez, formerly the lead investor in Aguas Provinciales de Santa Fe, supplied balance sheet data from the concessionaire's annual reports. News coverage of the concession is mainly from *El Litoral,* the main paper of the capital city of the province. Interviews with a range of participants in the sector helped me interpret the range of material collected.

Contrato de Concesión. November 27, 1995.

ENRESS (Despacho General). Data regarding fines levied against Aguas Provinciales de Santa Fe 1995 - 2006.

Legislatura de la Provincia de Santa Fe. "Ley 11,220." November 24, 1994.

Poder Ejecutivo Provincial. Decreto 221/02.

Provincia de Santa Fe. Privatización de DIPOS. "Pliego de Bases y Condiciones Generales y Particulares para la Concesión del Servicio Público de Agua Potable y Desagües Cloacales en el Ámbito de la Dirección Provincial de Obras Sanitarias." December, 1994.

Santiago del Estero: As one might expect with a province that has historically been known for a closed regime, information about the Santiago concession was difficult to obtain. Tenti's 2005 study of the implementation of Menem's state reform program in the province provides an excellent starting point, however. Legal documentation of the privatization was obtained from individuals who participated in the privatization process. The case also draws upon interviews with individuals familiar with the concession and the general materials published by ENOHSA, cited in section I. Finally, a recent presentation by the firm general manager reports performance targets realized to obtain ISO 24510-12 certification.

Law 6225. Provincia de Santiago del Estero. June 16, 1995.

Ministerio de Obras y Servicios Públicos, Dirección Provincial de Obras Sanitarias. "Concesión de los Servicios de Agua Potable y Desagües Cloacales Actualmente Prestados por Di.P.O.S. y las Municipalidades de Frías y Monte Quemado. Pliego de Bases y Condiciones." December, 1995.

Paz Zavalia, Sebastián. "Workshop: Evaluación y gestión de los servicios de agua Normas 24.500." Buenos Aires. March 22, 2011.

Tucumán: In researching the Tucumán case, I was able to build upon several case studies undertaken by other scholars. Upon examining the primary source material and conducting interviews, however, I found many inaccuracies in existing accounts; the Rais et al. paper cited in the bibliography is by far the most accurate. Librarians at the provincial archives were able to locate copies of the main pieces of legislation, while the library associated with the provincial legislature has a binder containing regulatory resolutions and other legal material dating from the short period during which the concession was in effect. The main Tucumán newspaper, *La Gaceta*, provides a wealth of information regarding the day-to-day progression of the nonpayment campaign and other types of political backlash against the concession. The remaining documents were obtained from participants in the privatization process or from parties in the current ICSID dispute. Interviews, again, helped me ensure that I was interpreting the archival material in an informed manner. Finally, the ICSID award favoring Vivendi, published in August of 2007, provides a synthesis of the main aspects of the case, albeit from a particular point of view.

CETI. 1993. "Análisis y evaluación de la estrategia de inversión." Dirección Provincial de Obras Sanitarias (DiPOS), Provincia de Tucumán.

Concesión del Servicio de Agua Potable y Desagües Cloacales en la Provincia de Tucumán. Contrato de Concesión. May 18, 1995.

Dirección de Obras Sanitarias, Provincia de Tucumán. "Concesión del Servicio de Agua Potable y Desagües Cloacales en la Provincia de Tucumán. Pliego de Bases y Condiciones Generales para la Licitación." May 10, 1994.

Générale des Eaux 1994, 1995 *Annual Report*s.

International Centre for Settlement of Investment Disputes. *Award*. Case No. ARB/97/3. August 20, 2007.

Law 6445/93. Province of Tucumán. Feb. 25, 1993.

Law 6529. Province of Tucumán. December, 1993. (File includes draft bills introduced by the executive branch on August 2 and November 5, 1993)

Poder Ejecutivo. Decreto acuerdo. 7/1-93.

