

**THE GOOD FIGHT:
CONFLICT AND THE MULTIPARTNER ALLIANCE**

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ABSTRACT

A multipartner alliance experiences heightened conflict: the increased number of partners impedes communication and trust-building; and the strategic importance of the alliance's projects often means the close and contentious involvement of external stakeholders. It is well-accepted that conflict is harmful to multipartner alliance performance, yet there exists a theoretical and empirical gap in understanding what specifically drives conflict in this setting, and what can lessen these instances of conflict. Drawing on diversity theory, I leverage a distinction between three types of diversity—variety of functional roles, separation in institutional values, and financial disparity—to explore the level of conflict experienced by the alliance, and seek to understand why some alliances are better equipped to manage this conflict once it does occur. I test hypotheses by creating a unique measure of the level of conflict experienced by the alliance through natural language processing of 345,000 pages of alliance documents across 2147 global alliances comprised of 45,000 partners. Additionally, using over 25,000 interim status reports, I examine the performance of the alliance over time to empirically assess if conflict is as detrimental to performance as previously theorized. This research examines conflict on a scale not previously studied and shows that the composition of the multipartner alliance does matter for conflict and its prevention, and that not all fighting is indeed bad.

[PLEASE DO NOT CIRCULATE WITHOUT PERMISSION]

The Kerala State Transport Project was a \$336 million project aimed at strengthening the road network of the Indian state of Kerala. Numerous organizations—including international and local firms—worked to complete the multi-year project, with the bulk of the road work being undertaken by a Malaysian-based company, PATI, and an Indian-based firm, Bhageeratha Engineering, Ltd. Yet, despite successful funding and planning on the front end of the initiative, the project overran its initial timing and financial estimates and was plagued by corruption and nepotism. Contractors clashed with local government officials who refused to hand over land required for the project. Local laborers clashed with the local and international companies over on-time salary payments. And partners from PATI and Bhageeratha clashed because of their different operating norms. Besides time delays and financial loss, the project embarrassed the local and national governments, raised issues for its primary funder, the World Bank, and sadly resulted in the fatality of the Malaysian project manager.¹

The Kerala State Transport Project is a form of a multipartner alliance: a group of organizations that comes together and is “not bound by authority based on employment relationships but characterized by a system-level goal” (Gulati, Puranam, & Tushman, 2012:573). As is seen in the above example, conflict harms the functioning of the multipartner alliance. Conflict harms trust between partners, impedes communication, and is costly and time-consuming to resolve. Though benefits of conflict can accrue (De Dreu & Weingart, 2003), the widely assumed view is that conflict in the multipartner alliance is to be avoided (Christoffersen, 2013). Yet conflict amongst members of the multipartner alliance, and between the alliance and external stakeholders is an understudied field (Lumineau, Eckerd & Handley, 2015); and a nuanced understanding of what drives conflict and when that conflict is indeed harmful to performance is lacking. Differences have long been shown to be a primary driver of conflict, whether between individuals, groups or organizations (Jehn, 1995; Pelled, Eisenhardt & Xin 1999). Thus, I

¹During the project, the Malaysian Chief Project Manager of PATI committed suicide; some believed it was due to his inability “to cope with the unorthodox ways of business in India.” <http://indiatoday.intoday.in/story/engineer-lee-see-commits-suicide/1/180075.html>
<http://www.dnaindia.com/india/report-malaysians-suicide-uncovers-kerela-scam-1066349>
<http://www.worldbank.org/projects/P072539/kerala-state-transport-project?lang=en>

extend recent work that examines how different diversity type impacts outcomes of interorganizational relationships (Bertrand & Lumineau, 2016; Mohr, Goerzen & Beamish 2016) to theorize that the relationship between diversity type and conflict is not straightforward in the multipartner alliance. I explore how each of the three diversity types—variety of functional roles, separation in institutional values, and financial disparity—drives conflict and then examine when diversity may in fact reduce conflict under certain conditions. Prior theory on diversity type in interorganizational relationships has overlooked the joint effects of diversity: in many cases, diversity drives conflict, yet, diversity may reduce conflict depending on the other types of diversity present. In this research, I provide further evidence that the same type of diversity can be both beneficial and detrimental to outcomes, in particular, conflict, (Bertrand & Lumineau, 2016) and offer an understanding into how organizations may mitigate conflict once it occurs.

Multipartner alliances are a popular and growing organizational form, as firms look to combine diverse capabilities to innovate, enter new markets, and complete large-scale projects (Dorobantu, et al, 2019; Heidl, et al 2014). More so than dyadic alliances, multipartner alliances rely heavily on informal governance mechanisms and trust to be successful, as there is often an absence of contracts between partners, no formal hierarchy, and the alliance may be time-bound (Eccles, 1981). The complexity and number of partners involved in these alliances increase the likelihood of conflict (Das & Teng, 2000; Park & Russo 1996, Lavie, Lechner, & Singh, 2007). In turn, conflict experienced by the multipartner alliance can harm the relational capital necessary for success, as conflict between partners impedes communication and erodes trust (Christoffersen, 2013); and conflict between the alliance and external stakeholders can slow or stop a project, incite violence, and significantly increase the costs of operations (Mahalingam & Scott 2011; Henisz, Dorobantu & Nartey, 2014).

Though its long been shown that some types of conflict are “good” (Jehn & Mannix, 1996), the consensus is that conflict in the multipartner alliance harms alliance performance (Christoffersen, 2013). Despite its importance to the functioning of the alliance, conflict experienced by the multipartner alliance is an understudied field, partially as a result of the empirical challenges in studying interorganizational

conflict (Lumineau, Eckerd & Handley, 2015).² Though researchers have begun to develop a deeper understanding of conflict between organizations and external stakeholders, especially in large, global infrastructure projects (Henisz, Levitt & Scott 2011; Dorobantu, Henisz & Nartey 2017); little research has moved beyond dyadic conflict to conflict between members of the multipartner alliance (with the notable exceptions of Heidl, Steensma & Phelps, 2014 and García-Canal, Valdés-Llaneza & Ariño 2004). Conflict drives more conflict, and in particular, conflict can reduce cooperative-framing to relationships in the alliance and increase the incentives for opportunism and more self-serving behaviors (Cao & Lumineau 2015; Dwyer & Walker 1981). Thus, the effects of conflict between two members of the alliance can spill over not only to other members of the alliance, but also to the other relationships that the members of the alliance have. Therefore, this study builds on past work to examine conflict between members of the alliance *and* between the alliance and other stakeholders (e.g., local labor groups, community members, investors, multilaterals). Given the overlap between stakeholders and partners of the alliance, examining only partner conflict misses the overall conflict experienced by the alliance, or misses conflict that does not neatly fall into either category. For example, from this study's research setting, a multipartner alliance executing an innovation project in Romania experienced conflict between the government and the main Romanian contractor over project cost.³ A Moroccan infrastructure project experienced conflict between the multipartner alliance and the local population because development plans were not discussed or shared with the local stakeholders.⁴ A coastal restoration project in Tunisia saw conflict between two international partners of the alliance.⁵

² Past interorganizational conflict research has focused on survey research or archival data. Survey data on conflict relies on managers' past perceptions and behaviors related to conflict (Lumineau, et al 2015). Archival data (e.g., legal disputes between two partners coded through legal proceedings) provide a less biased picture of conflict between two firms; but fail to capture conflict, disputes, or disagreements that do not rise to the level of legal action or that involve more than two organizations. Work examining conflict between external parties and organizations has begun to utilize media coding (e.g., Henisz, et al 2014), but may miss the disputes or disagreements that occur between partners on a project.

³ P058284: Cultural Heritage Project (Learning and Innovation Loan)

⁴ P056978: Irrigation Based Community Development Program

⁵ P069460: Gulf of Gabes Marine and Coastal Resources Protection Project

Conflict is messy and often builds on itself. Because the multipartner alliance involves complex relationships, and conflict between two members of the alliance can impact conflict between other members of the alliance (Greer, Jehn & Mannix, 2008; Park & Russo, 1996), conflict is a collective behavior of the alliance. Therefore, it is important to examine the composition of the multipartner alliance as a whole to understand the overall level of conflict experienced by the multipartner alliance. There is a long and rich line of research in the micro-organizational behavior field that examines conflict in relation to group-level diversity (Jehn & Mannix, 1998), and there is recent work examining diversity types in interorganizational relationships (notably Bertrand & Lumineau's (2016) examination of diversity type in cartel longevity).⁶ Drawing on both these research streams, I examine how the diversity of the multipartner alliance—that is, a group-level measure of differences amongst the partners—impacts conflict. Diversity is a tradeoff for the alliance: Alliances need unique and complementary capabilities from their diverse partners, but diversity affects the ability of the alliance to build trust, coordinate activities, share knowledge, and communicate (Gulati, 1995; Parkhe, 1991; Goerzen & Beamish, 2005); and subsequently diversity impacts alliance outcomes, including formation, innovation, financial return to partners, and dissolution of the multipartner alliance (Wuyts & Dutta, 2014; Jiang, Tao & Santoro, 2010; Zhang, Gupta & Hallen, 2017). Drawing on Harrison & Klein's (2007) typography of diversity, I explore how three types of diversity—variety of functional roles, separation in institutional values, and financial disparity—impact the level of conflict experienced by the multipartner alliance, and examine how this conflict can be lessened.

I hypothesize that the variety of functional roles of the partners of the multipartner alliance increases overall conflict experienced by the alliance. Partners with differences in functional roles combine unique and complementary resources to enter new markets and build new products (Jiang, Tao, & Santoro 2010). Functional diversity has long been shown to benefit group outcomes, including longevity of relationships, creativity, and performance (Goerzen & Beamish, 2005; Bruyaka & Durand,

⁶ See Lee, Kirkpatrick-Husk & Madhavan 2017 for an extensive review of diversity in the multipartner alliance.

