ABSTRACT

High renegotiation rates have been observed in infrastructure concession agreements. Two recent studies found close to half of infrastructure concessions were renegotiated (Guasch and Straub 2006, Woodhouse 2006). Incomplete contracts, the “obsolescing bargain,” and opportunistic bidding have all been suggested as potential reasons for this phenomenon. While many studies offer different explanations for the occurrence of renegotiations, relatively few have written on the renegotiation process itself. Moreover, most infrastructure investment research has studied renegotiations with a rational “calculating” perspective but has generally overlooked other non-strategic factors that may influence stakeholder decisions. This paper addresses these two gaps by developing a framework integrating strategic and cultural factors in the analysis of investors’ responses to government’s renegotiation requests. Hypotheses linking renegotiation approaches—ranging from relational bargaining to legalistic arbitration or litigation—to strategic factors and cultural dimensions of the lead investors are discussed. As a demonstration of the research framework, a case study – California State Route 91 Toll Express Lanes Project is presented.

KEYWORDS: Renegotiation, Arbitration, Public-Private Partnership, Culture

INTRODUCTION

In recent years, governments around the world are increasingly turning to the Public-Private-Partnership (PPP) delivery method to develop infrastructure projects (Lonsdale, 2005, Clarke, 2000, Gerrard, 2001). In a PPP project, the government typically invites private investors to finance the construction of an infrastructure project that was traditionally financed by the government, such as roads, power plants, and sewerage systems. In return, investors are granted a period of time, called the concession period, that typically runs 15 to 30 years, to operate and collect revenue from the government or end users to recoup their investment.

Although PPP may be a solution for governments with limited fiscal resources to bring bridges and electricity to citizens, private participation in infrastructure development presents numerous challenges. For one, international infrastructure developments often experience renegotiations during the concession period, adding uncertainties to both governments and investors. A study by the World Bank found that 40% of infrastructure concessions during the 1990s were renegotiated at some point (Guasch and Straub, 2006). Another report on energy concessions in developing countries found that 21 of the 34 cases studied (61.8%) underwent either mutual or unilateral renegotiations (Woodhouse 2006). Harris (2003) suggests that concerns over renegotiations and other political risks led to lower level of private investment in infrastructure in the early 2000’s. A better understanding of PPP renegotiations enables private

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investors and governments to better manage PPP projects, and thus deserves the attention of both researchers and practitioners.

EXPLANATIONS FOR HIGH RENEGOTIATION RATE IN PPP PROJECTS

The development of infrastructure and the renegotiation of concession agreements concern many academic disciplines such as economics, management, and law. Scholars from these disciplines have offered different explanations for the high renegotiation rate observed in infrastructure concessions, including incomplete contracts (Hart and Moore, 1988, Lonsdale, 2005, Guasch and Straub, 2006), the “obsolescing bargain” (Vernon, 1971), process specificity (Chang, 2007) and opportunistic bidding (Ho and Liu, 2004).

Limitations of Prior PPP Renegotiation Research

There are two limitations to the PPP renegotiation literature. Firstly, studies on PPP renegotiations tend to focus on the causes of renegotiation. Incomplete contracts, the “obsolescing bargain,” and opportunistic biddings are all examples of potential explanations for why renegotiations happen. While many scholars have identified renegotiation risk factors, relatively few have written on the renegotiation process itself. Another limitation of the existing research on concession renegotiation is that the studies are often conducted with a rational “calculating” perspective. Economic theories such as game theory lead scholars to assume that stakeholders engage in actions that maximize their utilities. As a result, renegotiation has often been labeled as stakeholder opportunistic behavior when either side has more bargaining power than the other. While calculated motives may provide partial explanations for human decisions, prior research has shown that other non-strategic factors such as culture can affect project member behavior as well. For instance, Horii and Levitt (2005) model and analyze how culture influences the operation of multi-national (US-Japanese) project teams. Studies incorporating non-strategic factors such as culture to the analysis of renegotiation process may provide new insights to the understanding of PPP renegotiations.

