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Within-country religious diversity and the performance of private participation infrastructure projects

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ABSTRACT

This paper investigates the impact of within-country religious diversity on the performance of private participation infrastructure projects. Our analysis of 8139 projects in 33 countries (1990–2014) shows that higher levels of within-country religious diversity are associated with a higher risk of project failure. This negative effect is exacerbated in greenfield projects and when a project's main sponsor is a foreign firm. In contrast, we find no moderation effect for local government ownership. The study contributes to the ongoing debate regarding the effects of within-country diversity on foreign business ventures.

1. Introduction

Scholarly interest in within-country diversity has increased in recent years in response to the critique that this type of diversity is ignored in studies of cross-country differences (Shenkar, 2001, 2012; Tung, 2008). Challenging the assumption of within-country homogeneity, recent studies have offered fine-grained insights into the effects of within-country diversity on foreign-investment decisions and performance (Beugelsdijk, Maseland, Onrust, van Hoorn, & Slangen, 2015; Beugelsdijk, Slangen, Maseland, & Onrust, 2014; Dow, Cuypers, & Ertug, 2016). However, the evidence to date has been mixed. Beugelsdijk et al. (2014) suggest that multinational enterprises (MNEs) are more likely to focus on culturally similar customer segments when within-country diversity is greater. On the other hand, Dow et al. (2016) maintain that within-country religious and linguistic diversity hampers information-gathering efforts in cross-border acquisitions, thereby increasing the potential problems of *ex-ante* information asymmetries and *ex-post* behavioral uncertainty. Moreover, while these studies have shown that within-country diversity has an effect on MNE affiliates' sales and decisions concerning the equity share in cross-border acquisitions, little is known about how within-country diversity affects business ventures in which local and/or foreign firms must work closely together.

Our study focuses on religion as one element of within-country diversity that affects local and foreign firm collaborations in the context of private participation infrastructure projects. Religion is a focal point of analysis in several papers that pay special attention to consumer and consumption behavior (Cleveland, Laroche, & Hallab, 2013; Engelland, 2014; Jamal & Sharifuddin, 2015; Minton, Kahle, & Kim, 2015; Montgomery, 2003). However, the extant literature has not considered the effect of religion at the presence of firm foreignness and inter-firm collaboration. Dow et al. (2016) analyzed the impact of religious beliefs on MNEs' decisions in relation to foreign acquisitions, but not inter-firm collaboration. Beugelsdijk et al. (2014) investigated the latter, but from a point of linguistic differences. Therefore, our study is the first to investigate within-country religious diversity effects in projects consisting of legally independent organizations.

Religion is a fundamental determinant of how a society communicates and interacts, and whether certain behaviors are acceptable (Dow & Karunaratna, 2006; Shenkar, 2001). Religion also has a significant impact on how corporate cultures evolve over time. In fact, the spirit of capitalism has shown to be deeply rooted in historical religious developments (Weber, 2011). Religious differences remain one of the main sources of political and civil conflicts, and they have had negative impacts on human and economic development in general (VanAlstine, Cox, & Roden, 2013). At the firm level, they are known to affect investment decisions (Martin & Drogendijk, 2014). While less studied than other cultural factors, religion is one of the most distinctive cultural features (Berry, Guillen, & Zhou, 2010; Castellani, Jimenez, & Zanfei, 2013; Dow & Karunaratna, 2006; Gomez-Mejia & Palich, 1997; Shenkar, 2001). Managers are keenly aware of differences in religion, as they more visible than other cultural components (Dow et al., 2016).

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Moreover, religious affiliation and diversity within a country have been found to be significant predictors of managerial decisions (Berry et al., 2010; Castellani et al., 2013; Dow & Karunaratna, 2006; Ghemawat, 2001; Jiménez & de la Fuente, 2016).

While religion broadly affects the organization of economic activity in society and various aspects of firm activity, this paper focuses on a particular phenomenon—partially privatized infrastructure projects. The World Bank uses the term "private participation projects" to refer to privatized infrastructure projects in which domestic firms and/or MNEs play a significant role as "sponsors"—private investors that have equity ownership in the project. While MNEs have been excluded from sponsoring infrastructure projects in the past (Henisz, Zelner, & Guillen, 2005), private ownership in infrastructure projects has increased significantly in the last two decades (Jiang, Peng, Yang, & Mutlu, 2015; Ramamurti & Doh, 2004).

Private participation projects typically involve a consortium comprised of multiple foreign and/or domestic sponsors that must engage in close collaboration to ensure their successful execution and completion. Given the characteristics of this kind of project, we follow previous studies (Jiang et al., 2015) in treating those projects that have completed the bidding process, fulfilled the legally binding agreements, raised the necessary funds, and have not been prematurely terminated by investors or the state as successful. These projects involve a wide range of stakeholders, such as local governments, suppliers, regulatory bodies, and consumer-advocacy groups. To accurately interpret the behavior of these stakeholders, private sponsors must understand the host-country idiosyncrasies, which are shaped, at least in part, by religious principles and doctrines.

The extant literature on infrastructure investments has studied various factors, including the privatization method (Djankov, 1999); state ownership (Doh, 2000; Doh, Teegen, & Mudambi, 2004; Inoue, Lazzarini, & Musacchio, 2013); policy reforms (Henisz et al., 2005); and host-country characteristics, such as political stability (Jiang et al., 2015) and government credibility (Ramamurti, 2003). However, the role of within-country heterogeneity has largely been neglected. We therefore extend previous research on infrastructure privatization by exploring the role of within-country religious diversity. More specifically, we aim to address the following research questions: (1) How does within-country religious diversity affect the performance of private participation projects? (2) How do various project-level characteristics moderate this relationship?

Private participation infrastructure projects serve as an ideal empirical setting for testing the performance implications of within-country diversity in the host country. The ubiquity of infrastructure projects implies that foreign sponsors encounter a wide range of cultural contexts with different levels of within-country diversity. At the same time, as infrastructure projects typically provide essential services to a wide range of users with different socioeconomic backgrounds, they are likely to be influenced by within-country diversity. By investigating the implications of diversity within the host country for the performance of private participation projects, our study complements previous studies and is, to the best of our knowledge, the first to explore the business-performance implications of within-country diversity in an international context.

In order to answer our research questions, we analyze a sample of 8139 private participation projects in 33 countries. Our theoretical predictions are based on two related premises. First, within-country religious diversity creates substantial informational complexity (henceforth: "complexity") for firms participating in private participation projects, leading to a poorer understanding of the environment. Second, private participation projects tend to serve a broad range of clients and involve a multitude of internal and external stakeholders. Therefore, we argue that sponsors of these projects will struggle to target and interact with specific segments within a country. Within-country religious diversity exacerbates information asymmetries and uncertainty, and makes it difficult to establish collaboration among different project stakeholders. We thus posit that within-country religious diversity has a direct, negative effect on the performance of private participation projects.

We also argue that various project characteristics may strengthen or weaken the negative impact of within-country religious diversity on project performance. We suggest that when a project's main sponsor is a foreign firm or when a project focuses on a greenfield investment (in contrast to a brownfield project that involves existing infrastructure), complexity increases, and sponsors will be poorly positioned to form relationships and connections with various stakeholders (e.g., suppliers, clients, governments) in the host country. We thus posit that these project characteristics will strengthen the negative effect of within-country religious diversity on project performance. In contrast, when a project includes some form of government ownership, ties with stakeholders in the local networks will be stronger and complexity will be reduced. This reduces the negative effects of within-country religious diversity on project performance.