Buenos Aires (AGBA), Catamarca, and La Rioja, I did not conduct site visits for the La Rioja, Catamarca, or AGBA cases, relying primarily upon press coverage, interviews with individuals residing in Buenos Aires, Corrientes, and Misiones who had had important involvement with or knowledge of the concessions, and materials covering the sector more generally, such as

ADERASA benchmarking data. In the case of La Rioja, the concessionaire, Aguas de la Rioja, has published a great deal of information on its website, www.aguasdelarioja.com. Because the primary investors in AGBA are publicly listed companies, information on the structure of their portfolios and public statements regarding firm strategy had been published. (Regarding Impregilo's structure and preferences, for instance, see reports by market analysts following the Milan stock exchange: Intermonte Securities. "Impregilo." May 8, 2001. Crédit Agricole Indosuez Cheuvreux. "Impregilo Construction: 2001 Results." April 2002.

Media/Press Sources Consulted

Actualidad Económica
Agence France Presse
Agencia EFE- Servicio Económico
Los Andes (Mendoza province)
Business News Americas
Catamarca es noticia (Catamarca province)
El Clarín (national paper in Argentina)
El Comercial (Formosa province)
El Cronista (national paper in Argentina)
El Día (Buenos Aires province)
Diario UNO (Mendoza province)
Expansión
FD (FAIR DISCLOSURE) WIRE
The Financial Times
Gaceta de los Negocios
La Gaceta (Tucumán province)
La Hora de Salta (Salta province)
Hoy (Buenos Aires province)
Infobae (national paper in Argentina)
Il Sole 24 Ore
Latin American News Digest
El Litoral (Corrientes province)
El Litoral (Santa Fe province)
La Mañana (Formosa province)
El Mundo
La Nación (national paper in Argentina)
Noticias de Argentina
Noticias Financieras
La Nueva Provincia (Buenos Aires province)
Nuevo Día (Buenos Aires province)
Nuevo Diario de Salta (Salta province)
El País
La Plata Informador (Buenos Aires province)
Prensa Económica
Reuters-Noticias Latinoamericanas
El Territorio (Misiones province)
El Tribuno (Salta province)
Valor Econômico
La Voz del Interior (Córdoba province)

La Unión (Catamarca province)
The Wall Street Transcript
WMRC Daily Analysis

www.catamarcaaldia.com (Catamarca province)
www.corrientesaldia.com.ar (Corrientes province)
www.el-litoral.com.ar (Corrientes province)
www.Formosaahora.com (Formosa province)
www.FormosaYa.com.ar (Formosa province)
www.misionesonline.net (Misiones province)
www.noticiasdel6.com (Misiones province)
www.nuevodiarioweb.com.ar (Santiago del Estero province)
www.nuevarioja.com.ar (La Rioja province)
www.primerafuente.com.ar (Tucumán province)
www.territoriodigital.com.ar (Misiones province)
www.diariopanorama.com (Santiago del Estero province)

E. Interviews

The following list includes interviews with participants in one of the Argentine concessions or related policy areas in Argentina. It excludes off-the-record interviews and conversations with academics and policy institute personnel. Multiple interviews with the same individual are not listed unless they took place in different years.

Aguilar Valdez, Oscar R. 2006. Lawyer, Estudio Beccar Varela. Interview by author. Buenos Aires.

Alberdi, Alejandra. 2006. Legal Director, Obras Sanitarias de Mendoza. Interview by author. Mendoza.

Argenti, Ricardo. 2006. Director of Economic and Financial Analysis and Former President, Ente Regulador de Servicios Sanitarios (ENRESS), Province of Santa Fe. Interview by author. Santa Fe.

Arntsen, Enrique. 2006. Former Director, Aguas Argentinas. Interview by author. Buenos Aires.

Balparda, Hugo. 2005. Senior Analyst, Ente Tripartito de Obras Sanitarias y Saneamiento (ETOSS). Interview by author. Buenos Aires.

Basualdo, Fernando. 2006, 2010. Director, Ente Regulador de Obras y Servicios Públicos (EROSP) and Congressional Representative, Province of Formosa. Interviews by author. Formosa and Buenos Aires.