A notable exception to the above two limitations was the observation by Wells (2006) regarding his experience of power sector concession renegotiations in Indonesia. In his book Making Foreign Investment Safe, Wells (2006) provides a detailed account of the renegotiation process he observed through his consulting experience. Furthermore, he points out that Japanese investors tend to engage in renegotiations and try to reach compromise when confronted with renegotiation requests initiated by the Indonesian government, whereas Americans tend to settle disputes through legal means. While his comment marks an important awareness of the potential impact culture has on the renegotiation process, it shares a common shortcoming with many early applied psychology studies of intercultural negotiations: namely by using “geographical location as a surrogate for culture, and consequently, it is often not possible to specify the aspects of culture that account for observed differences.” (Gelfand and Dyer, 2000, p.63)

In this paper, I suggest a research framework to fill the aforementioned gaps by incorporating cultural elements into the analysis of investors’ decision between arbitration and renegotiation in PPP projects. First, findings linking culture and negotiation will be discussed. Based on that body of literature, I then discuss the proposed research framework and present the hypotheses. Finally, a case study analyzed with the research framework is presented as a demonstration. Figure 1 summarizes the positioning of the current research with respect to existing literature.
CULTURE AND NEGOTIATION

Scholars have offered many different definitions of culture, (examples include Herskowitz, 1955, Faure and Rubin, 1993, Lytle et al., 2005). In nontechnical terms, culture is often described as the personality or the character of a group of people (as mentioned in Markus and Hamedani, 2007, Adair and Brett, 2004). With its far-reaching influence on human behavior, culture plays an important role in cross-cultural social interactions including negotiations (Brett, 2000).

Negotiation is a process by which two or more parties resolve perceived incompatible goals (Carnevale and Pruitt, 1992). Early negotiation theories were heavily influenced by the Western-biased underlying assumptions (Brett and Gelfand, 2005, Pruitt and Carnevale, 1993, Triandis, 1994). Case in point, subject to their cultural characteristics such as rational reasoning and low-context communication, western scholars recommend negotiators to openly share information and objectives in order to identify values (examples include Bazerman and Neale’s (1993) seminal book Negotiating Rationally, as noted in Brett and Gelfand 2005). While such a recommendation may yield favorable results in negotiations between low-context communicators who act rationally, it may be less effective in negotiations involving high-context negotiators, such as members of non-western cultures. In recent years, scholars have attempted to address this issue by incorporating culture into negotiation research.

Research on Culture and Negotiation using Cultural Dimensions

One way to conceptualize cultural differences displayed by nationals of different countries is the dimensional approach. The concept of the dimensional approach is that “cultural differences may reflect underlying basic value orientations, beliefs, and worldviews prevalent in a context; however, these differences can be best and most parsimoniously captured by identifying and describing cultures according to where they fall along a series of dimensions”
Over the last three decades, researchers such as Hofstede (1980, 2001), Schwartz (1992, 1994, 1999), Inglehart (1997, 2005, 1998), and the scholars in the GLOBE study (House, 2004) have offered different cultural dimensions that explain cultural psychological variation. Using these different dimensions, researchers have shown the connections between cultural differences and negotiation.

The most frequently cited cultural dimension in studies of negotiation is collectivism-individualism (Leung, 1998). In a simulated negotiation experiment using MBA students from the United States, China, India, and Philippines, Morris et al. (1998) found that societal conservatism positively relate to the use of avoiding style (uncooperative and unassertive behavior) in conflict resolution. They also found that Chinese participants displayed a greater tendency to use the avoiding style; whereas Americans were more ready to use competing style (uncooperative and assertive behavior) compared to others. In a separate study, Tinsley and Weldon (2003) found that American managers were more likely respond to conflicts with a direct approach; whereas their Chinese counterparts tended to use an indirect approach. Contrary to cross cultural theories which suggest interpersonal harmony is more important in collectivistic culture, their findings showed Chinese managers displayed a stronger desire to shame their counterparts in response to a normative conflict.