Our paper contributes to the incipient but growing body of literature on within-country diversity, which includes the work of Beugelsdijk et al. (2014) and Dow et al. (2016), by focusing on private participation projects characterized by close embeddedness and collaboration with numerous stakeholders. Within-country religious diversity may put the success of an infrastructure project at risk. We add more nuanced insights into this diversity-performance relationship by empirically confirming the moderating effects of various project-level characteristics. Moreover, we emphasize the critical role of firms' abilities to segment the market as a boundary condition in the analysis of within-country diversity. While diversity may help make it possible for firms focused on local sales to prosper through market segmentation (Beugelsdijk et al., 2014; Wedel & Kamakura, 2002), this mechanism rarely materializes in cross-border M&A activity or in private participation projects in the infrastructure sector.

2. Literature review and hypotheses

The literature offers numerous definitions of religion as a socially embedded phenomenon. In this study, we adopt the broad definition presented by Abela (2014) and Cavanaugh (2007), and describe religion as "any world-view of ideology that makes or implies absolute claims or assumptions" (Abela, 2014, p. 51). Religion is seen as part of "culture," but the two differ in locus: cultures derive from specific locations while religions transcend geographic borders. Moreover, religious values and beliefs are typically rooted in religious scriptures, which make them consistent and stable over time (Minton et al., 2015). Recent studies have characterized cross-country differences in religious beliefs as a critical form of institutional distance that influences firms' internationalization decisions, cross-cultural negotiations, and foreign subsidiary development (Castellani et al., 2013; de Jong, van Dutd, Jindra, & Marek, 2015; Richardson, 2014; Richardson & Rammal, 2018). In addition, research indicates that religious distance between countries is a deterrent to international investment and trade (Ghemawat, 2001).

However, within-country religious diversity has received less scholarly attention and lacks a precise conceptualization and definition in the business literature. Usually, it has been defined by its operationalization. Dow and Karunaratna (2006) and Dow et al. (2016) measure diversity based on the incidence (as a percentage) of each major religion in a country, such that the presence of numerous religions within the same country expresses diversity. These authors also take relatedness or connectedness among different religious into consideration, classifying them into: a) families, 2) religions, 3) divisions, and 4) denominations (i.e., sects within divisions). Examples of families are monotheistic religions with a common Middle Eastern origin and cyclical/reincarnation-based religions originating from the Indian subcontinent. Religions like Judaism, Christianity, and Islam belong to the former family, while Sikhism, Buddhism, and Hinduism belong to the

latter. Therefore, diversity within the same country can be either within or between families. However, even within a family, diversity may exist (e.g., Christianity and Islam). Furthermore, diversity can be found within the same religion (e.g., Protestants and Roman Catholics in Christianity) and within divisions (e.g., Greek or Russian Catholics). Diversity further increases when non-believers are included.

As noted earlier, some recent research has explored the implications of within-country diversity in an international business (IB) context. Beugelsdijk et al. (2014) argue that greater cultural diversity within a host country can mitigate the negative effects of cultural distance on MNE performance because companies are more likely to find a subsegment in the host country with characteristics similar to those of their home countries. As a result, MNEs face a lower liability of foreignness (Hymer, 1976; Zaheer, 1995) than the one suggested by the cultural distance between the home and host countries. As such, cultural distance measures should account for within-country diversity to increase their explanatory power (Beugelsdijk et al., 2014).

Dow et al. (2016) study within-country diversity in a different IB context—that of foreign firms acquiring local targets. The basic tenet of this study is that cultural diversity in the host country tends to create ex ante and ex post uncertainty around acquisitions. All else equal, cultural diversity in the target's host country implies information asymmetries and makes it difficult to ascertain the true value of the target. In addition, a cultural mismatch between the acquirer and the acquired organization creates obstacles in the post-integration process. These ex ante and ex post uncertainties associated with host-country cultural diversity make foreign firms reluctant to engage in full acquisitions and more likely to undertake partial acquisitions. Dow et al.'s (2016) empirical analysis confirms that the equity share of the acquiring firm diminishes as within-country diversity increases.

By examining de facto problems arising from within-country religious diversity, we add to Dow et al.'s (2016) study of possible problems in foreign acquisitions caused by within-country cultural diversity. We argue that these de facto problems can be attributed to two intertwined mechanisms. First, within-country religious diversity creates complexity, which makes it difficult for firms to understand the local market. A religion includes a broad set of codified and non-codified beliefs, behaviors, and norms, which play a key role in determining people's practices (Norris & Inglehart, 2011) and frames of reference (Kumar & Nti, 2004). Deep knowledge of various religions within a host country provides a nuanced understanding of individuals' motives and their willingness to trust, interact, and cooperate with others (Dow et al., 2016). Take the hypothetical example of an infrastructure project likely to have a certain imprint on nature (Minton et al., 2015). Stakeholders embedded in Christianity would tend to see humans as holding a superior position vis-à-vis nature, while those embedded in Buddhism would have a more pantheistic view. The situation would be even more complicated if the project also included stakeholders with other religious beliefs, such as atheists with a firm belief in Darwin's theory of evolution, as they would have yet another view on the man-nature relationship. Thus, high within-country religious diversity can increase ex ante information gathering costs for investors as they attempt to address the divergent beliefs, behaviors, and norms in the host country. By the same token, within-country religious diversity increases the risks of ex post misunderstandings and opportunistic behaviors (Dow et al., 2016).

Furthermore, participants in private participation projects need to interact with many local agents in the host country. Infrastructure projects usually differ from other forms of investment owing to their large size, the media attention paid to the process, and the nature of the services, which are often important and visible to a wide spectrum of users. For instance, electricity or telephone services are essential to the daily lives of many constituents in the country. In cases in which projects provide public goods, like water and roads, they affect the well-being of individuals as well as commercial and industrial users. Therefore, although it is possible to focus on certain communities with a predominant religion in an otherwise religiously diverse country,[1] it is usually difficult for sponsors of infrastructure projects to target specific market segments that share their religious background (Beugelsdijk et al., 2014). Even if such close sub-segments exist, they are likely to be too small to reach the economies-of-scale threshold that would warrant a substantial infrastructure investment. Hence, an infrastructure project located in a country with high religious diversity is likely to include and serve a diverse clientele that has different, and sometimes conflicting, beliefs, norms, and preferences. The tensions arising from a religiously diverse user basis can create not only informational challenges for sponsors but also technical obstacles that increase operational costs and risks. For instance, in 2016, thousands of Shi'a Hazaras (in predominantly Sunni Afghanistan) marched through Kabul to protest proposed changes to a power-transmission project. The protesters believed the changes favored Sunni regions and would limit the Hazara people's access to electricity (Reuters News, 2016).