Ben, Carlos. 2006. General Manager, Aguas y Saneamiento and Former Director, Aguas Argentinas. Interview by author. Buenos Aires.

Berli, Edgardo. 2006. Director for Institutional Relations, Ente Regulador de Servicios Sanitarios (ENRESS) and former Minister for Public Works and Services, Province of Santa Fe. Interview by author. Sante Fe.

Berstein, Horacio. 2007. Lawyer, Union of Users and Consumers. Interview by author. Buenos Aires.

Bidegain, Alejandro. 2006. Senior Consultant, Halcrow Ltd. Interviews by author. Buenos Aires.

Böhm, Luis Eduardo. 2006. Former Minister for the Environment, Province of Mendoza. Interview by author. Mendoza.

Bonifacio, Juan Luís. 2006. Manager, Department of Works, Aguas de Salta. Interview by author. Salta.

Bortolozzi, Edgardo. 2006. Director, Ente Nacional de Obras Hídricas de Saneamiento (ENOHSA). Interview by author. Buenos Aires.

Bozovich, Alejandro. 2006. Manager for Service Quality and Regulation, Aguas Argentinas. Interview by author. Buenos Aires.

Brailowsky, Alexandre. 2005, 2006. Director for Sustainable Development, Aguas Argentinas. Interviews by author. Buenos Aires.

Cabrera, Alejandro. 2006. Director of Finance, Aguas de Formosa. Interview by author. Formosa.

Canone, Daniel Antonio. 2006. General Secretary, Sindicato Obras Sanitarias Mendoza. Interview by author. Mendoza.

Carassale, Juan Manuel. 2006. Lawyer, Estudio Bosch Abogados. Interview by author. Buenos Aires.

Carbonell, José Fernando. 2006. Former Peronist party provincial legislator and privatization commission member, Province of Tucumán. Interview by author. San Miguel de Tucumán.

Cardone, Carlos. 2006. Director, Obras Sanitarias de Mendoza and President, Consejo Federal de Entidades de Servicios Sanitarios (COFES). Interview by email.

Castillo, Rodrigo. 2006. Director, Enron Corporation. Interviews by author. Buenos Aires.

Castro, Julio César. 2006. General Secretary, Sindicato Obras Sanitarias de la Provincia de Buenos Aires. Interview by author. La Plata.

Cavallo, Domingo. 2003, 2006. Former Minister of the Economy and Public Works, Argentina. Interviews by author. Cambridge, MA and Buenos Aires.

Chama, Roberto. 2005, 2006. General Manager, CETI Consulting. Interviews by author. Buenos Aires.

Chamas, Pablo. 2010. Owner, Aguas de Corrientes. Interview by author. Corrientes.

Cinti, Guillermina. 2006. Legal staff for water and sanitation privatization commission, Province of Buenos Aires. Interview by author. La Plata.

Claverol, Ricardo. 2006. Director of Water Management, Ente Provincial del Agua y de Saneamiento (EPAS), Province of Mendoza. Interview by author. Mendoza.

Courel, Carlos Alberto. 2006. Former member of the Chamber of Deputies for the Radical Party, Argentina, and former provincial legislator, Province of Tucumán. Interview by author. San Miguel de Tucumán.

Cruz, Pedro. 2006. General Secretary, Sindicato Único de Trabajadores de Obras Sanitarias – Salta. Interview by author. Salta.

De la Fuente, Omar. 2006. Vice President, Latinaguas. Interview by author. Corrientes.

Diaz, Leandro. 2006. Manager, E.R.S.A.C.T. (the provincial water regulator), Province of Tucumán. Interview by author. San Miguel de Tucumán.

Diaz-Ricci, Sergio. 2006. Member, Tribunal de Cuentas and former ombudsman, Province of Tucumán. Interview by author. San Miguel de Tucumán.

Donnoli, Carlos. 2003. Former Director of Planning, Aguas Argentinas. Interview by author. Buenos Aires.

Ercole, José Oscar. 2006. General Manager, 5 de septiembre S.A. Interview by author. La Plata.