In another study, Tinsley (1998) developed three models for conflict resolution: deferring to status power, applying regulations, and integrating interests and suggested that preference over which conflict resolution model to employ depends on the negotiator’s cultural dimensions of hierarchical differentiation, explicit contracting, and polychronicity. He hypothesized that U.S. managers would prefer integrating interests; German managers would prefer utilizing existing regulations; and Japanese managers would prefer deferring to status power. His results generally confirmed the hypotheses posted. In a later follow-up study, Tinsley (2001) was able to account for the cultural group variance by adding individualism to the analysis of conflict management strategy based on cultural values. In a third study, Tinsley and Brett (2001) found different conflict resolution norms for U.S. and Hong Kong managers. They found that U.S. managers were more likely to discuss issues, synthesize mutual interests, and resolve issues. On the other hand, Hong Kong managers were more concerned with authority and more inclined to take issues to higher management. The authors attributed the observed difference to differences on the cultural dimensions of individualism, egalitarianism, and openness to change.

**Issues Concerning the Application of Existing Intercultural Negotiation Literature to PPP Projects**

In their article discussing cultural elements of the underlying assumptions of negotiation theory, Brett and Gelfand(2005) point out that many of the studies on culture and negotiation collect their data through simulated negotiation experiments involving international students (examples include Adair and Brett 2005; Gelfand and Christakopoulou 1999; Tinsley and Pillutla 1998; Tinsley and Brett 2001; Morris et al. 1998; Gelfand and Realo 1999). Although using students as subjects in experiments provide a large N dataset for quantitative analysis, students’ responses and actions may not be good indicators of practitioner behaviors in International Business research and the external validity of studies with students as subjects are thus undermined (see Bello et al., 2009). Another common research design of the literature is using questionnaire (examples include Triandis et al. 2001, Tinsley 1998). In these studies, practitioners generally are given a hypothetical scenario and are asked to provide a likely response. The weakness of this approach is that responses to hypothetical situations often differ from actual behaviors. In his study comparing stated intentions and actual behaviors, Charles...
Manski (1990) observes that intentions data only bounds, but does not predict, likely subsequent behavior. The gap between questionnaire response and actual behavior is likely to widen when practitioners confront megaproject issues, where decisions carry enormous consequences and the stake is high both financially and socially. The last shortcoming of using simulated experiments or surveys is that they are both subject to short-term perspectives. With experiments and surveys completed in a matter of hours if not minutes, neither approach captures the long term aspect of megaproject negotiations (Brett and Gelfand, 2005). While analyzing how students behave in an Architecture/Engineering/Construction (A/E/C) problem-based learning experiment, Zolin et al. (Zolin, 2003 #355) observed that the length of the experiment played a crucial role in allowing participants to develop professional identity and relationships with other participants. By using a research method that deviates from those typically employed in previous intercultural negotiation research, I hope to further the understanding of how and to what extent cultural differences affect the PPP renegotiation process.

**RESEARCH METHODOLOGY**

**Dependent Variable**

An important part of the renegotiation process is the negotiation strategy/approach employed by stakeholders. In strategic alliances, partnering companies can choose between the structural/legal approach and relational approach in their business dealing, including negotiations (Faems et al., 2008). In the context of infrastructure investment, private investors’ legalistic and relational responses to government-initiated contract renegotiation requests lead to arbitration and renegotiation respectively (Wells and Ahmed, 2006). Building on Edkins and Smyth’s (Edkins and Smyth, 2006) relational-legal continuum, I have developed a coding scheme to record the different degrees of relational and legalistic approaches employed by PPP investors (See Appendix 1).

**Independent Variable**

**Cultural Factors**

Scholarly work by Hofstede (1980, 2001), Schwartz (1992, , 1994, , 1999), Inglehart (1997, 2005, 1998), and the GLOBE study (House, 2004) help elaborate the abstract idea of culture into various cultural dimensions. Comparison of the four different approaches is beyond the scope of this paper and readers can consult Terlutter, Diehl, and Mueller (2006) for a comprehensive review. For this study, dimensions and values from the GLOBE study are used because they clearly distinguish between cultural values (desired behaviors) and practices (frequently observed behaviors), and the two sometimes diverge (Den Hartog, 2004, Terlutter et al., 2006). In addition, the GLOBE study provides a more recent sample from managers of multiple organizations and thus offers subjects that are similar to PPP practitioners.