2012; Bertrand, et al 2016). Yet, diversity of functional roles does pose challenges for multipartner alliances. Coordination costs exist as alliance members seek knowledge from partners that are different from them and may have different operating norms and technical languages. Thus, variety of functional roles can induce conflict, though this conflict is frequently characterized as productive, as the disagreements and disputes allow for new and divergent ideas to inform decisions about the work being done (Jehn & Mannix, 1999; Mohr & Spekman, 1994).

Second, I argue that conflict increases by the level of separation in institutional values of the multipartner alliance, consistent with past theories that differences in institutional values harm communication and coordination, and reduces the ability of the alliance to build trust (Madhok, 1995; Park & Ungson, 1997). I posit that separation in institutional values increases the overall level of conflict both within the alliance and with stakeholders outside the alliance because conflict breeds more conflict: separation in institutional values of partners drives conflict that in turn can promote opportunistic and self-serving framing across interactions by members of the alliance, thus resulting in more conflict in both internal and external interactions (Tenbrunsel & Messick, 1999; Schilke & Lumineau, 2018).

Lastly, I argue that financial disparity—the differences in the share of financial resources amongst the partners of the alliance—drives conflict, as disparity brings about feelings of inequity, competition, and distrust within a group (Sidanius & Pratto, 2001; Galinsky, Magee, Inesi & Gruenfeld, 2006), and organizations push back against the firm or firms holding the majority of resources in a project setting (Van Marrewijk, Ybema, Smits, Clegg & Pitsis, 2016). However, when examined in the context of a high level of separation in institutional values, I posit that financial disparity helps mitigate conflict, as financial disparity allows for the emergence of a dominant set of operating norms that helps to address the challenges that result from disparate beliefs and values (Kiesler, 1983; Tiedens & Fragale, 2003). Financial disparity aids in the formation of a macroculture in the multipartner alliance—a shared set of values—that helps in reducing conflict and supports cooperation both within the alliance and with external stakeholders (Jones, Hesterly, & Borgatti, 1997). I argue that this effect helps to address the paradox multipartner alliances face with regards to separation diversity: the multipartner alliance needs

partners with vastly diverse institutional values in order to navigate new contexts, but that diversity comes at a cost of coordination and conflict. Financial disparity helps to mitigate this effect of separation in institutional values.

In order to examine these hypotheses, this paper departs from prior research on interorganizational conflict in important ways and addresses the empirical challenges previously posed in studying conflict. I test these hypotheses with a sample of 2138 multipartner alliances that came together to execute on projects funded by the World Bank. I develop a unique measure of conflict through the coding of 345,000 pages of project documents written at the completion of each project executed by the multipartner alliance. Using natural language processing, I code instances of disputes, disagreements, arguments, and other forms of conflict between members of the multipartner alliance and between members of the alliance and external stakeholders on a given project, developing a measure of the level of overall conflict experienced by the multipartner alliance. As such, this research offers a first-of-its-kind picture of interorganizational conflict, as it does not rely on legal proceedings, surveys of manager perceptions, or qualitative case studies. I examine group level conflict, as opposed to dyadic conflict, and the research setting spans industries and geographies on a scale—2138 multipartner alliances comprised of 45,000 organizations across 135 countries—not previously studied. Lastly, to understand the impact of conflict on the alliance, I conduct additional analyses that examine 25,000 interim status reports to understand performance over time of the alliances, and examine what mechanisms may be at play in mitigating the effects of conflict once it has occurred.

As such, this study advances research on interorganizational conflict and its effect on performance and offers a deeper understanding of conflict both between members of the alliance and between the alliance and other stakeholders. Using a unique and extensive measure of conflict, it contributes to the limited body of empirical work on interorganizational conflict. This paper also builds on the work of scholars such as Henisz, Dorobantu and Nartey (2014, 2017) that explores conflict between projects and external stakeholders by examining the composition of the alliance as a key factor that drives conflict. Furthermore, this work advances theory on the impact of diversity type on

organizational outcomes. Recent work on interorganizational relationships and diversity type focuses on the direct effect of diversity and outcome (Bertrand, et al 2016), though does not yet explore the joint effects of diversity type. I extend this theory to acknowledge that diversity type may have both a negative and positive effect on conflict depending on the context, specifically depending on the other types of diversity present in the alliance, and examine how alliances may contend with the necessary tradeoff that diversity presents (Dorobantu, et al 2019; Bertrand, et al, 2016). In the closing of this paper, I will elaborate on these specific contributions and avenues for future research on this topic.

THEORY & HYPOTHESES

The multipartner alliance is a group of organizations that come together to execute on a common goal or mission. Multipartner alliances, also called multilateral alliances, quasi-firms, meta-organizations, or global project organizations (among other names) comprise networks of firms “not bound by authority based on employment relationships but characterized by a system-level goal” (Gulati, Puranam, & Tushman, 2012:573). Despite their challenges in coordination and complexity, multipartner alliances remain a popular and growing organizational form, as firms look to combine diverse capabilities to innovate, enter new markets, and complete large-scale projects (Dorobantu, et al, 2019; Heidl, et al 2014).

The multipartner alliance differs from a dyadic partnership in ways that are important to this research. First, the alliance is brought together with a collective contract and goal; and as such, exclusive bilateral contracts between each dyadic relationship in the alliance may be rare, as is seen in venture capital syndicates, finance syndicates or temporary project organizations. The relationships within the alliance are often informal, temporal, and the overall alliance may lack an explicit hierarchy and codified collaboration mechanisms (Eccles, 1981). Thus, multipartner alliances typically rely more heavily on relational governance than formal governance mechanisms, and on indirect reciprocity as opposed to direct reciprocity (Albers, et al 2007; Fonti, Maoret & Whitbred, 2017).

Thomas defines conflict as ‘the process which begins when one party perceives that another has frustrated, or is about to frustrate, some concern of his (1992: 265). In the multipartner alliance, conflict is theorized as a key factor in the functioning of the alliance especially as firms come together to achieve

a common goal, but may have vastly distinct organizational goals (Eccles, 1981). Conflict in the multipartner alliance is important because it harms trust between organizations (Kim et al., 2004, 2006; Tomlinson et al., 2004), and trust has long been shown to be an important component for governing interorganizational relationships (Ring & Van de Ven 1992; Gulati 1995; Gulati & Gargiulo 1999), especially in the multipartner alliance where there is a greater need for social governance mechanisms (Gulati, Puranam & Tushman 2012, Heidl & Phelps, 2011, Das & Teng, 2002). Furthermore, conflict comes at a cost to the alliance. Resolution of conflict requires time and resources from the alliance partners that could have been dedicated elsewhere had no conflict arisen (Zaheer, McEvily & Perrone 1998; Steensma & Lyles, 2000; Henisz, Dorobantu & Nartey, 2014).

It should be acknowledged that there are benefits of conflict, including the reduction of groupthink and promotion of creativity (De Dreu & Weingart, 2003), but the more widely held and supported view is that conflict within an alliance ultimately hurts performance (Li & Hambrick, 2005; Christoffersen, 2013; Reus & Rottig, 2009; Schilke & Lumineau 2018). Though there is significant work that examines the antecedents of conflict in two-party relationships, including contract structure (Lumineau & Malhotra, 2011; Schilke & Lumineau, 2017; Klaus & Klerk 2017), difficulty and alternatives in the market (Gray & Handley 2011; Cannon and Perreault, 1999), the allocation of resources between partners (Lumineau & Malhotra 2011), common or divergent norms of behavior (Ganesan, 2010) and the level of interdependence and coordination (Assael 1969, Alter 1990), there is limited work directly measuring what drives conflict in the multipartner alliance, and subsequently, how that conflict affects performance (Christoffersen, 2013; Reus & Rottig, 2009).

In the organizational behavior literature, diversity has long been examined as a critical antecedent to conflict in a group (Jehn & Mannix, 1997). In the multipartner alliance, diversity of members allows the alliance to access distinct capabilities and enter uncertain or foreign markets (e.g., Dorobantu, et al 2019). Yet, diversity in the multiparty alliance presents a tradeoff, as differences amongst partners increases transaction costs and makes coordination more difficult. Scholars have increasingly explored how diversity amongst the partners in the multipartner alliance affect the ability of the alliance to build

trust, coordinate activities, share knowledge, and communicate (Gulati, 1995; Parkhe, 1991; Lavie & Miller, 2008; Goerzen & Beamish, 2005); and subsequently how these behaviors impact the outcomes of the alliance, including formation, innovation, financial return to partners, and dissolution of the multipartner alliance (Wuyts & Dutta, 2014; Jiang, Tao & Santoro, 2010; Zhang, Gupta & Hallen, 2017, Dorobantu, et al 2019).

Diversity comes in multiple forms, and different forms impact the alliance in different ways. Strategy scholars have begun to leverage diversity scholars' (Harrison & Klein, 2007; Stirling, 2007) categorization of three types of diversity—variety, separation, and disparity— to examine diversity in multipartner alliances and other forms of interorganizational relationships (e.g., Lee, et al 2017; Mohr, Goerzen & Beamish 2016). Consistent with past diversity scholars and work done by Bertrand & Lumineau (2016), I take into account the context in examining diversity and conflict and acknowledge that I cannot capture all aspects of diversity in the multipartner alliance. As such, I focus on the specific aspects of each diversity type—variety of functional roles, separation in institutional values, and financial disparity—that in particular impact the ability of the multipartner alliance to build trust, share information, and coordinate activities, all critical to conflict in the multipartner alliance.

Variety of Functional Roles

The first type of diversity I explore is variety. Variety is differences in kind or type, and implies distinct information or knowledge (Harrison & Klein, 2007). For example, minimum variety could be an alliance comprised of partners from the same industry (Jiang, et al, 2010), or similar years of operating (Bertrand, et al 2016). Maximum variety could be an alliance where each partner comes from a different industry. Variety of experience, background, or knowledge amongst partners in an alliance allows the alliance to bring together complementary and distinct information to build new products, innovate, or enter new markets. Thus, knowledge that is transferred amongst partners with high variety is complementary and creates value, as opposed to knowledge that is redundant when there is limited variety amongst partners (Goerzen & Beamish, 2005). In particular, alliances characterized by a set of partners

from a variety of functional roles (e.g., marketing, manufacturing) exhibit greater knowledge sharing and higher performance (Jiang, et al 2010; Lee, et al 2017). Multipartner alliances that can draw upon unique and diverse pools of knowledge resulting from differences in functional roles can make more effective decisions and deliver more creative products (Bruyaka & Durand, 2012; Goerzen & Beamish, 2005).