Errazú, José. 2006. General Manager, E.R.S.A.C.T. (the provincial water regulator), Province of Tucumán. Interview by author. San Miguel de Tucumán.

Escalada, Juan Carlos. 2007. President, Unión Nacional de Usuarios y Consumidores, Provincia de Misiones. Interview by author. Posadas.

Estrada, Daniel. 2005. Former Director, Ente Tripartito de Servicios Sanitarios (ETOSS). Interview by author. San Fernando.

Fabian, Luís. Coordinator, BID-IV program, Ente Nacional de Obras Hídricas de Saneamiento (ENOHSA). Interview by author. Buenos Aires.

Ferrero, Juan. 2005. Manager for Contractual Regulation, Aguas Argentinas S.A.. Interview by author. Buenos Aires.

Ferreyra, Alicia Cristian. 2007. Legal Coordinator, Aguas de Salta. Interview by author. Salta.

Fleitas Ortiz de Rozas, Abel. 2006. Director, Anti-Corruption Office, Ministry of Justice and Human Rights, Argentina. Interview by author. Buenos Aires.

Freyre, Rodolfo. 2006. President, Freyre & Asociados S.A. and Former Director, Azurix Corporation. Interview by author. Buenos Aires.

Galeano, Sergio. 2006. Project Leader, Department of Sustainable Development, Aguas Argentinas S.A. Interview by author. Buenos Aires.

García-Posse, Benjamín. 2006. Former Director ("Interventor"), Dirección Provincial de Obras Sanitarias (DiPOS). Interview by author. San Miguel de Tucumán.

Garvich, Eduardo. 2006. Former privatization commission member and Secretaria de Hacienda de la Provincia, Tucumán. Interview by author. Buenos Aires.

Garzonio, Omar. 2006. Former member of regulatory division, Azurix Corporation. Interview by author. Buenos Aires.

Ghio, Román. 2006, 2007. Coordinator, ADERASA benchmarking program, Ente Tripartito de Servicios Sanitarios (ETOSS). Interviews by author. Buenos Aires.

Gómez, Mariano. 2006. Former economist with the Azurix Corporation. Telephone interview by author. Buenos Aires/Houston.

González Cabañas, Jorge Alejandro. 2006. President of the Board of Directors, Aguas de Salta. Interview by author. Salta.

González Thomas, Alberto. 2007. Manager for Administration and Finance, Aguas de Salta. Interview by author. Salta.

Gregorini, Alberto. 2007. Former General Manager, Aguas Provinciales de Santa Fe. Interview by author. Buenos Aires.

Güller, Alfredo. 2006, 2007. Senior Analyst, Ente Tripartito de Servicios Sanitarios (ETOSS). Interview by author. Buenos Aires.

Gusberti, Alfredo. 2006, 2007. General Manager, Aguas de Formosa. Interviews by author. Formosa and by telephone from Buenos Aires.

Heinrich, Martín. 2006. President, Protel Servicios and former manager, Ente Nacional de Obras Hídricas de Saneamiento (ENOHSA). Interview by author. Buenos Aires.

Hernández, Darío. Director of Economic Regulation and Financial Management, Ente Provincial del Agua y de Saneamiento (E.P.A.S.), Province of Mendoza. Interview by author. Mendoza.

Hilbert, Christian. 2007, 2009, 2010. Commercial Manager and later General Manager, Servicios de Aguas de Misiones S.A. Interview by author. Posadas.

Hope, Ricardo Denis. 2006. Director, Administración Obras Sanitarias Corrientes (A.O.S.C.). Interview by author. Corrientes.

Inglese, José Luís. 2006. President, Inglese Consultores S.A. Interviews by author. Buenos Aires.

Isasmendi, Armando. 2009, 2010. President, ENRESP (Salta Regulatory Agency). Interviews by author. Salta and via telephone from Buenos Aires.

Iussig, Bruno. 2005. General Manager, Cooperativa de Obras y Servicios Públicos, Vivienda y Servicios Asistenciales Ltda. (Comaca). Interview by author. Tres de Febrero.