Although the GLOBE study captures cultural values and practices at a societal level instead of an individual level, individuals share values and adopt practices through interaction with other members of their society. Thus, average or typical values and practices of a society are reasonable proxies for those of their individual members (Terlutter et al. 2006).

**Strategic Factors**

Many of the strategic motivations for an investor’s renegotiation approach fall under the influence of what Heide and Miner (1992) refer as the “shadow of the future”. Investors who
hope to maximize long term gain may take actions that do not necessarily maximize immediate reward but will lead to more favorable scenarios in the future. Besides the investor’s nationality, Wells (2006) also observed companies that have little intention for future business or few ongoing business ties in the host country tend to exercise arbitration; whereas those that have more current or future business activities tend to renegotiate. In my research, Well’s observation on the link between strategic factors and renegotiation approach will be tested in a larger sample of countries besides Indonesia. In order to achieve that, I have developed a coding scheme to record the levels of future business involvement and current business ties an investor has in a host country. Coding schemes for these independent variables, as well as the aforementioned dependent variables, can be found in Appendix 1.

Hypotheses

To build on the observations made by Wells (2006) in the handful of Indonesian projects and findings from the aforementioned intercultural negotiation research, the following hypotheses are proposed to test the collective and interactive effects strategic and cultural factors have on PPP investors’ renegotiation approaches:

*H1: The higher the level of current investment a lead sponsor has in the host country besides the infrastructure project, the more likely it will employ a relational renegotiation approach.*

*H2: The higher the level of future business plans a lead sponsor has in the host country beyond the infrastructure project, the more likely it will employ a relational renegotiation approach.*

*H3: Higher assertiveness of the investor’s cultural practice scores will lead to a more legalistic renegotiation approach.*

*H4: Higher collectivism I of the investors will lead to a more relational renegotiation approach.*

*H5: Higher future orientation will lead to a more relational renegotiation approach.*

*H6: Higher humane orientation will lead to a more relational renegotiation approach.*

Data Collection and Analysis

I will use Charles Ragin’s (2000) fuzzy-set Qualitative Comparative Analysis (fsQCA) to analyze the data in this study. Unlike traditional statistical regression analysis, QCA does not rely on large-N sample for its analysis. Instead, it uses Boolean Algebra with binary or fuzzy set variables to determine the necessity and sufficiency of conditions (independent variables) to cause the observed outcomes (dependent variables). One of the major strengths of fsQCA is that it allows researchers to investigate the integrative and conditional effects of multiple independent variables (Ragin 2000). This helps achieve the research objective of finding the extent and conditions under which strategic and cultural factors affect investors’ renegotiation approach. An intermediate-N sample (9-12 cases) is to be identified using the Public Works Financing (PWF) database, which tracks worldwide PPP projects. Through online database such as Factiva, I will research on the renegotiation history of each project and identify key renegotiation data. In some projects, I will also conduct interviews with the projects’ senior managers and executives who have direct involvement with the projects to verify the accuracy of the online news sources and to collect unpublished information regarding the renegotiation process. In the following section, an illustrative case study – Orange County’s State Route 91 Toll Express Lanes is analyzed using the aforementioned research framework.
ILLUSTRATIVE CASE STUDY – CALIFORNIA STATE ROUTE 91 TOLL EXPRESS LANES PROJECT

Project Introduction

State Route 91 (SR-91) was opened in 1968. The 8-lane highway served as the main east-west corridor between Los Angeles and Riverside County (Figure 2). With the rapid development of the Los Angeles suburbs, particularly Orange County and Riverside County, the traffic volume on SR-91 more than doubled from 91,000 vehicles per day in 1980 to 188,000 vehicles in 1990 (Miller, 2002). However, California’s inability to raise taxes and the political struggle between Orange County and Riverside County kept the improvement of SR-91 from getting the resources to go forward.