Despite the general consensus that variety of functional roles has a positive impact on alliance outcomes, impact of variety of functional roles on conflict is not as straightforward. That is because there are coordination costs as alliance members seek knowledge from partners that are different from them—especially as partners with different functional roles may work from different operating norms and use different terminology and language (Jiang, et al 2010).⁷ In navigating these differences, conflict does occur; however, the conflict that arises because of high variety is typically productive conflict (often referred to as “task” conflict) (De Dreu, et al 2003). This conflict that arises because of distinct information and knowledge allows for new and divergent ideas that inform decisions about the work being done (Jehn & Mannix, 1999; Mohr & Spekman, 1994). However, despite these challenges, the widely held belief is that variety of functional roles in the multipartner alliance is beneficial to overall alliance functioning. Partners in these alliances are incentivized to share information in order to access and combine unique knowledge, which in turn reduces the hazards of opportunism and reduces negative conflict (Luo & Park, 2004). Thus, multipartner alliances characterized by variety of functional roles experience conflict, but this conflict is in service of better ideas and decision-making (and thus, may be beneficial to the successful functioning and performance of the alliance). I predict that greater variety of functional roles increases conflict experienced by the multipartner alliance.

It is important to note that a *lack* of variety of functional roles also has an impact on conflict, and specifically, has an impact on unproductive conflict in an alliance. Partners from the same functional backgrounds may compete with each other outside the bounds of the alliance which can create conflict

⁷ This dynamic is borne out in the findings of Jiang, et al 2010 in their exploration of alliance portfolios that showed an inverted “U” relationship with regards to variety diversity: too much created overwhelming coordination costs, but too little was detrimental to performance as well.

within the alliance for three primary reasons. First, competitive partners have greater incentive to take advantage of their counterparts and may seek to access their partner's competencies or knowledge, resulting in trust issues between the partners (Park & Russo, 1996; Garcia-Canal, et al 2003). Second, partners in the alliance may have overlapping or unclear roles and may seek to play the same roles, thus resulting in conflict on how work is allocated (Davis, 2016). Lastly, competition between partners creates conflicting interests, as it creates challenges to devise mutually beneficial goals within the alliance (Park & Ungson, 1997).

The context of this research, global projects, provides clarity on the competing theories of the impact of variety of functional roles and conflict. In the global projects of this research setting, firms bid and are selected for specific contracts and scopes of work. Therefore, despite multiple firms having the same functional background, there is a clear allocation of work required and specific documentation of a firm's role on the project. Thus, I expect that overlapping functional backgrounds in this research context to have less of an impact on conflict due to competition over how work is allocated. I posit:

Hypothesis 1: The level of conflict experienced by the multipartner alliance is positively related to the variety of functional roles of its partners

Separation in Institutional Values

Diversity classified as "separation" is the differences in the values and beliefs in a group (Li, et al 2017; Harrison & Klein 2007; Stirling, 2007; Mohr, Goerzen & Beamish 2016). Separation is measured along a continuum, such that groups classified with high separation contain members, for example, on opposite sides of an opinion. Low separation in a group contains those members with similar opinions. In general, high separation increases the coordination costs of members of the multipartner alliance, as differences in attitudes, beliefs and values, can harm trust, make information sharing more difficult and ultimately induce conflict. Past work has shown that partnerships with high separation of beliefs and values experience worse performance, including greater likelihood of dissolution (Mohr, Goerzen & Beamish 2016).

In particular, separation in institutional values is important in explaining partner behavior in the

multipartner alliance, because partners' home institutional environments shape the ways of communicating, collaborating, and interacting with the other partners, critical factors to the effective operating of the multipartner alliance. A company's home institutional environment is important because it shapes its values, norms, beliefs, and a way of operating (Kostova, 1999). For example, a firm coming from a country that has strong regulatory institutions protecting intellectual property may act differently (e.g., be more willing to share information given protections in place) than a firm that comes from a country with a weak set of IP regulations. And, scholars have long shown that firms represent the values and norms determined in their home country (Hennart and Zeng, 2002; Park & Ungson, 1997; Parkhe, 1991). Shared expectations of appropriate behavior, including organizational practices, routines and norms of firms and society impact how firms interact and build relational capital (Henisz, Levitt, & Scott, 2012). This is because a shared set of values and norms whether between individuals on a team or organizations reduces conflict, increases trust and cooperation, eases knowledge sharing, and creates more deeply embedded and stronger social ties.

Extensive research shows that differences in institutional values amongst partners impacts the performance and longevity of an alliance (e.g., Weber, Shenkar, & Raveh, 1996; Barkema & Vermeulen, 1997). Though partners with a high separation in institutional values is often necessary as alliance navigate new or uncertain environments (Dorobantu, et al 2019), these differences also pose problems, as differences impede communication and cooperation, and increase the costs of coordination (Lavie & Miller, 2008; Hennart & Zeng 2002, Wassmer, 2010).

Multipartner alliances characterized by high separation in institutional values contend with a varied set of operating expectations, management practices and values. These differences can impede the ability of the multipartner alliance to build social capital, trust and relationships, and can impact the ability of the multipartner alliance to effectively communicate and cooperate, resulting in greater conflict and discord (e.g., Goerzen & Beamish, 2005; Mahalingham, Levitt & Scott, 2011). Tensions arise because of differences in norms and values and a lack of a shared understanding in operating (Wassmer, 2010, Parkhe, 1993). Conversely, familiarity and a shared understanding of operating norms results in

more communication, reduces conflict, and allows for easier conflict resolution if it is to occur (Gruenfeld, Mannix, Williams, & Neale, 1996). Shared expectations and a shared way of operating reduces the likelihood of misinterpretations and misunderstandings (Gulati & Singh, 1998; Mayer & Argyres, 2004).

As long explored in organizational behavior, the conflict resulting from differences in core values and beliefs – called “relationship conflict”—harms group performance, creating a cycle of hostility and escalating conflict (Baron, 1991; Janssen, van de Vliert, & Veenstra, 1999). Because this type of conflict is a result of the characteristics of the members of the group, this conflict is latent: it is ever-present on the team and exists as friction and long-lasting resentment amongst group members (Bar-Tal, 1989; Schein, 1986). Conflict drives more conflict, and in particular, reduces cooperative-framing to relationships in the alliance and increases the incentives for opportunism and more self-serving behaviors (Cao & Lumineau 2015; Dwyer & Walker 1981). I posit that this self-interested framing that results from conflict driven by diversity spills over to the other relationships and interactions that the members of the alliance have. Thus, greater conflict between alliance members and other stakeholders results: alliance members approach those interactions not from a cooperative or goodwill trust-building perspective, but from a transaction-oriented and self-serving perspective.

Multipartner alliances characterized by high institutional diversity lack a shared set of operating norms and a shared sense of familiarity which drives conflict. This conflict results in greater opportunistic and self-serving behaviors across all interactions, which in turn results in greater conflict with external stakeholders. Thus, I posit that these alliances experience greater overall conflict:

Hypothesis 2: The level of conflict experienced by the multipartner alliance is positively related to the separation in institutional values of its partners.

Financial Disparity

The third type of diversity, *disparity*, is “differences among unit members in their portion of a valued resource” (Harrison & Klein, 2007: 1207). These resources may be financial, social status, pay,

prestige or other sources of power. Disparity is measured as dispersion across a hierarchical continuum, such that disparity in a group takes into account both the value (i.e., the resources) and the concentration of those resources in the group (Harrison & Klein, 2007). In general, disparity (whether in power, pay, prestige, or status) across members of a team can diminish trust and cooperation, and induce conflict (e.g., Bourgeois & Eisenhardt 1988; Bloom 1999). At the group level, greater access to resources by one group over others creates perceptions of unfairness by the non-dominant group, and conflict and rivalry become prominent (Sherif et al, 1961).

In particular, financial disparity—the distribution of the financial revenues of the alliance—is important in the functioning of the alliance, as members of the alliance control (and at times, compete) for the fixed share of revenues allocated on a project. Maximum financial disparity implies that the financial revenues of the alliance are controlled by a small number of alliance partners; minimum disparity implies a more equitable distribution of revenues in the group.⁸ I posit that financial disparity increases the conflict experienced by the multipartner alliance, as members of the alliance compete for resources and experience feelings of inequity and distrust. Financial disparity, and more specifically the direct impact of disparity on conflict in the multipartner alliance is not well-established (Albers, Schweiger, & Gibbs 2018), but there is extensive research on the impact of the allocation of financial resources in a group.

As long explored by sociologists, contact between unequal groups inevitably results in conflict (Pettigrew, 1980; Messick & Mackie, 1989). This link between disparity and conflict, both at the individual level and the group level, is well-established. Differences in resources across members of a team can diminish trust and cooperation, and induce conflict (e.g., Bourgeois & Eisenhardt 1988; Bloom 1999). As articulated by social dominance theory, divisions are established due to the ability of a group

⁸ As a point of clarity, it is important to note that financial disparity is distinct from majority control or majority ownership, though many of the same mechanisms may be consistent across both. This is because financial disparity takes into account both the number of members, as well as the relative share or value each member holds. Thus, Group X that has four members, with member A holding 50% of the resources, and members B, C, D holding 12.5% of resources may operate very differently than a group Y that has member A holding 50% of the resources, member B holding 48% of the resources, and members C and D each holding 1%. Group Y may face far more gridlock and competition than Group X given their structures.

to claim resources over another, which creates perceptions of unfairness (Siddanius & Pratto, 1999). The group in control of the resources feels justified in its access to resources, whereas the group with limited resources believes the status quo is unfair. This dynamic leads to competitiveness and conflict, as the groups seek to claim these finite resources (Sherif, et al 1951). Conversely, equal status amongst group members is a necessary condition to optimal group functioning and the reduction of prejudice amongst group members (Allport, 1954, Pettigrew, 1990).