In addition, given the omnipresence of the outputs of these projects and the typically significant capital outlays they require, the number and range of internal and external stakeholders, such as employees, governments, banks, unions, the press, local communities, and religious organizations, is extensive (Gatti, 2013). As such, sponsors are situated in a network of complex multi-lateral interactions involving various stakeholders, all of which have legitimate reasons to participate in the project (Freeman, 1984). In a religiously diverse country, various local stakeholders are likely to have different religious backgrounds and to represent the conflicting interests of their respective religious groups. They are typically geographically bounded and cannot easily opt out due to the wide distribution of the project's users and outputs, and they may have limited incentives to reconcile with other stakeholders due to differences in religious beliefs and historical animosity (Duijzings, 2000).[2] Thus, interactions among them may cause suspicion or even antagonism, resulting in a fractious environment for the project's sponsors. For instance, Bulgaria's Ministry of Environment and Water halted the development of numerous infrastructure projects in regions dominated by Turkish Muslims due to alleged violations of procurement procedures (South East Europe News Digest, 2009). As a result, high within-country religious diversity may increase the challenges sponsors face in terms of communicating with diverse and sometimes disagreeing stakeholders from different religious segments, and in terms of balancing their competing demands.

We therefore expect within-country religious diversity to adversely affect the performance of private participation projects. In this regard, we propose the following hypothesis:

Hypothesis 1. The higher the level of within-country religious diversity in the host country, the less likely private participation infrastructure projects are to succeed.

While we expect a negative direct effect of within-country religious diversity on private participation projects, we maintain that a number of project-level characteristics can moderate such an effect. Various features of a project may increase or decrease complexity and/or prevent firms from discerning compatible agents and effectively establishing relationships with them. In particular, we suggest that when the main sponsor is a foreign company or when the investment is a greenfield project, the negative effect will be stronger, whereas ownership by a host-country government will mitigate the negative effect.

We expect the negative impact of within-country religious diversity on private participation projects to be stronger when a project's main sponsor is a foreign company. As religions usually include a broad set of non-codified beliefs, and as they affect human behaviors and government policies in intricate ways (Dow et al., 2016), a foreign sponsor's lack of familiarity with the local culture and norms will significantly

[1] We thank an anonymous reviewer for this suggestion.

[2] We thank an anonymous reviewer for suggesting this line of argumentation.

impede its ability to process unfamiliar information. For instance, civil conflicts and policy debates in religiously diverse countries often have a strong religious undertone (Fearon & Laitin, 2003; Svensson, 2007). Thus, foreign sponsors with limited local familiarity must gather information on the political power of different religious sectors in order to understand how their political priorities influence government policies and regulations regarding infrastructure. In addition, foreign sponsors face potential exclusion from local tacit-knowledge networks (Schmidt & Sofka, 2009), and even xenophobia and discrimination from local actors (Arikan & Shenkar, 2013; Sharma, 2015).

Moreover, foreign sponsors in the infrastructure sector often face an unfriendly or even hostile political environment in the host country, which limits their ability to establish constructive relationships with religiously diverse stakeholders. For instance, even though outright expropriation has become less common, investments in infrastructure projects remain particularly risky for foreign sponsors (OECD, 2015). Infrastructure projects are often deemed strategic to a country's economic development and commonly held beliefs suggest that citizens have a right to access these basic services. In addition, many infrastructure projects operate as natural monopolies. Therefore, governments prefer local ownership to foreign ownership to protect national interests, and foreign sponsors are deemed acceptable only when the economic and political benefits overwhelmingly outweigh the costs (Luo, 2007; Vernon, 1971; Wells & Gleason, 1995). The participation of foreign sponsors often becomes necessary due to weakness in the domestic capital market or institutional pressures exerted by multilateral organizations that provide essential project financing, such as the International Monetary Fund (IMF) and the World Bank (Doh & Ramamurti, 2003). As a result, foreign sponsors active in the infrastructure sector usually face higher discrimination costs, as they are often viewed with suspicion and lack legitimacy in the local context (Zhou & Guillen, 2016). This discrimination and suspicion increase the costs associated with developing an understanding of local markets in which religious diversity is higher and various stakeholders represent the interests of different religious groups.

The inherent economic characteristics of infrastructure projects also create substantial risks for foreign sponsors. Infrastructure projects usually require a significant amount of upfront capital. Although the development of project financing has significantly reduced capital requirements and, thus, risk for project sponsors (Gatti, 2013), they nonetheless remain vulnerable after construction is complete because the assets are largely immobile (Vernon, 1971). Furthermore, unlike investments in manufacturing, infrastructure projects usually do not involve exports or continuing technological or financial input. As a result, the project's economic, technological, and political dependence on foreign sponsors can quickly diminish. Consequently, political considerations are more likely to be stacked against foreign sponsors in infrastructure projects than in other forms of investment (Wells & Gleason, 1995). Moreover, the higher discrimination costs make it more difficult for foreign sponsors to discern which local agents (e.g., partners, suppliers, buyers) are most compatible. Even if they can overcome the informational barriers, their limited legitimacy and ties with local networks will limit the range of potential agents.

Thus, considering the heightened information and discrimination costs, we expect a stronger negative effect of within-country religious diversity on private participation projects when the main sponsor is a foreign company. This leads to our second hypothesis:

Hypothesis 2. The negative effect of within-country religious diversity on the likelihood of success of a private participation infrastructure project is strengthened when the project's main sponsor is a foreign company.

Local governments at various levels become a special type of local partner when they retain some ownership of an infrastructure project in order to maintain some control over the provision of essential goods and services (Fagre & Wells, 1982). At the same time, they may also act as customers, regulators, lenders, and arbiters, thereby making relationships with them key to the success of private participation projects. We argue that a host-country government's equity ownership will weaken the negative effect of within-country religious diversity on project performance. By sharing ownership with the local government, firms create a governance structure that allows them to internalize transactions with the local authorities and gain valuable knowledge about regulatory processes, thereby reducing complexity (Li, Peng, & Macaulay, 2013). Moreover, the frequent interactions between firms and governments lead to potential opportunities to influence government policies and gain preferential treatment (Jiménez, Luis-Rico, & Benito-Osorio, 2014). In addition, including the local government as a sponsor of the project can increase the project's legitimacy (Boddewyn, 1988) and provide access to business networks in the host country (Jiang et al., 2015), thereby reducing discrimination costs (Zhou & Guillen, 2016). As a result, equity ownership by local government reduces the information asymmetries and operational uncertainty caused by within-country religious diversity. The improved understanding of the host-country environment helps sponsors better discern and effectively choose the appropriate local agents with which to interact. We therefore expect a weaker negative effect of within-country religious diversity on private participation projects and propose the following hypothesis:

Hypothesis 3. The negative effect of within-country religious diversity on the likelihood of success of a private participation infrastructure project is weakened when the project includes the local government as a sponsor.