Figure 2 - Map of SR-91 and highlighted Express Lanes

Recognizing the difficulty of expanding SR-91 with traditional public funds, the California legislature passed Assembly Bill 680 in 1989 to authorize the California Department of Transportation (Caltrans) to partner with private companies to build, operate, and lease up to four transportation projects. The decision essentially paved the way for turning the SR-91 expansion plan into a PPP project. Four lanes would be added within the median of the 10-mile stretch of freeway between SR-55 and the county line of Riverside County (Figure 4). Drivers can choose using the less-congested express lanes for a fee or remaining in the original freeway lanes for free. By partnering with private investors, the state avoided the need to finance the $130 million construction cost itself by selling bonds. In return, the investors were granted a 35-year operation period to collect tolls from express lane drivers recoup their investment. One key condition of the agreement was the non-compete clause agreed to by Caltrans. The clause would become influential to the development of the project and will be discussed in further details later.

The consortium that won the right to build and operate the project was California Private Transportation Company (CPTC). It was composed of three main equity partners:
• Peter Kiewit Sons’ – an experienced heavy infrastructure firm founded in 1884. As the major investor in CPTC (65% ownership interest), it also provided project management, construction management, and financial services for the project (Miller, 2002).
• Granite Construction – a large transportation contractor. In addition to its 25% equity stake in the project, Granite also received the 56.8 million construction contract as a part of the deal (Levy, 1996). In addition to the SR-91 collaboration, Granite also partner with Kiewit in the neighboring San Joaquin Hills (SR-73) toll road project.
• Cofiroute – the world’s largest toll road operator headquartered in France (Levy, 1996). It served as a limited partner and provided traffic and toll management services for the consortium.

The Operation and the Conflict

The SR-91 express lanes officially opened to traffic on December 27, 1995 and brought immediate relief to the heavily congested freeway. It reduced the typical delays along the 10-mile stretch from 20-40 minutes during peaked hours to less than 10 minutes (Sullivan, 2000). Since it brought traffic relief to drivers of express lanes and the original free lanes, SR-91 express lanes were well received by the general public.

With the commute substantially improved, increasing number of residents moved to Riverside County to take advantage of the more affordable housing. At the same time, some drivers made abrupt lane-shifts as they were deciding whether to use the express lanes and thus creating safety hazards. As a result, demands for expanding the free SR-91 lanes began to surface, particularly in the popular press (Price, 2001). As Caltrans began to consider various traffic improvement proposals, some criticized the agency’s motive was not to improve safety but to expand the capacity of free lanes for citizens. Critics argued any expansion of free lanes would undermine the demand for the fee-based express lanes and violate the “non-compete” clause of the partnership agreement.

Dependent Variable - Renegotiation Approach

Facing potential expansion activities from Caltrans, CPTC took legal actions quickly. Price (2001) comments in his report that before the question could be resolved within the provisions of the partnership, a prudent and anxious CPTC exercised the non-compete clause in its operating agreement with the state. Without seeking further dispute resolution pursuant to the agreement, the CPTC filed a lawsuit in March 1999 asking for damages as a result of Caltrans’ action to plan enhancements. (p.263)(italic emphasis by author)

In a seminar addressed to the Stanford University students, the former Granite manager who had overseen the SR-91 project recalled the consortium chose immediate legal actions as soon as they learned of the potential expansion plan to the free lanes. The partners and their lenders asserted that any expansion of the free public lanes would make the project unviable.

In September 1999, one month before the lawsuit settlement was to be announced, CPTC attempted to sell the project to a startup nonprofit organization called New Trac, which was formed by CPTC itself. Critics argued that buying the project from a company created by CPTC with tax-exempt bonds issued by the state was not in the public interest. The proposed deal was widely perceived as a sweetheart deal and raised a major political outcry(Sullivan, 2003). Amid the controversy, CPTC dropped its proposed sales plan.

After the failed sale of the project to New Trac, the settlement to the legal dispute was announced in October 1999. As Price (2001) reported, the settlement reaffirmed and more
clearly interpreted the non-compete clause. The objectives of the settlement agreement were to ‘safeguard the economic viability of the Project and CPTC’s substantial capital investment’ as well as ‘restrict the right of Caltrans to design, finance, construct or operate any public transportation facility with the Absolute Protection Zone and restrict Caltrans’ right to adversely affect the volume to traffic to, or the revenues generated by, the Project’ (p.263, Settlement Agreement, 1999, p.1-2).