Amongst firms, financial disparity drives instability in a network and creates conflict. Conflict results because disparity reduces cooperative interactions (Dwyer & Walker, 1981), prevents perspective-taking of the other party (Galinsky, Magee, Inesi & Gruenfeld, 2006), incentivizes less integrative behavior (Lin & Germain, 1998) and reduces information sharing (McAlister, Baderman & Fader 1986). Equal resources between two firms produces mutual accommodations (Harrigan, 1988) and reduces the likelihood of retaliatory behaviors (Dwyer & Walker, 1981). In the multipartner alliance, disparity of status has been shown to lead to factionalism and instability (Heidl, et al, 2014). Furthermore, financial disparity establishes informal dominance by the members of the alliance who have greater access to financial resources. In two party relationships, higher levels of conflict result when aspects of the relationship (e.g., legal contracts) establish dominance (Lumineau & Malhotra, 2011, Schilke & Lumineau, 2018). Dominance in a partnership harms the formation of goodwill trust, increases suspicion and antagonism, reduces the desire to work cooperatively, and in turn, induces greater amounts of conflict (Deci & Ryan, 1987; Scherer, Abeles, & Fischer, 1975; Tenbrunsel & Messick, 1999; Malhotra & Murnighan, 2002).

In the multipartner alliance, financial resources are allocated across the partners, and in some instances, these financial resources are highly disparate—with a firm or small group of firms controlling the majority of the financial resources. Financial disparity creates feelings of inequity, competition, and a perception of dominance, which in turn drives greater conflict between partners. Thus, I posit:

Hypothesis 3: The level of conflict experienced by the multipartner alliance is positively related to the financial disparity of its partners.

There are, however, benefits to financial disparity in a group. Though inequity and competition arise, financial disparity allows for greater structure, a dominant set of operating norms, and efficiency in decision-making and resolving conflict once it does occur (Winch & Leiringer, 2016; Lumineau & Malhotra, 2011). Multipartner alliances with separation in institutional values are comprised of firms with highly varied norms, values, and ways of operating. Thus, conflict results from clashing expectations and from the challenges in establishing a common way of operating. Past research has shown that opportunistic behavior, which drives conflict, can be reduced by the establishment of a shared set of assumptions, values and beliefs (Jones, Hesterly, & Borgatti, 1997). Thus, in situations of separation in institutional values, financial disparity may reduce the level of conflict experienced by the multipartner alliance in two primary ways: 1) by imposing a dominant set of operating norms and expectations of behavior and 2) by more quickly and efficiently resolving the conflict that results from separation in institutional values once it does occur, thus reducing spillover conflict.

First, as asserted by the dominance complementarity view, a party or group holding the majority of resources is able to dictate a way of operating and clarify the norms that all members are expected to ascribe to (Kiesler, 1983; Tiedens & Fragale, 2003). A dominant group can act as a “peacemaker” between members of the alliance (Heidl, et al, 2014) and other partners may look towards the dominant partner for the preferred way to operate. For example, Heidl, et al 2014 showed that a dominant and central partner can mitigate schisms and the negative effects of faultlines in an alliance. Bertrand & Lumineau (2016) showed that a powerful member of a cartel can increase its longevity given the clear operating norms brought about by this disparity.

Second, financial disparity helps with efficiency in decision-making, in particular, in resolving conflict once it does occur as the dominant partners can more easily act at will and make decisions by fiat (Galinsky, et al 2006). Lumineau & Malhotra (2011) found that disparity in power reduced the cost and time to resolve conflict once it does occur. Given that conflict begets more conflict (Greer, et al 2008;

Baron, 1991; Janssen, van de Vliert, & Veenstra, 1999), in the presence of high financial disparity overall conflict may be reduced: when conflict between differing institutional values does arise, it is resolved quickly, may not escalate, and does not spill over into other instances of conflict. Thus, I posit:

H4: Greater financial disparity lessens the impact of separation in institutional values on the level of conflict experienced by the multipartner alliance.

METHODS & SETTING

The setting for this study is the set of all multipartner alliances that form to execute World Bank-funded projects that began and ended between 1999 and 2016. The World Bank provides funding, in the form of long-term concessionary loans to countries for projects that will impact the economic and social development of a particular country or region. The Bank supports in the identification, preparation, monitoring, and evaluation of these projects in collaboration with the host countries.⁹ Private companies, individuals, and NGOs are contracted to each project by the borrowing country sponsor and comprise the multipartner alliance that executes the project. These organizations that execute the projects are selected through a variety of procurement methods (e.g., international competitive bidding, national competitive bidding).

This setting is attractive for many reasons. The primary reason is that these projects do not appear to be fundamentally different from other large global projects not funded by the World Bank. Often, these World Bank-funded projects are partially funded by other private or government sources. Multiple funding sources are common on large global projects, including funding from a mix of public and private sources. Second, the projects of this dataset span countries and industries, and the companies executing these projects span a variety of home countries, levels of prior experience, and experience with local partners, as discussed below. Furthermore, these companies also execute on projects and form alliances not funded by the World Bank. Finally, while there is a great deal of research exploring drivers

⁹ The World Bank refers to host countries as “borrowing countries,” but for the purposes of this study I follow nomenclature used in international business research and refer to the country where the project takes place as the “host country.”

of project outcomes using the World Bank Project Database and IEG Performance Database (for example, see Isham, Kaufmann & Pritchett 1997, Isham & Kaufmann 1999; Kilby, 2000; Dollar & Levin, 2005), there has been little consideration of the firm-level effects on project-level outcomes (with the notable exceptions of Malik & Stone (2017) and McLean (2017)). Thus, this research fills an empirical gap in the international aid and development literature by extending the existing analyses to include the effect of the contractors who execute these development projects.

The dataset is comprised of four datasets: The World Bank Project Database, the World Bank Contractor Database, IEG Performance Database and a corpus of project documents including Implementation Completion and Results reports for each project, and Implementation Status Reports for a subset of projects. The data are organized with one observation for each new contracting relationship (i.e., firm, individual or NGO) entered to support a World Bank project. In all, there were 157,180 contracting relationships introduced between 1999 and 2016 across 5864 projects (the Contractor Database started collecting data in 1999). From this dataset, I combined contract observations (and summed contract amounts) to ensure that for each unique project there were not multiple observations with the same contractor, resulting in a dataset of 102,203 contracting relationships. Given that the theoretical test of these data is of diversity and financial asymmetry, it was important to capture the full financial share that a single contractor owned on a given project. Of those, 43,958 contracting relationships were not associated with a specific project, did not include a conflict data, or were associated with projects that started before 1999, leaving 58,245 contracting relationships across 2,592 projects. I dropped 119 projects that took place at the regional level, given that the theoretical test of institutional differences is at the country level. From the dataset of 2473 projects and 55,473 contracting relationships, I dropped those projects (203) that have only one or two contracting relationships. Given that the study is of group-level differences within the project, I tested the model on projects with three or more contracting relationships. Finally, I dropped those projects that did not have an associated Implementation Completion and Results report or did not have data on World Bank Leadership (for

selection model) (123 projects). The model was thus tested on a dataset containing 52,659 contracting relationships across 2147 projects.

These 2147 projects took place across 135 countries, with China hosting the most projects at 131, and Brazil hosting the second greatest number of projects at 74. Given that the projects are partially funded by the World Bank, all of the projects take place in developing countries, with the average GDP per Capita across all countries at \$4,354, with the maximum GDP per capita at \$23,159. The average number of contracting relationships on a project is 24, the average size of a project is \$52,500,000, and the average contract size is \$2,614,047.

Insert Figure 1 about here

Dependent Variables

Level of Conflict: The emphasis of this study is the level of conflicts, disputes and disagreements that the partners of the multipartner alliance experience during the lifespan of the project. Measuring conflict experienced by the multipartner alliances poses a challenge, as measurement is commonly done through survey data, which rely on managers' past perceptions of whether conflict occurred; or it is done through the analysis of contractual disputes that rise to the level of legal action (Lumineau, et al 2015). Thus, I look to build a measure that captures the level of conflicts, disputes, arguments and disagreements experienced between members of the multipartner alliance and the alliance and external stakeholders that do not necessarily rise to the level of legal action; nor that rely on the memory or perceptions of the managers directly involved in the conflict.

To measure the level of conflict experienced by the multipartner alliance, I develop a coding of the dependent variable from each project's Implementation Completion and Results report (ICR), a detailed document written by the World Bank at the completion of the project.¹⁰ These reports are

¹⁰ See <http://documents.worldbank.org/curated/en/375311468326426795/pdf/NonAsciiFileName0.pdf> For a guide to the ICR report. World Bank. 2011. *Implementation completion and results report : guidelines (English)*. Washington DC: World Bank.

“prepared to satisfy accountability needs and provide lessons from completed operations” and in general, describe project design, implementation, problems encountered, lessons learned, and outcomes (World Bank, 2011; Winters, 2018). The report is compiled by World Bank staff with input from key project stakeholders, including government agencies, co-financiers, and others.

In general, the ICRs do not have a structured or obligatory section that to capture the instances of arguments, conflict, disputes or disagreements experienced by members of the multipartner alliance. For instance, there is no specific measure gathered by the Bank that captures how much conflict is experienced by the alliance in undertaking the project. Sections that discuss instances of disagreements or disputes amongst alliance partners and amongst alliance partners and external partners are written in unstructured text form and are often embedded in the discussions of other parts of the project. For example, in a coastal restoration project in Tunisia, text in the project document states: “*By project completion, INSTM was unable to settle a dispute with and between the two consulting firms involved in the study.*”

Therefore, I coded instances of conflict through the use of a machine learning algorithm, which helped to both identify instances of conflict, as well as help to refine the coding scheme in order to capture instances of conflict that may not have been in the original code. The use of the machine learning algorithm to develop a set of labeling rules (i.e., a list of words and phrases) that capture types and level of conflict helps to not only reduce bias in the code, but also to ensure that false positives (e.g., “anti-conflict measures”) are not captured (see King, Lam & Roberts, 2017).