We now turn our attention to the types of investments associated with private participation projects. Sponsors undertaking brownfield investments can retain critical relationships with suppliers, clients, regulatory agencies, and other external and internal stakeholders when they acquire existing assets (Conner & Prahalad, 1996; Delmon, 2009). These key business ties can help the firm understand the host-country environment, thereby reducing the complexity and discrimination costs related to within-country religious diversity in the host country. In contrast, although greenfield investments in which firms build new infrastructure facilities often allow for the use of more advanced technologies, they do not provide immediate access to or an in-depth understanding of various stakeholders. This, in turn, increases the information asymmetries and uncertainty arising from the host country's religious diversity. Although sponsors in greenfield projects can gradually gain knowledge of local market and institutional conditions, the complex socio-economic, regulatory, and political environments in religiously diverse countries usually pose significant barriers to incremental learning from direct experience, especially in the short run (Makino & Delios, 1996). However, unlike other forms of investment, the long-term stability and economic returns of an infrastructure project are largely determined by initial strategic choices regarding financing, payment schemes, community interactions, and governmental relationships (Gatti, 2013). Thus, we argue that, in comparison to brownfield projects, greenfield projects are subject to greater complexity, as well as more difficulties in appropriately assessing compatibility and developing relationships with local agents. These characteristics strengthen the negative effect of within-country religious diversity on private participation projects. We therefore propose the following hypothesis:

Hypothesis 4. The negative effect of within-country religious diversity on the likelihood of success of private participation infrastructure projects is stronger in greenfield projects than in brownfield projects.

Table 1
List of host countries.

Argentina	Ghana	Philippines
Bangladesh	Guatemala	Romania
Brazil	India	Russian Federation
Bulgaria	Jamaica	Sierra Leone
Chile	Lebanon	South Africa
China	Mexico	Tanzania
Colombia	Morocco	Thailand
Costa Rica	Nigeria	Turkey
Ecuador	Pakistan	Uruguay
El Salvador	Panama	Vietnam
Ethiopia	Peru	Zambia

3. Method

3.1. Sample

We use data from the World Bank's Private Participation in Infrastructure (PPI) dataset to test our hypotheses. The PPI dataset, which mainly covers projects in emerging economies, has been employed in research focused on privatization and foreign investment (Jiang et al., 2015; Ramamurti & Doh, 2004). Our sample includes 8139 private participation projects carried out between 1990 and 2014 in 33 countries for which data on within-country religious diversity is available. The list of host countries is provided in Table 1. Brazil hosted the most projects (1581) followed by China (1056) and India (1033). The highest number of projects occurred in the energy sector (3337), followed by the telecommunication (2442), and transportation (1465) sectors.

3.2. Variables

3.2.1. Dependent variable

The success of an infrastructure project can be measured in terms of whether its sponsors fulfill the legally binding agreement to invest funds, develop facilities, or provide services. A project could be viewed as failing when its concession period is terminated prematurely by either the sponsors or the government. In line with Jiang et al. (2015), we measure project success using the project status given in the PPI dataset. The dataset identifies a project as “operational” when it is providing services to the public, “merged” when it has been merged with another project, “concluded” when the contract period has expired, “canceled” when the private sector sponsor(s) has exited the project,[3] and “distressed” when the government or the sponsor has either requested termination or is in international arbitration. The dependent variable, “success,” is a binary variable that equals one when a project is identified as operational, merged,[4] or concluded, and zero when the project is categorized as canceled or distressed. A total of 6960 of the 8139 projects were deemed successful.

3.2.2. Independent variable

We build on previous literature on within-country religious diversity (Dow et al., 2016) and measure it using a Herfindahl-type index based on Dow and Karunaratna's (2006) religious-distance scales (available at https://sites.google.com/site/ddowresearch/).

$$Within-country\ religious\ diversity = 1 - \sum_{i}^{N} Share\ of\ religion_i^2$$

To compute this variable, the percentage shares of the total population that each of the main religions[5] represents in a country are squared and summed. That number is then subtracted from 1. A value of 1 would mean a perfectly heterogeneous situation in which every person in the country professes a different religion. In contrast, a value of 0 would represent a perfectly homogeneous country in which every person professes the same religion (Dow et al., 2016).

3.2.3. Moderators

Hypotheses 2–4 focus on the moderating effects of various project-level characteristics on the negative role of within-country religious diversity. First, we test the interaction between within-country religious diversity and the main sponsor being a foreign firm. We code this variable 1 when the owner with the highest share in the project is from a different country and 0 otherwise. A total of 4090 of 8139 projects (50%) had a foreigner as the main sponsor.

Second, we test the interaction between within-country religious diversity and local government ownership. We code this variable 1 when the local government appears as a sponsor in the project, and 0 otherwise. A total of 2358 of the 8139 projects (28%) had the local government as one of the sponsors.

Third, we test the interaction between within-country religious diversity and greenfield projects. We code this variable 1 when the project builds and operates a new facility according to the PPI dataset, and 0 otherwise. A total of 4586 of the 8139 projects (56%) were greenfield investments.

3.2.4. Control variables

In the model, we include various project- and country-level variables that may affect project performance (Jiang et al., 2015). At the project level, we control for the age of the project in terms of the time lapsed from the project's establishment until the final year covered in the sample. This reduces the potential bias arising from the fact that some projects began more recently than others. We also control for total project size (subject to a logarithmic transformation), the delay between commitment to the project and the project's closure, and whether the project is publicly traded. In addition, prior studies have shown that cross-country religious distance may negatively affect foreign investments (Castellani et al., 2013; Richardson, 2014). We thus include the religious distance between the host and home countries as calculated by Dow and Karunaratna (2006). Notably, this measure ranges from a minimum score of −1.551 for two countries with little distance to a maximum score of 1.528 for two very distant countries. Finally, the PPI dataset distinguishes among four main sectors (energy, telecommunications, transportation, and water and sewerage). We include the first three sectors in the models using dummy variables and exclude the fourth to avoid collinearity issues.

At the country level, we control for host-country GDP, GDP growth, GDP per capita, and unemployment. We also control for the possibility that religious diversity might reflect other institutional features of the host country, such as political stability, using the Political Constraint (POLCONV) index (Henisz, 2002). POLCONV takes the number of independent political branches able to veto the government into account to depict how easily a government can arbitrarily change laws and regulations. As such, it thus indicates the credibility of a government's commitment to keeping policies unchanged and captures a critical component of the political environment for companies willing to invest and operate in a foreign location (Holburn & Zelner, 2010; Jiménez, Benito-Osorio, Puck, & Klopf, 2018). Finally, we include dummy variables to control for the geographical region in which the project is located.

[3] The private sector might exit in one of the following ways: (1) selling or transferring its economic interest to the government before fulfilling the contract terms, (2) removing all management and other personnel from the concern, or (3) ceasing operation, service provision, or construction for 15% or more of the license or concession period following the revocation of the license or repudiation of the contract.

[4] As merged projects continue to operate, we follow Jiang et al. (2015) and consider them as successes. The results do not change if they are removed from the sample.

[5] Atheism and agnosticism were treated as unique religions in this process.

Table 2
Descriptive statistics.