After immediate legal action from the consortium, it is evident that the disputing parties engaged in a dialogue as they contemplated a deal that would sanction the sale of the project to New Trac. In the end, the two sides could not reach any agreement following the failed sale attempt. The dispute was resolved with the announcement of legal settlement. Thus, the case is classified as Mostly Legal (score of 0.3) on the relational-legalistic renegotiation approach continuum.

**Independent Variable – Strategic Factors**

*Future Business*

Following the opening of SR-91 express lanes, the two largest investors of CPTC – Kiewit and Granite changed their business strategies and did not want to remain involved in the project (Sullivan, 2003). In the aforementioned seminar, the former Granite manager explained despite the fact that the project was profitable, the rate of return was not high enough to justify the large sum of equity investment required from the two contractors.

Unable to back up the argument that the road would be unsafe without additional public lanes, Caltrans officials later acknowledged that Caltran’s support for the proposed sale was a condition to the settlement agreement itself (Kindy and McKim, 2000). With the proposed sale to New Trac canceled, Caltrans settled and was prohibited from adding any free public lanes. Nonetheless, critics suggested the proposed sale to New-Trac “was a sign that the CPTC had come to see the project as too risky for the partners’ continued involvement” (Price, 2001, p.264). In April 2002, CPTC finally agreed to sell the project to the Orange County Transportation Authority (OCTA) for $207.5 million. The transfer of ownership was officiated by Assembly Bill 1010, which also prohibited any new franchises after January 1, 2003.

While Kiewit hasn’t invested in another toll road in California following the passage of AB 1010, the major investor of SR-91 express lanes remains an active developer and builder of toll roads in other North American cities. Since the sale of the SR-91 express lanes to OCTA, Kiewit has been involved in eight different toll road projects to various extents. In particular, in 2007, it took on the role of major investor in the TX183/I-820 project in Dallas.

To evaluate Kiewit’s future business interests, it is important to recognize the many future ties Kiewit was expected have with Caltrans. Since no toll road franchise has been allowed in California with the passing of AB 1010, it is impossible to observe Kiewit’s interests on toll road investment in California after the SR-91 project. However, with its core business in heavy construction such as roads and highways, Kiewit constantly tender construction projects from transportation agencies throughout the country, including Caltrans. So even if Kiewit was not planning to invest in future California toll roads, it will still do business with Caltrans on a regular basis, as it has been for decades. In addition, Kiewit could still be a toll road investor in other states. The eight different toll road projects it has been a part of since the SR-91 investment suggest it intended to remain active in the toll road business. Thus, a Future Business score of 1 is assigned to Kiewit in this case study.
**Current Investment**

Similar to the argument above, Kiewit is involved in multiple transportation construction projects under the supervision of Caltrans at any given time. Concurrent to their development of SR-91, Kiewit and Granite were also involved in the neighboring San Joaquin Hills (SR-73) toll road project, also under Caltrans. Thus, a score of 1 is assigned to the Current Investment variable.

**Cultural Dimensions of Lead Investor**

With most of their offices and projects located within the U.S. (the rest primarily in Canada) and a team of senior executives dominated by Americans, Kiewit can be considered an “All-American” company. The cultural scores of the Kiewit senior executives are thus assumed to resemble those of the U.S. across all cultural dimensions. Table 1 shows the cultural practice and value scores of the U.S from the GLOBE study (2004) finding.

<table>
<thead>
<tr>
<th>Cultural Dimension</th>
<th>Society Practices (As Is)</th>
<th>Society Values (Should Be)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertiveness</td>
<td>4.55</td>
<td>4.32</td>
</tr>
<tr>
<td>Collectivism I</td>
<td>4.20</td>
<td>4.17</td>
</tr>
<tr>
<td>Future Orientation</td>
<td>4.15</td>
<td>5.31</td>
</tr>
<tr>
<td>Humane Orientation</td>
<td>4.17</td>
<td>5.53</td>
</tr>
</tbody>
</table>

* 7-point scale. Higher score indicates greater exhibition of the dimension.