With the support of the machine learning tool, I created a labeling rule to code instances of conflict through the use of a subject – verb pairing. The list of subjects included terms such as “companies,” “suppliers,” “contractors;” the verbs (and the stems) included “disagree,” “argue,”

“dispute” (“disagreement” “argument”). An instance of conflict was coded when any of the subject terms were within ten words of proximity to the verb terms.¹¹

Examples of conflict include:

*“WWTP had been 80 percent completed - the same physical progress rate it had reached in 2011, prior to the **dispute** between ONAS and its **contractor** which went into international arbitration.”* (P086865)

*“[There were] delays due to (i) **disagreements** between the client and the international **consultant** on technical and financial matters related to the preparation of tender documents”* (P090656)

*“After contract award, when **disputes** on implementation arose between the EEC and **Contractor**, EEC felt its original assessment had been correct.”* (P057929)

*“The contractual **dispute** between the MoE and the **Engineering Consultant** involved additional work undertaken by the Consultant without having signed a contract addendum.”* (P098850)

For each project, the separate instances of conflict are summed, and the total is normalized by project document word count (per 1000 words) to create an overall conflict score (*Level of Conflict*). A larger conflict score indicates higher levels of conflict experienced by the multipartner alliance.

Independent Variables

Variety of Functional Roles: Functional diversity is the differences in functional purposes of partners (Jiang, et al 2010). Functional differences impact the ability of the alliance to access non-redundant and complementary knowledge and expertise. Based on prior research by Jiang, et al (2010), functional differences are measured by the primary activities that the firm undertakes (e.g., marketing, consulting, etc.). The World Bank categorizes each contractor with a “procurement type” which is “the overall purpose of the work or services performed under the contract” (World Bank Project Codebook). There are 45 different procurement types (e.g., Construction Supervision, Policy & Strategy, Implementation Support) and the top 25 procurement types cover approximately 85% of all contracts. Following Jiang, et al (2010) and Harrison & Klein’s (2007) approach to measuring functional diversity in a group, I use the

¹¹ As a robustness check of the machine learning algorithm, I also created a list of conflict words developed through the Goldstein Scale for WEIS Data (Goldstein, 1992), a measure that was developed to capture the intensity of conflict or cooperation. Though my research does not distinguish intensity of conflict (e.g., assault is more intense than complain), I leveraged the scale as an additional robustness check. Direction of results remained the same.

Blau Index of Variability (Blau, 1977). The Blau Index allows for the measure of diversity of categorical variables within a group. For each project organization, I compute the Blau Index (*Variety*) using $1 - \frac{\sum([n_i(n_i - 1)] / [n(n-1)])}{n(n-1)}$ where n_i equals the number of members in the functional group i , and n equals the total number of members in the group.

Separation in Institutional Values: Separation in institutional values is the institutional differences between the home countries of the firms within the alliance. Institutional differences, that is, the differences in the normative, cognitive, and regulative institutions across countries impact organizational behavior, including choice of countries, partners, and entry modes (Henisz 2000, Jensen & Szulanski 2004, Kostova 1997, Xu & Shenkar 2002). Based on prior research by Lavie and Miller (2008), these institutional differences are measured by the World Governance Indicators (WGI), a set of six values that measure country differences across administrative and political national environments. The World Governance Indicators rate countries on a scale of 0-100 on the following six values: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. As discussed by Harrison & Klein (2007), much richness of heterogeneity could be lost in aggregating the six WGI values when generating the diversity measure. Following Harrison & Klein (2007), for each WGI value, I calculated the average score of each partner's home country between the years of 1999-2016. Then, I computed an average project score for each of the six WGI values and took the standard deviation over the project WGI score. For each project organization, I computed standard deviation using $\sqrt{[\sum(S_j - S_{mean})^2/n]}$ where S_{jn} refers to contractor j 's home country aggregate WGI score on value n and S_{mean} refers to the project's average WGI score on that same value n . Separation in institutional values (*Separation*) is the average standard deviation across all six of those scores.¹² Standard deviation is used as it allows for comparisons across project

¹² As an additional robustness check, for each partner's home country, I averaged the six factors between the year 1999-2016 to get an aggregate WGI score. Then, following Harrison and Klein's (2007) approach to measuring the differences of values on teams, I computed an average project WGI score and took the standard deviation over the overall project WGI score. For each project organization, I computed standard deviation (*Separation*) using $\sqrt{[\sum(S_j - S_{mean})^2/n]}$ where S_j refers to contractor j 's home country aggregate WGI score and S_{mean} refers to the project's average WGI score. Results remained robust.

organizations of different sizes, as the standard deviation does not increase with the size of a unit or team (Harrison & Klein, 2007). Larger standard deviations indicate greater separation in institutional values on the project.¹³

Financial Disparity: Financial disparity is measured by the financial share of the contract allocated to each organization in the multipartner alliance. Financial disparity impacts efficiency, coordination, conflict resolution between organizations and individuals operating at the boundaries of those organizations (Lumineau & Malhotra 2011; Bae & Gargiulo, 2004; Blodgett 1992; Bleeke & Ernst, 1991). Based on prior research by Lumineau & Malhotra; 2011 and others, financial resources are measured by the revenues generated by each partner, and thus for this setting, the revenues are defined as the amount of money allocated to each partner to execute the project.

To capture both the size and share of control, my primary measure of financial asymmetry is a measure of a Herfindahl Index Score for each project organization, a measure most often used to measure the concentration of industries, as determined by market shares of firms. The Herfindahl Index measures the concentration ratio, so it gives more weight to larger contractors and takes into account the number of contractors in the multipartner alliance. For each multipartner alliance, I computed a Herfindahl Index (*Disparity*) score using $\sum_{i=1}^N s_i^2$ where S_i is the ratio of contract amount for contractor i over total amount across all contractors and N is the number of contractors on the project. The Herfindahl Index ranges from $1/N$ to 1, where values closest to 1 represent high concentrations of resources (greater financial disparity).¹⁴

Interaction: The interaction between Separation in Institutional Values and Financial Disparity was operationalized through an interaction term: *Separation* Disparity*.

¹⁴ Financial disparity is measured at the group level and takes into account both the number of firms within the alliance and the relative share controlled by each firm. For example, this allows the measurement to capture the differences between a multipartner alliance comprised of four organizations, with the lead organization controlling 50% of the project resources, and the other three organizations controlling 12.5% each versus a multipartner alliance comprised of four organizations with the lead organization controlling 50% of the project resources, and the other three organizations controlling 48%, 1% and 1%.

Other Independent Variables

I first control for the level of experience that members of the multipartner alliance have with each other and the host country context in which they are operating. Prior experience with partners is measured by the total number of instances that partners in the alliance have worked together on past World Bank projects (*Partner Experience*). For example, in multipartner alliance with firms A, B, C and D, if firms A and B have worked on two prior projects together, and firms B and C have worked together on one prior project, the alliance would receive a score of “3”.

Firms can learn how to operate in a host country and build knowledge through the experience of working in that country, which may reduce the likelihood of conflict between partners and external stakeholders. Thus, I calculated the overall level of experience that all partners in the multipartner alliance have in working in the project’s host country. I counted the number of times each alliance partner has worked on another World Bank project in the host country (*Country Experience*).

An extensive body of work demonstrates the importance of host country level characteristics on project outcomes. Differences in country economic strength, institutional strength, policies, and infrastructure have all been shown to significantly impact the performance of these projects. Following Dollar & Levin (2011) and Denizer, Kauffman, and Kraay (2011), I control for the strength of the host country economy with a measure the GDP per capita averaged over the years of the dataset (*GDP / Capita*). I also control for the institutional stability of the host country with a measure of the average WGI score of the host country (*Institutional Strength*), and control for other country-level effects through the use of country fixed effects (*Country*).

Additional project level variables also significantly impact the performance of projects (Denizer, Kauffman, & Kraay 2011). To account for these, I control for project complexity as measured by the natural log of the size of the project in dollars (*Project Size*), as larger projects may be more complex and experience more conflict. I also control for project length, as longer projects may be more complex and have a longer time frame in which to experience more conflict (*Project Length*). I control for the effects of sector differences by using a dummy variable for project sector (*Sector*), as well as annual differences

with a dummy variable for the year that the project closed and final project report was written (*Year*), consistent with past research (Denizer, Kauffman & Kraay, 2011). Lastly, given that financing from the World Bank comes in different forms, I account for the lending instrument (*Lending Instrument*) also consistent with past research (Kilby & Michaelowa, 2018).¹⁵

Selection

Research exploring multipartner alliances is limited to the set of firms that are selected to form the alliance, thus, selection bias can be present in studies of the multipartner alliance. This study of multipartner alliance conflict is limited to that set of contractors that were chosen to participate in the multipartner alliance. Thus, the variables of interest—separation in institutional values, variety of functional roles and financial disparity—may influence the formation of the multipartner alliance in the first place and bias the results of the model. Contractors are selected for the multipartner alliance through a bidding process run by a third-party (e.g., the project management office). For each contract in the multipartner alliance, the bidding process involves different forms of bidding (called “procurement methods”). For example, the contractors may be selected on a cost-basis or a cost and quality basis.¹⁶ Thus, selection of the contractors to the multipartner alliance is not random and must be incorporated into the model.