Variable	Obs	Mean	Std. dev.	Min	Max
Successful	8139	0.85	0.35	0	1
East Asia	8139	0.19	0.39	0	1
Central Europe	8139	0.11	0.32	0	1
Middle East and North Africa	8139	0.01	0.09	0	1
South Asia	8139	0.15	0.36	0	1
Sub-Saharan Africa	8139	0.06	0.24	0	1
Energy	8139	0.41	0.49	0	1
Telecom	8139	0.30	0.45	0	1
Transport	8139	0.18	0.39	0	1
Total investment (log)	8139	3.75	2.29	−3.50	13.97
Age	8139	8.96	5.56	1	24
Delay	8139	3.94	5.39	−3	23
Publicly traded	8139	0.11	0.32	0	1
Greenfield	8139	0.56	0.49	0	1
Local government ownership	8139	0.28	0.45	0	1
Host country POLCONV	8139	0.47	0.28	0	0.89
GDP	8139	11.58	0.67	8.8	12.93
GDP growth	8139	5.31	4.47	−14.53	33.74
GDP per capita	8139	3.45	0.42	2.18	4.18
Unemployment	8139	6.07	4.97	0	27.2
Foreign main sponsor	8139	0.50	0.50	0	1
Religious distance	8139	−1.04	0.88	−1.55	1.52
Religious diversity	8139	0.26	0.17	0.01	0.69

3.3. Analytical method

Given the binary nature of our dependent variable, we estimate logistic regression models to test our hypotheses. To test the moderation effects, all interaction terms are calculated using mean-centered variables (Aiken & West, 1991; Dow et al., 2016; Kafourus & Aliyev, 2016).

4. Results

Table 2 reports descriptive statistics for the variables in the model, while Table 3 provides the correlation coefficients and variance inflation factors (VIFs). The low correlations between predictors suggest that multicollinearity is not an issue. In addition, all VIFs are below the limit of 10 recommended by Neter, Wasserman, and Kutner (1985), Kennedy (1992), and Studenmund (1992), and only GDP per capita is over the stricter limit of 5.3 proposed by Hair, Anderson, Tatham, and Black (1999). Accordingly, we can assume that collinearity is not a problem.

Table 4 presents the results of the binary logistic regressions. Model 1 includes the explanatory variables, including the direct effect of within-country religious diversity. Models 2–4 test the proposed moderation relationships.

In Hypothesis 1, we proposed a negative relationship between within-country religious diversity and the likelihood of project success. The coefficient of within-country religious diversity in the host country is negative and significant ($\beta = -0.986$, $p < 0.01$) in Model 1, indicating that higher within-country religious diversity is statistically associated with a greater likelihood of project failure. This direct negative effect of within-country religious diversity is consistent across all of the models that include interactions. Hypothesis 1 is therefore supported. However, as limited dependent variable models are non-linear, the marginal effect does not equal the coefficient obtained in the model. Instead, it varies with the value of all model variables (Wiersema & Bowen, 2009). In order to assess the size of the effect, we follow Boellis, Mariotti, Minichilli, and Piscitello (2016) and estimate the average marginal effects, which are reported in Table 5. The results of Model 1 suggest that when within-country religious diversity increases by 0.01 (this variable ranges from 0.01 to 0.69), the likelihood that the private participation project will succeed decreases by 8.42% ($p < 0.01$).

In Hypothesis 2, we proposed that when the main sponsor of a project is a foreign company, the negative effect of within-country religious diversity on project performance is stronger. In Model 2, we find that the coefficient of the interaction between within-country religious diversity and a foreign main sponsor is negative and significant ($\beta = -1.510$, $p < 0.01$). The negative effect of within-country religious diversity is therefore exacerbated when the main sponsor is a foreign company, which supports Hypothesis 2. As the coefficient of the interaction terms cannot be interpreted in a straightforward way in non-linear models (Ai & Norton, 2003), we supplement it with a graphical analysis (Boellis et al., 2016). Fig. 1 contrasts the average marginal effects of host-country religious diversity when the main sponsor of the project is a foreign or local firm. The difference in the slopes of the solid curve (local main sponsor) and the dashed curve (foreign main sponsor) suggests that while higher levels of within-country religious diversity have an overall negative effect on the likelihood of project success, this effect is more pronounced when the main sponsor is a foreign company. For instance, when within-country religious diversity is at the sample's lowest level, projects led by a foreign company have an 82.8% probability of success whereas the corresponding figure for projects led by a local company is 86.3%. However, at the highest level of diversity in the sample, the probability of success drops to 70.8% for projects led by a foreign company and rises to 84.9% for projects led by a local company.

In Hypothesis 3, we proposed that when a project includes the local government as a sponsor, the negative effect of within-country religious diversity on project performance is weaker. In Model 3, we find that the coefficient of the interaction between within-country religious diversity and local government ownership is positive as expected but not significant ($\beta = 0.750$, $p > 0.1$). Fig. 2 depicts the average marginal effects of government ownership at various levels of host-country religious diversity. The slopes of both graphs are relatively similar (the slope is slightly steeper in the case of government ownership but not in a statistically significant way), suggesting that the overall negative effect of within-country religious diversity is not affected by local government ownership. Therefore, we cannot validate Hypothesis 3.

In Hypothesis 4, we proposed that the negative effect of within-country religious diversity on project performance is stronger among greenfield projects. In Model 4, we find that the coefficient of the interaction between religious diversity and greenfield projects is negative and significant ($\beta = -3.848$, $p < 0.01$). Thus, we find support for Hypothesis 4. Fig. 3 shows the average marginal effects of greenfield investments at various levels of host-country religious diversity. The difference in the slopes of the solid curve (brownfield projects) and the dashed curve (greenfield projects) suggests that although higher levels of within-country religious diversity have an overall negative effect on the likelihood of project success, this effect is more pronounced when the project is greenfield. For instance, when within-country religious diversity is at the sample's lowest level, greenfield projects have a 78.3% probability of success, whereas the corresponding figure for brownfield projects is 95.2%. However, at the sample's highest level of diversity, the probability of success drops to 66.9% for greenfield projects and rises to 98.6% for brownfield projects.

The control variables largely behave as expected. One noteworthy result is that the coefficient estimate for religious distance is negative but not significant. One possible explanation is that a wide religious distance may have deterred many sponsors from investing in private participation projects. Those that did invest may have taken precautions and carefully prepared for the challenge of religious distance. As robustness tests, we included additional control variables to check whether religious diversity might be capturing other host-country institutional characteristics. In this regard, we used the Control of Corruption index from the World Bank's World Governance Indicators, the Corruption Perception Index from Transparency International, and the Index of Economic Freedom from the Heritage Foundation. Although the results showed no significant differences from those of our main models, these variables were omitted as their inclusion reduced the sample size and increased collinearity. Thereafter, we tested whether the variables “foreign main sponsor” and “religious distance”

Table 3
Correlation matrix and VIFs.