It is interesting to note the discrepancy between society practice and values on the last two dimensions - Future Orientation and Humane Orientation. The data shows that Americans in general think they should endorse long-term perspectives and engage in humane behavior more than they practice. Society practice will be used first to test the correlation with renegotiation approach when information for other projects are collected. However, society values will be tested as well if the society practice values of these two dimensions among projects fail to show strong relationship with renegotiation approach.

**CONCLUSION**

Scholars from various disciplines have offered different explanations for the high renegotiation rate in PPP contracts. Using fuzzy set Qualitative Comparative Analysis, this research looks beyond the causes for renegotiation and studies how cultural factors interact with strategic factors to influence PPP investors’ response to government-led renegotiation requests. Research findings will help both government officials and private lenders to better predict the renegotiation approach adopted by the investors should the government suggest renegotiation during the concession period. The findings will help practitioners to better manage the renegotiation process and thus increase the effectiveness of using PPP as a tool to address the problem of funding much needed infrastructure projects confronting many governments around the world.
**APPENDIX 1**

*App. Table 1 – Coding Scheme for the Dependent Variable: Relational-Legalistic Renegotiation Approach Continuum*

<table>
<thead>
<tr>
<th>Relational-Legalistic Renegotiation Approach Continuum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Completely Legalistic</strong></td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>Investor opts for litigation or arbitration without any recorded attempted negotiation with the government. The outcome of the dispute is determined by the court/arbitrator ruling.</td>
</tr>
<tr>
<td><strong>Mostly Legalistic</strong></td>
</tr>
<tr>
<td>0.3</td>
</tr>
<tr>
<td>Investor takes immediate legal actions by initiating litigation or arbitration. After legal action is taken, some degrees of bargaining with the government is recorded but fail to reach agreement. The outcome of the dispute is determined by the court/arbitration ruling.</td>
</tr>
<tr>
<td><strong>Half and Half</strong></td>
</tr>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>Investor either:</td>
</tr>
<tr>
<td>a) takes immediate legal actions preceding renegotiation bargaining. Bargaining effort leads to settlement out of court and no court/arbitrator ruling results, or</td>
</tr>
<tr>
<td>b) engages in renegotiation bargaining with government officials preceding legal actions. Renegotiation does not lead to agreement and the dispute is ultimately settled by court/arbitrator ruling.</td>
</tr>
</tbody>
</table>
Mostly Relational
Investor immediately engages in bargaining negotiation as soon as the government suggests contract renegotiation. Legal actions are taken after a substantial period of bargaining (more than 3 months). Bargaining effort leads to settlement out of court and no court/arbitrator ruling results.

Fully Relational
Investor engages in a dialogue with government officials as soon as contract renegotiation is suggested. No legal action is taken and agreement is reached between the parties.

**App. Table 2 – Coding scheme for Future Business variable**

<table>
<thead>
<tr>
<th>Future Business</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor does not plan to conduct business in the jurisdiction governed by the host government agency (ex. in California when the dispute is with Caltrans). Observe significantly lower level of business activities by the investor in the same area (state/province/country) during the 3 years after dispute resolution of the case study project.</td>
<td>0</td>
</tr>
<tr>
<td>Investor considers reducing future exposure in the host country (state/province). Observe moderate decrease of business activities by the investor in the same area during the 3 years after the dispute resolution of the case study project.</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Investor's future business plan in the host country (state/province) not negatively impacted by the dispute or its outcome. Business activities in the area follow the trend line 3 years before and 3 years after the dispute resolution date.

**App. Table 3 – Coding scheme for Current Investment variable**

<table>
<thead>
<tr>
<th>Current Investment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Investor's exposure of other investments in the host country that can be negatively affected by the government is less than 50% of the project value of the case study project.</td>
</tr>
<tr>
<td>0.5</td>
<td>Investor's exposure of other investments in the host country that can be negatively affected by the government is between 50% and 150% of the project value of the case study project.</td>
</tr>
<tr>
<td>1</td>
<td>Investor's exposure of other investments in the host country that can be negatively affected by the government is more than 150% of the project value of the case study project.</td>
</tr>
</tbody>
</table>
REFERENCES