To account for potential endogeneity arising from the selection of contractors into the multipartner alliance, I constructed a quasi-control group of matched contractors that did not form an multipartner alliance and employed a probit model that predicts whether or not the multipartner alliance forms in order to obtain the selection parameter (*lambda*). I also control for procurement method in the first stage of the model. I constructed the sample for the selection model by matching each contract in the

¹⁵ There are 13 different lending instruments that the World Bank deploys, depending on timing, project needs, and the borrowing agency. The most common instrument (1,460 projects) is the *specific investment loan* (SIL). Other instruments include *technical assistance loans*, *financial intermediary loans*, and *emergency recovery loans*. (World Bank Lending Instruments: Resources for Development Impact, 2001)

¹⁶ The World Bank denotes 17 different procurement methods that are typically aligned to contract size and type. Procurement methods include categories such as *International Competitive Bidding*, *National Competitive Bidding*, *Least Cost Selection*, and *Quality and Cost Selection*.

study to a contract in the dataset of all World Bank contracts (102,203), following a similar approach used by Dorobantu, et al (2019), Heidl, et al (2014), Zhang, et al (2017). I matched contracts based on procurement type and sector. Procurement type has 45 categories of what the contract does or provides to a project (e.g., Construction Supervision, Raw Materials - Chemicals). Sector has 10 categories (e.g., Transportation, Education, Mining). I matched on procurement type and sector to take into account that different types of contractors come together to execute a project, and that not all firms within the dataset are equally capable of performing the required work for a contract. This approach differs from other approaches, which consider alliance partners to be of similar capabilities and thus match on extrinsic characteristics such as alliance year, number of partners, location or industry.

I created five unrealized multipartner alliances for every one realized multipartner alliance, matching each of the 55,370 contracts across the 2336 realized syndicates with a contractor from the universe of potential contractors.¹⁷ Thus, the unrealized multipartner alliances were the same size (number of contractors) as each realized multipartner alliance. So multipartner alliance *Z* with three contractors would have five matched multipartner alliances, each also containing three contractors of the same procurement type and industry as the three contractors in multipartner alliance *Z*. Because I randomly selected contracts from the set of all matched contracts, an unrealized multipartner alliance could be completely different from the realized multipartner alliance, or it could differ by just one or two contracts (see Zhang, et al 2017). The resulting sample contained 332,220 contracts which resulted in 12,828 multipartner alliances: 2336 realized multipartner alliances (55,370 contracts) and 10,690 unrealized multipartner alliances (276,850 contracts).

The selection model includes the variables of interest included in the analysis of multipartner alliance conflict (second stage). I included an exogenous variable that indicates whether the lead contractor is from a country that has a seat on the World Bank Board of Executive Directors during the

¹⁷ Past research suggests matching each realized alliance with at least two unrealized alliances (e.g., King & Zeng, 2001).

year when the contract is signed.¹⁸ The Board of Executive Directors “consider and decide on loan and credit proposals...and they decide on policies that guide the general operations of the bank.” (World Bank Annual Report 2000:35). The Board is comprised of 25 representatives from shareholding countries, with the five largest shareholding countries each having a permanent seat on the Board, while the remaining 19 Board seats are elected for two-year terms (see Kaja & Werker (2010) for a detailed overview of the Board of Executive Directors). I expect that lead contractors from countries with an Executive Director seat during the contract signing year affects the likelihood of the formation of the multipartner alliance, but does not affect conflict within the multipartner alliance. Past research has shown that World Bank disbursement to borrowing countries is influenced by Executive Director membership (Kaja & Werker, 2010), and that selection of contractors into World Bank funded projects are also affected by political influence and economic ties to the contractor’s country (McClellan, 2017). As hypothesized, board membership aligned to the lead contractor predicts formation of the multipartner alliance, but the board membership of the lead contractor did not predict the level of conflict in the alliance (the second stage model). I estimated the inverse Mills ratio (*lambda*) from the probit regression model that estimates the probability of formation of the multipartner alliance.¹⁹

RESULTS

The dependent variable (*Conflict Level*) is a continuous variable that measures the level of conflict coded in the project document, normalized by the length of the project document. The variable ranges from 0, for those projects in which not instances of conflict or disputes were coded in the project documents to a maximum of 1.65 (instances of conflict per 1000 words in the document). Given the continuous nature of the dependent variable, the primary estimation approach was an ordinary least

¹⁸ *Lambda* was calculated using only whether the lead contractor’s home country had a seat on the Exec Board given that I am looking to predict *formation* of the multipartner alliance, not *selection* of the specific contractors given that the level of study is at the group-level, not at the individual firm level. However, the instrumental variable also predicts selection of the individual contractors into a multipartner alliance, a finding that is in itself interesting, but outside the bounds of this study.

¹⁹ As a robustness check in the first stage model, I used a rare events logit (firthlogit) and there were no differences in the direction or significance of the estimations predicting formation of the multipartner alliance.

squares regression model to test the core hypotheses. Table 1 provides means, standard deviations and intercorrelations for all variables used to assess conflict.

Insert Table 1 about here

Table 2 summarizes the results of five separate regression models designed to test the four hypotheses. Model 1 includes only control variables. Models 2 through 4 examine the relationships between *conflict*, *variety of functional roles*, *separation in institutional values*, and *financial disparity* through direct effects and Model 5 examines the interaction of *separation* and *financial disparity*, all after controlling for experience, host country institutional strength, project length, project amount, and country, financing, year and sector. Models 6 shows the full model.

Insert Table 2 about here

Hypothesis 1 suggests that as the variety of functional roles of the multipartner alliance increases, the level of conflict experienced by the multipartner alliance will increase, as differences in functional backgrounds increase the challenges in exchanging information, as well as increase the ideas and knowledge brought forward to determine the best course of action. The effect of *variety* is positive and significant ($p < 0.10$). This positive, significant effect remains consistent across the full model of direct effects ($p < 0.10$). My findings are aligned with past research that predicts that high variety will increase conflict, as partners from different functional backgrounds must navigate different modes of operating, ways of communicating, and terminologies, unique to their own function. However, the conflict that results from this variety is more likely to be of the productive type. Thus, the examination of the *type* of conflict brought about by variety of functional roles is an important consideration for future examination. I discuss additional considerations in the Conclusions section of this paper.

Models 3 and 4 explore the direct effects of *separation in institutional values* and *financial disparity* without the addition of any interaction terms. The effect of *separation* is positive and but not significant across all models. Thus, Hypothesis 2 is not supported. Past theory suggests that *separation in*

institutional values increases transaction costs, reduces communication and harms trust amongst the multipartner alliance and its stakeholders. Thus, I examine the non-results of separation in institutional values through additional analyses.

Hypothesis 3 suggests that greater financial disparity increases the level of conflict experienced by the multipartner alliance, as disparity fuels competition, harms trust, and increases feelings of inequity between partners. The effect of *disparity* on conflict is positive and significant ($p < 0.10$) in Model 4. This result holds in the full model of direct effects (Model 6).

In Hypothesis 4, I predict that *financial disparity* lessens the impact of *separation* on conflict experienced by the multipartner alliance because *disparity* allows for a dominant and clear set of operating norms that reduce the conflict resulting from alliance partners with diversity of institutional values. In Model 5, the effect of *separation x disparity* is negative and significant ($p < 0.05$), providing evidence that in instances of alliances with separation in institutional values, greater financial disparity reduces the level of conflict experienced by the alliance. Results remain significant ($p < 0.10$) in the full models.

It's important to note that the effect does not merely attenuate the impact of these diversity types on conflict, rather the interaction of financial disparity and separation in institutional values reverses the sign. Conflict is *decreased* in instances of high financial disparity and high separation in institutional values. Figure 3 shows the marginal effects of financial disparity at varying levels of separation in institutional values, and the marginal effects of separation in institutional levels at varying degrees of disparity. At the highest levels of disparity, the effect on conflict is indeed reversed. Disparity *decreases* conflict in the presence of high separation in institutional values.

Insert Figure 2 about here

Additional Analyses

I undertook additional analyses to better understand the results that did not correspond to my theory development, and to better understand the relationship between conflict and performance in the multipartner alliance.

First, I further explore the non-result of the direct effect of separation in institutional values on the level of conflict experienced by the multipartner alliance. In aligning with past theory, I predicted that separation in institutional values would increase the level of conflict experienced. However, I found no effect. In probing the non-results of this effect, I found that separation in institutional values did indeed significantly increase the level of conflict in the alliance, but only in those projects that were longer in duration (i.e., longer than the average project). In Models 7, 8, and 9 I show this effect. Models 7 and 8 split the sample in long projects (greater than 7.4 years) and short projects (fewer than 7.4 years), and Model 9 shows the interaction between separation in institutional values and project length. In Model 7, the impact of separation on conflict is positive and significant, and in Model 8, impact of separation on conflict is negative and significant: there is a reduction in conflict for short-term projects with high degrees of separation in institutional values. These results are consistent with theory in organizational behavior research that contends that certain types of diversity impact group functioning over time. Specifically, deep-level diversity—that is, diversity of values and beliefs—may not impact group cohesion early in the group’s formation. Rather, it takes time for values and beliefs to become conveyed, and thus have an impact on conflict (Harrison, Price & Bell, 1998).

Next, I explored the relationship between performance and conflict. It is generally accepted that conflict harms the performance of the multipartner alliance (Christofferson, 2014). I do not attempt to make a causal argument in order to empirically support this theory; however, I do look at performance over time in my sample to understand how projects with high conflict and low conflict may differ in their performance outcomes. Using approximately 25,000 interim status reports written over the life of the projects, I capture an interim measure of performance that measures how well the project at the time of

the interim report is achieving its stated objectives.²⁰ This performance score is determined by the World Bank team managing the project; thus, there are inherent biases consistent with self-reported measures of performance. Despite these biases, these interim performance ratings provide a useful indication of the change in project performance over time, despite the subjectivity of the measure and potential for the overall measure to be inflated (or deflated). This measure is written qualitatively as Highly Unsatisfactory to Highly Satisfactory; I convert these assessments to a 1 to 6 scale to further analyze (1 – Highly Unsatisfactory). Not all projects in my original sample have these interim results reports. Of my sample of 2147 projects, 1489 projects had interim project reports and thus interim measures of project performance. At the beginning of the project, high-conflict projects (those above the mean of conflict) and low conflict projects (below the mean) started out at approximately the same performance rating.²¹ However, over time, projects that experienced high levels of conflict decreased more than their low-conflict counterparts, resulting in a final rating of 4.14 versus 4.34 (and average across all projects of 4.31).