	1	2	3	4	5	6	7	8	9	10	11	12
1, Successful	1											
2. East Asia	−0.17*	1										
3. Central Europe	0.05*	−0.18*	1									
4. Middle East	−0.01	−0.04*	−0.03*	1								
5. South Asia	−0.13*	−0.21*	−0.16*	−0.04*	1							
6. Sub-Saharan Africa	0.02*	−0.13*	−0.09*	−0.02*	−0.11*	1						
7. Energy	−0.09*	0.01	−0.06*	−0.04*	−0.03*	−0.13*	1					
8. Telecom	0.22*	−0.16*	0.21*	0.10*	−0.01	0.24*	−0.55*	1				
9. Transport	−0.0*	−0.04*	−0.12*	−0.03*	0.16*	−0.06*	−0.40*	−0.31*	1			
10. Total investment	−0.15*	−0.00	−0.02*	−0.02*	0.08*	−0.09*	0.03*	−0.01	0.04*	1		
11. Age	0.22*	0.04*	−0.06*	−0.01	−0.17*	−0.04*	−0.09*	0.01	0.07*	−0.08*	1	
12. Delay	0.27*	−0.20*	0.09*	0.00	−0.10*	0.06*	−0.16*	0.50*	−0.22*	−0.05*	−0.26*	1
13. Publicly traded	0.14*	−0.01	0.06*	0.02*	−0.00	−0.06*	−0.10*	0.27*	−0.12*	0.16*	0.05*	0.31*
14. Greenfield	−0.2*	0.17*	0.02	−0.01	0.09*	0.13*	0.02*	0.27*	−0.28*	0.06*	−0.12*	−0.05*
15. Local government	0.08*	0.12*	0.08*	0.02*	−0.16*	−0.01	0.16*	−0.07*	−0.10*	−0.00	0.18*	0.03*
16. Host POLCONV	0.1*	−0.56*	0.09*	0.02*	0.19*	−0.11*	0.06*	−0.01	0.08*	0.11*	0.00	0.08*
17. GDP	−0.19*	0.23*	−0.02*	−0.13*	0.14*	−0.38*	0.13*	−0.35*	0.10*	0.15*	−0.32*	−0.12*
18. GDP growth	−0.14*	0.33*	−0.16*	−0.02	0.15*	0.09*	0.00*	−0.15*	0.07*	0.09*	−0.15*	−0.12*
19. GDP per capita	0.02*	−0.26*	0.23*	0.00	−0.52*	−0.28*	0.16*	−0.11*	−0.08*	0.09*	−0.28*	0.22*
20. Unemployment	0.14*	−0.24	0.19*	0.02*	−0.38*	0.07*	0.05*	0.05*	−0.09*	−0.02	0.18*	0.12*
21. Foreign main sponsor	0.08*	−0.02*	−0.03*	0.03*	−0.21*	0.14*	0.01*	0.16*	−0.16*	0.02*	0.11*	0.10*
22. Religious distance	−0.04*	0.30*	0.17	0.07*	0.01*	0.16*	−0.03*	0.03*	−0.04*	−0.03*	−0.07*	−0.08*
23. Religious diversity	−0.17*	0.39*	0.12*	−0.03*	0.19*	0.28*	−0.11*	0.01	0.02*	−0.08*	−0.13*	−0.19*

	13	14	15	16	17	18	19	20	21	22	23	VIFs
1, Successful												–
2. East Asia												3.92
3. Central Europe												1.75
4. Middle East												1.12
5. South Asia												5.35
6. Sub-Saharan Africa												2.61
7. Energy												3.79
8. Telecom												5.15
9. Transport												2.71
10. Total investment												1.19
11. Age												2.35
12. Delay												1.97
13. Publicly traded	1											1.31

(*continued on next page*)

Table 3 (*continued*)

	13	14	15	16	17	18	19	20	21	22	23	VIFs
14. Greenfield	−0.11*	1										1.60
15. Local government	0.03*	−0.21*	1									1.33
16. Host POLCONV	0.09*	−0.17*	−0.10*	1								1.81
17. GDP	−0.02*	−0.04*	0.02*	0.03*	1							2.58
18. GDP growth	−0.08*	0.07*	0.01	−0.26*	0.18*	1						1.43
19. GDP per capita	0.05*	−0.19*	−0.05*	0.27*	0.28*	−0.26*	1					6.81
20. Unemployment	0.07*	−0.16*	0.05*	0.14*	−0.20*	−0.35*	0.36*	1				1.60
21. Foreign main sponsor	−0.03*	0.05*	0.15*	−0.16*	−0.32*	−0.01	−0.01	0.10*	1			2.31
22. Religious distance	−0.06*	0.17*	0.18*	−0.27*	−0.08*	0.18*	−0.32*	−0.13*	0.57*	1		2.34
23. Religious diversity	−0.13*	0.18*	0.10*	−0.32*	0.18*	0.38*	−0.46*	−0.37*	−0.03*	0.31*	1	2.63

* $p < 0.5$.

might have an impact on each other. We re-ran the models while including "foreign main sponsor" and "religious distance," and found no significant differences from the results of the main models. Finally, we verified whether the fact that some projects did not have a foreign sponsor could affect our results. We re-ran the models including "foreign main sponsor" and "religious distance" and found no significant changes in the results.[6]

5. Discussion

This study is motivated by the emerging interest in the effects of within-country cultural diversity on MNEs (Beugelsdijk et al., 2014, 2015; Dow et al., 2016). On the one hand, within-country diversity can increase the opportunities firms have to target culturally close customer segments and, hence, positively influence their performance. On the other hand, a diverse host-country environment can be viewed as a deleterious condition, as it implies higher information costs, barriers to relationship development, and political risk. We argue that whether within-country diversity in the host country is an asset or a liability depends on managers' abilities to segment the market. In the infrastructure sector, the outputs of private participation projects are widely distributed geographically and socially, and they usually involve a wide range of stakeholders, making it difficult to target specific segments.

Our study focuses on within-country religious diversity, as religion plays a critical role in determining which kinds of behaviors are tolerated in a society, and how its members communicate and interact (Dow & Karunaratna, 2006; Shenkar, 2001). Religious diversity also effects how corporate cultures evolve over time (Weber, 2011). Our results indicate that within-country religious diversity adversely affects the performance of private participation infrastructure projects (Hypothesis 1) due to the hazards arising from the increased complexity and the risk of becoming involved with stakeholders with incompatible goals and/or discordant ways of pursuing and fulfilling those goals.

We also find that multiple project-level characteristics moderate this influence. When the main sponsor of a project is a foreign company (Hypothesis 2), the higher liability of foreignness and lower legitimacy (Wells & Gleason, 1995) complicate the firm's understanding of the environment and make it difficult to correctly address all religious sensitivities in the host country. Similarly, greenfield projects lack key business ties with suppliers, clients, and other business networks that could reduce information-gathering costs (Conner & Prahalad, 1996; Delmon, 2009). This strengthens the direct negative relationship between within-country religious diversity and private participation projects (Hypothesis 4).

Finally, we find no statistically significant moderating effect for government participation (Hypothesis 3). We expected local government participation to have a positive moderating impact on the effect of within-country religious diversity as a consequence of increased legitimacy and access to host-country business networks (Boddewyn, 1988; Jiang et al., 2015). However, the sponsor's strategic objectives and the government's goals are unlikely to be completely aligned. As the government often acts as a regulator, arbiter, buyer, and lender, this additional mechanism through which it can influence operations may increase the bureaucracy within a project's internal governance and limit the sponsor's ability to improve efficiency, thereby offsetting the advantages of including the local government in project ownership.

We believe our findings make multiple contributions to the literature. We contribute to the literature on private participation projects by highlighting within-country religious diversity as a factor that plays a critical role in project success. In addition, we deepen our understanding of this relationship by analyzing various project-level characteristics that might have a moderating influence by changing the level

[6] We are grateful to an anonymous reviewer for the robustness-test suggestions.

Table 4
Logit regression result.