Kippes, Gustavo. 2003. Former consultant to Aguas Argentinas on regulation. Interview by author. Buenos Aires.

Langus, Pablo. 2010. Commercial Director, Aguas de Corrientes. Interview by author. Corrientes.

Lemire, Jean-Bernard. 2003, 2007. Former General Manager, Aguas Argentinas, S.A. Interviews by author. Buenos Aires.

Lentini, Emilio. 2003, 2004, 2005, 2006, 2007, 2009, 2010. Director of the Economics Division, Ente Tripartito de Servicios Sanitarios (ETOSS). Interviews by author. Buenos Aires.

Manfredi, Guillermo. 2007. President, Ente Provincial Regulador de Agua y Cloaca (EPRAC), Gobierno de la Provincia de Misiones. Interview by author. Posadas.

Martínez, Eduardo. 2005. Manager for Institutional Relations, Ente Tripartito de Servicios Sanitarios (ETOSS). Interview by author. Buenos Aires.

Massafra, Javier Nicolás. 2007. President, Ente Regulador de los Servicios Públicos (ENRESP), Salta. Interview by author. Salta.

Mata, Ismael. 2006. Former Subsecretary of Water Resources, Member of the privatization commission for Obras Sanitarias de la Nación, and Director of ETOSS. Interview by author. Buenos Aires.

de Maud'huy, Charles-Louis. 2006. Director, Veolia and former Vice-Chairman, Aguas de la Aconquija, Tucumán. Interview by author by telephone between Cambridge, MA and Paris.

Mendiburo, Nora. 2006. Manager, Consejo Federal de Entes Sanitarias (COFES). Interview by author. Buenos Aires.

de Mendonça, Horacio. 2006. Project Manager, Ente Nacional de Obras Hídricas de Saneamiento (ENOHSA). Interviews by author. Buenos Aires.

Molinari, Alejo. 2005. Director for Quality of Service, Ente Tripartito de Obras Sanitarias y Saneamiento (ETOSS), and of the ADERASA benchmarking project. Interview by author. Buenos Aires.

Muñoz, Eduardo. 2006. Board of Directors, Ente Provincial del Agua y de Saneamiento (EPAS), Province of Mendoza. Interview by author. Mendoza.

Nallar, Daniel Mauro. 2006, 2007, 2009. Auditor General of the Province and former President, Ente Regulador de los Servicios Públicos (ENRESP), Salta. Interviews by author. Salta.

Nevani, Norberto Aldo. 2006, 2007, 2009. General Manager, Aguas de Salta. Interviews by author. Salta.

Otrera, Wylian. 2006. Former Secretary for Public Works and Public Services, Ministry of the Economy and Public Services, Argentina. Interviews by author. Buenos Aires.

Pastorini, Gabriela. 2005. Former coordinator, Aguas Más Trabajo Program, Aguas Argentinas. Interview by author. La Matanza.

Pavon, Karina. 2006. Legal and Commercial Manager, Aguas de Formosa. Interview by author. Formosa.

Pelinski, Javier. 2010. Director, EPRAC (Misiones Province Regulator). Interview by author. Posadas.

Pereyra, Rúben. 2006. Secretary General, Federación Nación de Trabajadores de Obras Sanitarias (FENTOS). Interviews by author. Buenos Aires.

Pérez Gattorna, Eduardo. 2006. General Manager, HYTSA estudios y proyectos S. A. Interview by author. Buenos Aires.

Pochat, Victor. 2006. Former Subsecretary for Water Resources, Argentina. Interview by author. Buenos Aires.

Prado, Cecilia. 2006. Program Manager, PRONAPAC loan program, Ente Nacional de Obras Hídricas de Saneamiento (ENOHSA). Interview by author. Buenos Aires.

Puliafito, José Luís. 2006. Former President of the Board of Directors, Ente Provincial del Agua y de Saneamiento (EPAS), Province of Mendoza. Interview by author. Mendoza.