Insert Figure 3 about here

However, not all high-conflict projects suffered from poor performance: some high-conflict projects experience a greater decline in project performance than other high conflict projects. Of the 424 high-conflict projects, 80% either did not decrease in their final performance rating or decreased by only one point. 16% of projects decreased by two points or more from their initial project rating and 4% of high conflict projects improved. Using the same machine learning tool originally used to code the level of conflict, I examined two additional characteristics of these segments: the presence of conflict mediation activities and the presence of participatory mechanisms in the final project report. Conflict

²⁰ The “Interim Completion and Results Report” is a short document written throughout the life of the project. These reports are not written at consistent pre-set milestones (e.g., at the end of every six months), so in order to account for this, I combined the reports across percentage of project completion for each project. For example, a project that lasted ten years might have a report written every 6 months or so – I combined the performance score for all reports written in the first two years, second two years, etc., to get a score for each quintile of the project.

²¹ All projects = 4.91; High conflict projects = 4.90; Low conflict projects = 4.91

mediation includes terms such as *dispute resolution, conflict arbitration, disagreement alleviation*, and others. Participatory mechanism includes terms such as *inclusive approach, decentralized decision making, community participation, participatory decisions*.²² I generated both of these lists using a machine learning algorithm to reduce bias in my search criteria, and generated a mediation score and participatory score that is mentions of the term per 1000 words in the project document. For high-conflict projects, the segment of projects that got worse have significantly fewer mentions of participatory mechanisms than those projects that got better or those projects that stayed the same / decreased slightly (participation score = 0.045 vs. 0.065). The participation score of those projects that decreased is significantly different from the mean participation score ($p < 0.05$) and significantly different from those projects that did not greatly decrease ($p < 0.05$). Interestingly, mentions of mediation did not significantly differ across the three segments. This finding may imply that multipartner alliances can recover from conflict when certain tools (e.g., community voice, greater transparency) are used.

Insert Table 3 about here

These findings do not make a causal claim between conflict and performance, or between participatory factors and conflict. Rather, they provide an additional insight into what mechanisms may be at play as multipartner alliances navigate conflict over time; and how alliances may recover from conflict.

CONCLUSIONS AND DISCUSSION

This study provides a first-of-its kind examination of conflict in the multipartner alliance through the development of a unique empirical measure of conflict between members of the alliance and members

²² Both sets of terms were generated through a machine learning algorithm to ensure that words were not biased by my search criteria, but were rather generated based on the data. For mediation, the terms *management, mitigation, prevention, resolution, alleviation, arbitration, and resolution* were examined in proximity to *disagreement, dispute, conflict, argument, fight*. For participatory, the terms used were: *participatory mechanisms, participatory decision, inclusive approach, community participation, empowering local, decentralized decision, community driven, greater involvement, greater voice, greater transparency, and transparent decision*.

of the alliance and external stakeholders. Past research has explored how diversity amongst partners of the alliance affects the formation, stability, and success of the multipartner alliance. Furthermore, research has hypothesized that the mechanisms underlying the diversity and performance relationship include the ability of the alliance partners to build trust, increase communication and coordination, and ultimately reduce conflict. Existing research on the multipartner alliance has so far omitted the direct and empirical link between diversity and the conflict experienced by the multipartner alliance, including conflict experienced between partners and conflict between partners and other external stakeholders. This study aims to create a direct link between the three diversity types (both separately and jointly) and conflict and begins to consider how conflict can be mitigated in these alliances.

As a baseline, this study shows that variety of functional roles increases the conflict experienced by the alliance over the life of the project. Variety of functional roles has long been shown to have positive benefits to the performance and other outcomes of the multipartner alliance, as partners from different backgrounds combine unique resources and knowledge (Jiang, et al 2010). However, these differences also induce conflict as firms have differing knowledge bases and ideas from which to tackle a problem, and in particular, approach a non-routine task (De Dreu, et al 2003; Hambrick, et al 1996). Thus, variety of functional roles increases conflict, though the conflict experienced may be of the productive type that ultimately helps performance. This study does not disentangle the type of conflict experienced by the multipartner alliance (e.g., whether that conflict is productive or unproductive), and thus, we are unable to determine empirically if the conflict driven by variety is of the productive type.

Furthermore, variety of functional roles may be a proxy for the complexity of a project: a project that requires partners from different and highly varied backgrounds and knowledge sources may be one that has technical challenges or complicated problems to solve (Li, et al 2017). Past research has used project size as a proxy for complexity as well, and in this analysis, project size also drives conflict. Again, some of the conflict driven by project size may be productive conflict that occurs in figuring out a novel problem or tackle a non-routine task. Future research that links conflict to performance outcomes

can help better understand the link between variety, complexity and the type of conflict that the alliance is experiencing.

Past theory suggests that separation in institutional values drives conflict as differences in beliefs and values creates distrust, impedes communication, and harms coordination. Though alliances often need partners with diverse ways of operating, especially when entering or operating in uncertain contexts (Dorobantu, et al 2019); this diversity comes at a cost. My empirical findings do not support the hypothesis that greater separation in institutional values generates greater conflict in the multipartner alliance. In examining this non-result, I find that the effect of separation in institutional values is contingent on the length of the project: longer projects experience greater conflict when there is high separation in institutional values. This finding is consistent with organizational behavior theory that examines diversity type over time. For diversity that is “deep,” that is, diversity that is based on underlying values and beliefs, time is required for these divisions to surface (Harrison, et al, 1988). Early in the life of a group, members operate from politeness norms and experience low relationship conflict (that is, conflict from differing values and beliefs). Over time, as members get to know each other, the friction from different ways of operating and beliefs begins to surface (Jehn & Mannix, 1998). I take caution in extrapolating micro-theory to my setting; however, this relationship between separation in institutional values, time and conflict should be further explored. Those projects that require diverse institutional partners may benefit from a truncated or expedited timeline in order to reduce the unproductive conflict that may arise.

Though financial differences between two firms has been frequently studied, research on financial disparity in the multipartner alliance is extremely limited (Lee, et al 2018). This study shows that financial disparity—as a direct effect—increases the level of conflict experienced by the multipartner alliance. I posit that this is a result of the competition and distrust that arises due to inequity between partners (Sidanius & Pratto, 2001). However, as noted by past scholars, diversity types can have both positive and negative benefits on a group (Bertrand & Lumineau, 2016). This study shows that under conditions of separation in institutional values, financial disparity reduces the level of conflict

experienced by the multipartner alliance. Financial disparity allows for the emergence of a dominant set of operating norms; thus, in instances of varied norms and beliefs, the structure and dominance brought about by financial disparity reduces conflict. I do not predict that under conditions of variety of functional roles, financial disparity has the same effect of mitigating conflict. I examined the interaction between variety of functional roles and financial disparity and found no effect. Consistent with theory, financial disparity helps create a macro-culture in the presence of conflicting values and norms: there would be little reason to assume that this is important in instances of variety of functional roles.

Recent work argues that diversity type matters less than the overall level of diversity experienced by the alliance (Dorobantu, et al 2019), and as such, this study's examination of the joint effects of diversity types is not straightforward. This argument of diversity as an aggregate measure, which is rooted in the faultlines literature (Lau & Murnighan, 1998), posits that alliances that are diverse on multiple attributes (e.g., partners from different countries, as well as partners from different functional backgrounds) experience the effects of diversity more acutely than partners that differ on fewer elements. Therefore, an aggregate construct of diversity is the necessary measure of diversity in multipartner alliances as opposed to diversity of the alliance on one attribute. In an exploration of conflict, the debate between the use of an aggregate diversity measure or a distinct diversity type becomes more complex than an exploration of other alliance outcomes such as performance or longevity. This is because there is productive and unproductive conflict, and each diversity type may have a different impact on that outcome. For example, from my empirical work, an aggregate measure of diversity would predict that conflict is heightened for those projects that are high in multiple diversity types (as the alliance has a higher overall level of diversity). However, in instances of high separation and high variety diversity, I see no effect on conflict, potentially because the type of conflict that each diversity type induces is different. Furthermore, in the condition of high disparity and high separation, I see a reversal: conflict is reduced despite a higher *overall* level of diversity in the alliance.

Additional empirical analyses begin to unpack the important relationship between conflict and performance. This study shows that, *ex-ante*, high-conflict projects are not anticipated to be problematic

– as seen by the rating of the projects at the beginning of their life. Rather, project performance over time decreases in those projects that experience high levels of conflict and ending project performance is lower for those projects characterized by high levels of conflict. However, this study also shows that not all projects that experience conflict suffer from poor performance. Those projects that have a high-level of participatory mechanisms – that is shared decision-making and involvement of the community—appear to “recover” from conflict. These results beg a greater examination of the causal link between actions the multipartner alliance can take—for example participatory decision-making—and the ability to bounce back from conflict; as well as the link between these actions and the three types of diversity. Similarly, additional analyses could examine the capabilities partners build in navigating and resolving conflict. Though this study controls for past experience working with partners, past experience navigating conflict may be better equipped to prevent conflict, or resolve conflict once it does occur.

This paper makes several contributions. First, it offers a first-of-its-kind measure of conflict to examine what drives conflict in the multipartner alliance. Academic research has devoted limited attention to examining conflict between partners in an alliance, partially as a result of the empirical challenges in measuring conflict (Lumineau, et al 2015). Through the construction of a unique measure of conflict developed through the natural language processing of 340,000 pages of project documents over 2147 alliances, this study builds on the work of management scholars such as Heidl, et al (2016), and Lumineau & Malhotra (2011) that examines conflict between partners, what drives that conflict and how it can be reduced. It also offers insight into the relationship between conflict and alliance performance, a relationship theoretically, but not empirically examined (Christofferson, 2013), as well as provides insight into the characteristics of the alliance that may prevent a negative impact of conflict on performance. As such, it adds to the small but growing body of literature on conflict resolution and conflict prevention between organizations (Lumineau & Henderson, 2012; Malhotra & Lumineau, 2011; Lumineau & Malhotra, 2011).