Variables	(1)	(2)	(3)	(4)
	Base	Foreign main sponsor	Local government ownership	Greenfield
East Asia	−1.243***	−1.327***	−1.227***	−1.358***
	(0.206)	(0.208)	(0.206)	(0.207)
Central Europe	−0.162	−0.139	−0.166	−0.259
	(0.170)	(0.171)	(0.170)	(0.169)
Middle East and North Africa	−2.238***	−2.197***	−2.167***	−2.563***
	(0.369)	(0.364)	(0.373)	(0.373)
South Asia	−2.547***	−2.667***	−2.521***	−2.806***
	(0.264)	(0.268)	(0.265)	(0.269)
Sub-Saharan Africa	−1.318***	−1.333***	−1.285***	−1.531***
	(0.266)	(0.266)	(0.267)	(0.270)
Energy	1.176***	1.173***	1.171***	1.241***
	(0.133)	(0.133)	(0.133)	(0.134)
Telecommunications	2.014***	2.013***	2.005***	2.014***
	(0.219)	(0.219)	(0.219)	(0.219)
Transportation	0.310**	0.318**	0.291**	0.347**
	(0.138)	(0.138)	(0.139)	(0.138)
Total investment (log)	−0.141***	−0.145***	−0.141***	−0.139***
	(0.0194)	(0.0194)	(0.0194)	(0.0196)
Age	0.0787***	0.0779***	0.0794***	0.0803***
	(0.0120)	(0.0120)	(0.0120)	(0.0119)
Delay	0.230***	0.231***	0.231***	0.242***
	(0.0233)	(0.0234)	(0.0233)	(0.0235)
Publicly traded	1.976***	1.992***	1.981***	2.015***
	(0.520)	(0.523)	(0.520)	(0.518)
Greenfield	−1.857***	−1.864***	−1.859***	−0.691***
	(0.110)	(0.110)	(0.110)	(0.190)
Local government ownership	−0.161	−0.119	−0.211*	−0.200*
	(0.108)	(0.109)	(0.113)	(0.109)
Host country POLCONV	0.743***	0.748***	0.781***	0.675***
	(0.206)	(0.206)	(0.207)	(0.205)
GDP	0.573***	0.555***	0.570***	0.566***
	(0.0946)	(0.0949)	(0.0946)	(0.0954)
GDP growth	0.00833	0.00785	0.00863	0.00133
	(0.0121)	(0.0122)	(0.0121)	(0.0124)
GDP per capita	−2.123***	−2.154***	−2.092***	−2.268***
	(0.268)	(0.268)	(0.268)	(0.269)
Unemployment	0.00269	0.00310	0.00235	0.0101
	(0.0109)	(0.0109)	(0.0109)	(0.0110)
Foreign main sponsor	0.161	0.0369	0.153	0.0712
	(0.138)	(0.144)	(0.138)	(0.137)
Religious distance	−0.0871	0.0116	−0.0930	−0.0658
	(0.0681)	(0.0765)	(0.0682)	(0.0680)
Religious diversity host country (H1)	−0.986***	−0.720**	−0.884***	−0.0690
	(0.324)	(0.335)	(0.333)	(0.350)
Foreign main sponsor * religious diversity host country (H2)		−1.510***		
		(0.491)		
Local government ownership * religious diversity host country (H3)			0.750	
			(0.564)	
Greenfield * religious diversity host country (H4)				−3.848***
				(0.554)
Constant	2.669**	3.200***	2.570**	2.687**
	(1.094)	(1.111)	(1.096)	(1.088)
Log likelihood	−2212.6***	−2207.78***	−2211.71***	−2188.3***
Pseudo R2	34.29	34.43	34.31	35.01
Observations	8139	8139	8139	8139

Standard errors in parentheses.
* $p < 0.1$.
** $p < 0.05$.
*** $p < 0.01$.

Table 5
Average marginal effects.

Variables	(1)	(2)	(3)	(4)
	Base	Foreign main sponsor	Local government ownership	Greenfield
East Asia	−0.106***	−0.113***	−0.105***	−0.114***
	(0.0174)	(0.0175)	(0.0174)	(0.0172)
Central Europe	−0.0138	−0.0118	−0.0142	−0.0218
	(0.0145)	(0.0145)	(0.0145)	(0.0142)
Middle East and North Africa	−0.191***	−0.187***	−0.185***	−0.215***
	(0.0313)	(0.0308)	(0.0317)	(0.0310)
South Asia	−0.218***	−0.228***	−0.215***	−0.236***
	(0.0219)	(0.0222)	(0.0219)	(0.0218)
Sub-Saharan Africa	−0.113***	−0.114***	−0.110***	−0.129***
	(0.0225)	(0.0225)	(0.0226)	(0.0224)
Energy	0.100***	0.100***	0.0999***	0.104***
	(0.0111)	(0.0111)	(0.0111)	(0.0110)
Telecommunications	0.172***	0.172***	0.171***	0.169***
	(0.0182)	(0.0182)	(0.0182)	(0.0179)
Transportation	0.0265**	0.0271**	0.0248**	0.0291**
	(0.0118)	(0.0118)	(0.0119)	(0.0116)
Total investment (log)	−0.0121***	−0.0124***	−0.0120***	−0.0117***
	(0.00163)	(0.00163)	(0.00163)	(0.00162)
Age	0.00672***	0.00665***	0.00678***	0.00675***
	(0.00102)	(0.00102)	(0.00102)	(0.000987)
Delay	0.0197***	0.0197***	0.0197***	0.0203***
	(0.00198)	(0.00199)	(0.00198)	(0.00196)
Publicly traded	0.169***	0.170***	0.169***	0.169***
	(0.0444)	(0.0446)	(0.0443)	(0.0435)
Greenfield	−0.159***	−0.159***	−0.159***	−0.0580***
	(0.00863)	(0.00859)	(0.00862)	(0.0159)
Local government ownership	−0.0138	−0.0102	−0.0180*	−0.0168*
	(0.00924)	(0.00933)	(0.00966)	(0.00915)
Host country POLCONV	0.0635***	0.0638***	0.0667***	0.0567***
	(0.0175)	(0.0175)	(0.0176)	(0.0172)
GDP	0.0489***	0.0473***	0.0486***	0.0475***
	(0.00800)	(0.00801)	(0.00799)	(0.00793)
GDP growth	0.000712	0.000670	0.000736	0.000112
	(0.00104)	(0.00104)	(0.00103)	(0.00104)
GDP per capita	−0.181***	−0.184***	−0.179***	−0.190***
	(0.0224)	(0.0223)	(0.0224)	(0.0220)
Unemployment	0.000230	0.000265	0.000201	0.000845
	(0.000932)	(0.000932)	(0.000930)	(0.000924)
Foreign main sponsor	0.0137	0.00315	0.0130	0.00598
	(0.0118)	(0.0123)	(0.0118)	(0.0115)
Religious distance	−0.00744	0.000992	−0.00793	−0.00553
	(0.00582)	(0.00652)	(0.00581)	(0.00571)
Religious diversity host country (H1)	−0.0842***	−0.0614**	−0.0754***	−0.00580
	(0.0276)	(0.0285)	(0.0283)	(0.0294)
Foreign main sponsor * religious diversity host country (H2)		−0.129***		
		(0.0418)		
Local government ownership * religious diversity host country (H3)			0.0640	
			(0.0481)	
Greenfield * religious diversity host country (H4)				−0.323***
				(0.0458)
Observations	8139	8139	8139	8139

Standard errors in parentheses.
* p < 0.1.
** p < 0.05.
*** p < 0.01.