Puyó, Hugo. 2006. Technical Director, Aguas de Formosa and former manager, A.G.O.S.F. (the former state-owned water utility in Formosa). Interview by author. Formosa.

Qüerio, Federico. 2006, 2007, 2009, 2010, 2012. President, Sagua Argentina S.A. Interviews by author. Buenos Aires.

Raigorodsky, Nicolás R.S.. 2006. Director of Planning for Transparency Policy, Anti-Corruption Office, Ministry of Justice and Human Rights, Argentina. Interview by author. Buenos Aires.

Rey, Osvaldo. 2005. Former Assistant General Manager, Obras Sanitarias de la Nación and Advisor to the Board of Directors of Aguas Argentinas. Interview by author. Buenos Aires.

Rigotti, Marcelo. 2006. Service Quality Manager, Aguas Argentinas. Interview by author. Buenos Aires.

Rohde, Paul Adolfo. 2006. General Manager, Servicio de Agua y Mantenimiento Empresa del Estado Provincial, Chaco. Interview by author. Resistencia.

Sánchez, Dionisio. 2006. General Secretary, Sindicato Obras Sanitarias Formosa. Interview by author. Formosa.

Santacruz, Román. 2006. Director, Aguas de Corrientes. Interview by author. Corrientes.

Saravia, Jorge Andrés. 2010. Director, Córdoba regulatory agency. Interview by author. Córdoba.

Sargiotto, Enrique. 2010. General Manager, Aguas Cordobesas. Interview by author. Córdoba.

Savid, Rogelio. 2006. Former General Manager, Aguas de Tucumán. Interview by author by telephone between Buenos Aires and Jujuy.

Schenone, Omar Raul. Assistant Manager, Cooperativa de Obras y Servicios Públicos, Vivienda y Servicios Asistenciales Ltda. (Comaca). Interview by author. Tres de Febrero.

Schifini, Juan Pablo. 2006. Formerly Vice-President, now President, Asociación Argentina de Ingeniería Sanitaria y Ciencias del Ambiente (AIDIS). Interview by author, Buenos Aires.

Semino, Julio. 2007. Board member (for J.C.R.), Aguas de Salta. Interview by author. Salta.

Sícaro, Eduardo. 2006. Minister for Public Works and Public Services, Province of Buenos Aires. Interview by author. La Plata.

Soria, Raúl. 2005, 2006, 2007. Project Manager, Department of Sustainable Development, Aguas Argentinas. Interviews by author. Buenos Aires.

Taylor, Christian. 2006. Project Manager, Aguas Argentinas. Interview by author. Buenos Aires.

Temple, Ricardo. 2005. Director of Procurement, Aguas Argentinas. Interview by author. Buenos Aires.

Vaca Narvaja, Patricia. 2003. Former Subsecretary for Competition and Consumer Defense. Interview by author. Buenos Aires.

Vallejos, Carlos. 2006. Project Manager, Administración de Aguas Provinciales, Provincia de Chaco. Interview by author. Resistencia.

Vélez, Oscar. 2006. Former General Manager of Obras Sanitarias de Mendoza and Partner, JVP Consultores. Interviews by author. Mendoza and Buenos Aires.

Vich, Sergio. 2006. Offical spokesperson, Administración de Aguas Provinciales, Provincia de Chaco. Interview by author. Resistencia.

Vilas, Carlos. 2003. Former President of the Board of Directors, Ente Tripartito de Obras Sanitarias y Saneamiento (ETOSS). Interview by author. Buenos Aires.

Vucerakovich, Andrés. 2007. Commercial Manager, Aguas de Salta. Interview by author. Salta.

Ybars, Marcelino. 2006. Former Drinking Water and Sanitation Services Manager, E.R.O.S.P. (the provincial multi-service regulator), Formosa. Interviews by author. Formosa.

Zapata, Juan Antonio. 2006. Former Secretary for Economic Reform Assistance to the Provinces, Ministry of the Economy and Public Services, Argentina. Interview by author. Mendoza.