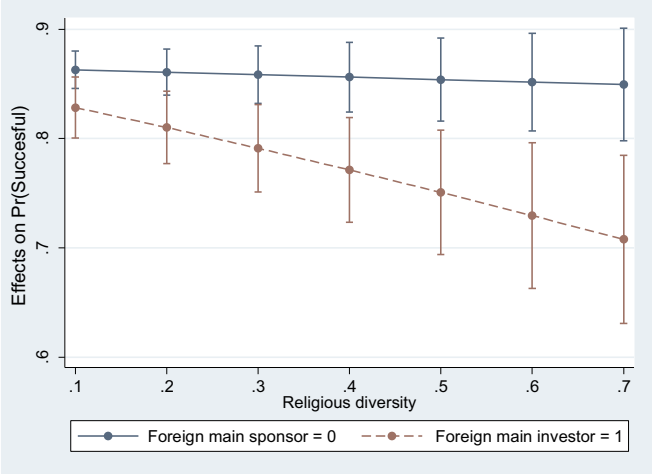

Fig. 1. Average marginal effects of foreign company as main sponsor at various levels of host country religious diversity.

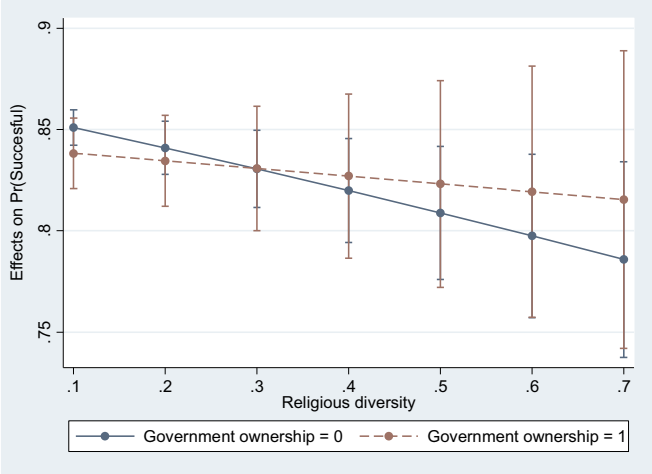

Fig. 2. Average marginal effects of government ownership at various levels of host country religious diversity.

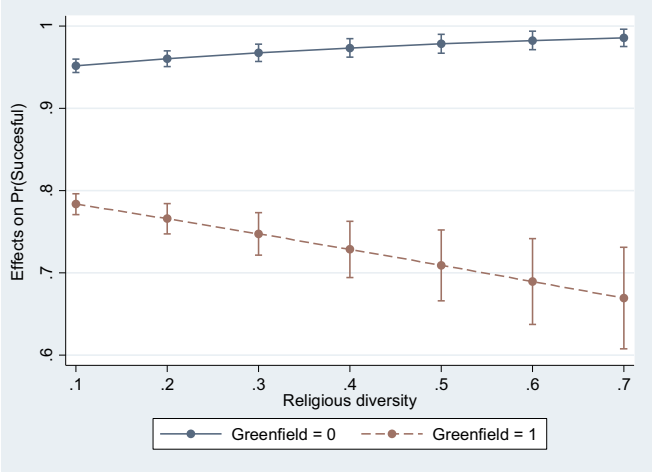

Fig. 3. Average marginal effects of greenfield at various levels of host country religious diversity.

of complexity and/or the ability to identify compatible local agents.

Our study accentuates the critical role of market segmentability in a culturally diverse business environment. When different customer segments are distinct and separable, within-country diversity may be an advantage that offsets the peril of cultural distances. Previous research had shown that within-country religious diversity may have a positive effect when it allows a company to find the closest, most suitable subsegment in the market (Beugelsdijk et al., 2014). Conversely, when segmentation is limited because of market structure or pronounced information asymmetries (Dow et al., 2016), within-country diversity can put the success of local business ventures at risk. We show that this is the case in the infrastructure sector, where market segmentation is difficult, if not impossible, as infrastructure operations affect a broad base of customers and involve local stakeholders both economically and socially. This empirical confirmation of the negative side of within-country diversity is an important contribution to the literature.

At the managerial level, our paper emphasizes the potential challenges associated with within-country religious diversity. Managers should be aware of the difficulties that religiously diverse environments can pose for the management of a private participation project and proactively try to implement measures to reduce those adverse effects. Foreign managers should also carefully predict the likely counter-reactions of governmental partners, local partner firms, and local populations that might differ in their religious bases and orientations. Moreover, our paper identifies project characteristics that managers should try to avoid, if possible, such as greenfield investments or projects in which the main sponsor is a foreign company, as they accentuate the adverse effects of within-country religious diversity.

5.1. Limitations and avenues for future research

Our paper is subject to several limitations. First, similar to previous studies on within-country religious diversity, we are unable to test potentially relevant mediating constructs at the individual level. Future research could explicitly test the individual characteristics of each stakeholder involved in a private participation project in order to assess such factors as their religious values. Second, within-country religious diversity can also affect other managerial phenomena. Future studies may therefore focus on other aspects of infrastructure projects, such as reinvestment decisions, and employ other estimation techniques, such as hazard models, to study project survival when a project's inception time can be accurately determined. Third, we only focus on one dimension of within-country diversity. Future research could enlarge and complement our findings by exploring the roles of other cultural diversity dimensions.

Third, the effect of within-country religious diversity might be moderated by a religion that exerts a dominant influence in the national business context or in a specific region. In this paper, we use a simple construct based on percentages, but the real (or informal) influence could substantially deviate from these percentages (Chaves & Gorski, 2001). For example, the political power and financial strength of the religious group should also be taken into consideration (Abela, 2014). Furthermore, we measure the impact of “religion,” but we have no notion of how “religious” members of a public–private partnership group could be. Religiosity expresses a focus on religion, and how religion directs that person's life and decision making. Therefore, we could have a project characterized by high religious diversity in which the participants are not particularly religious and, consequently, the expected problems never occur, or vice versa (Cleveland et al., 2013). In addition, members might be religious as well as tolerant of other religions, or vice versa. The extant literature offers mixed findings on the extent to which religiously diverse countries are tolerant of other religions (Dowd, 2016). Again, this can be boiled down to whether the

members of the public-private partnership are tolerant or not.

Finally, while private participation projects occur in both developed and emerging economies, the PPI dataset only covers infrastructure projects in emerging economies. Consequently, although Dow et al. (2016) provided religious diversity data on 69 countries, our analysis only includes 33 host countries. Therefore, in addition to limitations related to the generalizability of our findings, we caution readers about the reduced variance in our independent variable due to the limited number of data points on host-country religious diversity.[7] Moreover, MNEs from emerging economies are increasingly investing overseas, including in infrastructure projects in developed economies (Guillen & García-Canal, 2012). Therefore, to verify the generalizability of our results, we suggest that research should be conducted on private participation projects in a broader range of countries and covering more within-country religious tensions.

Overall, we believe that our paper adds to the growing body of literature on within-country diversity (Beugelsdijk et al., 2014, 2015; Dow et al., 2016). However, we also believe that more effort is needed to theoretically and empirically develop this construct. We hope our paper encourages other researchers to explore the intriguing and fascinating effects of within-country diversity.

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