Second, this study extends theory of the impact of diversity type on alliance outcomes. Past work on diversity type and outcome does not examine diversity types jointly—i.e., do not consider how one

diversity type may impact another in the outcome (Bertrand & Lumineau, 2016). This study builds on the extensive research of diversity type in the multipartner alliance by examining each diversity type in turn, and in particular examining disparity diversity which has had limited attention in past work on the multipartner alliance (Lee, et al 2018). This study refines the theory of diversity type on conflict by positing that under certain conditions diversity type may increase or decrease conflict. Though extensively explored in the organizational behavior literature, the link between diversity type and conflict has had limited exploration in the strategy field. This study examines conflict as the mechanism of the diversity—outcome relationship to develop a finer grained understanding of why diversity matters to the alliance, a relationship previously theorized but rarely empirically explored.

Lastly, given its empirical setting, this study contributes uniquely to the extensive body of work in the international development and development economics fields examining the drivers of performance in World Bank-funded projects by exploring how the firms executing the project impact conflict. Despite vast literature exploring how project and country-level variables impact projects, limited research explores the impact firms or combinations of firms have on project outcomes. This paper joins a small number of studies that seek to understand how firm characteristics impact these large projects (Malik & Stone, 2017; McLean, 2017).

REFERENCES

- Albers, S., Schweiger, B., & Gibb, J. (2015). Complexity, power and timing in multipartner alliances: An integrative review and research agenda. *Managing Multipartner Strategic Alliances*. New York: Information Age Publishing.
- Allport, G. W., Clark, K., & Pettigrew, T. (1954). *The nature of prejudice*.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.
- Barkema, H. G., & Vermeulen, F. (1997). What differences in the cultural backgrounds of partners are detrimental for international joint ventures? *Journal of international business studies*, 28(4), 845-864.
- Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic management journal*, 17(2), 151-166.
- Bertrand, O., & Lumineau, F. (2016). Partners in crime: The effects of diversity on the longevity of cartels. *Academy of Management Journal*, 59(3), 983-1008.
- Bleeke, J., & Ernst, D. (1991). *The way to win in cross-border alliances*. Harvard business review, 69(6), 127-135.
- Blodgett, L. L. (1992). Research notes and communications factors in the instability of international joint ventures: An event history analysis. *Strategic management journal*, 13(6), 475-481.
- Bloom, M. (1999). The performance effects of pay dispersion on individuals and organizations. *Academy of Management Journal*, 42(1), 25-40.
- Brouthers, K. D., Brouthers, L. E., & Werner, S. (2003). Transaction cost-enhanced entry mode choices and firm performance. *Strategic Management Journal*, 24(12), 1239-1248.
- Bunderson, J. S., & Boumgarden, P. (2010). Structure and learning in self-managed teams: Why “bureaucratic” teams can be better learners. *Organization Science*, 21(3), 609-624.
- Bunderson, J. S., & Reagans, R. E. (2011). Power, status, and learning in organizations. *Organization Science*, 22(5), 1182-1194.
- Cagno, E., Caron, F., & Mancini, M. (2007). A multi-dimensional analysis of major risks in complex projects. *Risk Management*, 9(1), 1-18.
- Cao, Z., & Lumineau, F. (2015). Revisiting the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *Journal of Operations Management*, 33, 15-42.
- Carton, A. M., & Cummings, J. N. (2012). A theory of subgroups in work teams. *Academy of management review*, 37(3), 441-470.
- Choguill, M. B. G. (1996). A ladder of community participation for underdeveloped countries. *Habitat international*, 20(3), 431-444.
- Christoffersen, J. (2013). A review of antecedents of international strategic alliance performance: synthesized evidence and new directions for core constructs. *International Journal of Management Reviews*, 15(1), 66-85.
- Clegg, S. R., Pitsis, T. S., Rura-Polley, T., & Marosszeky, M. (2002). Governmentality matters: designing an alliance culture of inter-organizational collaboration for managing projects. *Organization studies*, 23(3), 317-337.
- Coleman, J. S. (1974). *Power and the Structure of Society*.
- Das, T. K., & Teng, B. S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of management review*, 23(3), 491-512.
- Das, T. K., & Teng, B. S. (2001). A risk perception model of alliance structuring. *Journal of International Management*, 7(1), 1-29.
- Davis, J. P. (2016). The group dynamics of interorganizational relationships: Collaborating with multiple partners in innovation ecosystems. *Administrative Science Quarterly*, 61(4), 621-661.

- De Dreu, C. K. (2008). The virtue and vice of workplace conflict: Food for (pessimistic) thought. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 29(1), 5-18.
- De Dreu, C., & Weingart, L. (2003). Task versus relationship conflict, team performance, and team member satisfaction: a meta-analysis. *Journal of applied Psychology* 88.4 741.
- Denizer, C., Kaufmann, D., & Kraay, A. (2013). Good countries or good projects? Macro and micro correlates of World Bank project performance. *Journal of Development Economics*, 105, 288-302.
- Dollar, D., & Levin, V. (2005). Sowing and Reaping: Institutional Quality and Project Outcomes in Developing Countries. *World Bank Policy Research Working Paper* # 3524.
- Dorobantu, S., Lindner, T., & Müllner, J. (2020). Political risk and alliance diversity: A two-stage model of partner selection in multipartner alliances. *Academy of Management Journal*, 63(6), 1775-1806.
- Dreher, A. Sturm, and Vreeland, JR. (2009). "Development aid and international politics: Does membership on the UN Security Council influence World Bank Decisions" *Journal of Development Economics* 88. 1-18
- Dussauge, P., Garrette, B., & Mitchell, W. (2000). Learning from competing partners: Outcomes and durations of scale and link alliances in Europe, North America and Asia. *Strategic management journal* 21.2:99-126.
- Dwyer, F. R., and Walker Jr. (1981). Bargaining in an asymmetrical power structure." *The Journal of Marketing*: 104-115.
- Eccles, R. G. (1981). The quasifirm in the construction industry. *Journal of Economic Behavior & Organization*, 2(4), 335-357.
- Filiou, D., & Golesorkhi, S. (2016). Influence of Institutional Differences on Firm Innovation from International Alliances. *Long Range Planning* 49.1: 129-144.
- Fligstein, N., & McAdam, D. (2011). Toward a general theory of strategic action fields. *Sociological theory*, 29(1), 1-26.
- Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological science*, 17(12), 1068-1074.
- García-Canal, Esteban, Ana Valdés-Llaneza, and Africa Ariño. "Effectiveness of dyadic and multi-party joint ventures." *Organization Studies* 24.5 (2003): 743-770.
- Gibson, C. & Vermeulen, F. (2003). A healthy divide: Subgroups as a stimulus for team learning behavior. *Administrative Science Quarterly*, 48: 202-239
- Goerzen, A., & Beamish, P. (2005). The effect of alliance network diversity on multinational enterprise performance. *Strategic Management Journal* 26.4: 333-354.
- Gulati, R., Puranam, P., & Tushman, M. (2012). Meta-organization design: Rethinking design in interorganizational and community contexts. *Strategic management journal*, 33(6), 571-586.
- Harrigan, K. R. (1988). Joint ventures and competitive strategy. *Strategic management journal*, 9(2), 141-158.
- Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of management review*, 32(4), 1199-1228.
- Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface-and deep-level diversity on work group cohesion. *Academy of management journal*, 41(1), 96-107
- Heidl, R. A., Steensma, H. K., & Phelps, C. (2014). Divisive faultlines and the unplanned dissolutions of multipartner alliances. *Organization Science*, 25(5), 1351-1371.
- Heine, K., & Kerk, M. (2017). Conflict resolution in meta-organizations: the peculiar role of arbitration. *Journal of Organization Design*, 6(1), 1-20.
- Henisz, W. J. (2000). The institutional environment for multinational investment. *The Journal of Law, Economics, and Organization*, 16(2), 334-364.

- Henisz, W. J., & Delios, A. (2001). Uncertainty, imitation, and plant location: Japanese multinational corporations, 1990-1996. *Administrative science quarterly*, 46(3), 443-475.
- Henisz, W. J., Levitt, R. E., & Scott, W. R. (2012). Toward a unified theory of project governance: economic, sociological and psychological supports for relational contracting. *Engineering project organization journal*, 2(1-2), 37-55.
- Hennart, J. F., & Zeng, M. (2002). Cross-cultural differences and joint venture longevity. *Journal of International Business Studies*, 33(4), 699-716.
- Iorio, J., & Taylor, J. E. (2015). Precursors to engaged leaders in virtual project teams. *International Journal of Project Management*, 33(2), 395-405.
- Isham, J., & Kaufmann, D. (1999). The forgotten rationale for policy reform: the productivity of investment projects. *The Quarterly Journal of Economics*, 114(1), 149-184.
- Isham, J., Kaufmann, D., & Pritchett, L. H. (1997). Civil liberties, democracy, and the performance of government projects. *The World Bank Economic Review*, 11(2), 219-242.
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of management journal*, 44(2), 238-251.
- Jiang, R. J., Tao, Q. T., & Santoro, M. D. (2010). Alliance portfolio diversity and firm performance. *Strategic management journal*, 31(10), 1136-1144.
- Kaja, A., & Werker, E. (2010). Corporate governance at the World Bank and the dilemma of global governance. *The World Bank Economic Review*, 24(2), 171-198.
- Kale, P., Dyer, J. H., & Singh, H. (2002). Alliance capability, stock market response, and long-term alliance success: the role of the alliance function. *Strategic Management Journal*, 23(8), 747-767.
- Kilby, C. (2000). Supervision and performance: the case of World Bank projects. *Journal of Development Economics*, 62(1), 233-259.
- Kilby, C., & Michaelowa, K. (2019). What influences World Bank project evaluations?. In *Lessons on Foreign Aid and Economic Development* (pp. 109-150). Palgrave Macmillan, Cham.
- Klein, K.J. & Harrison, D.A. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32: 1199-1228. 117.
- Kogut, B. and Singh, H. 1988. The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies*, 19 (4): 411-32.
- Koka, B. R., & Prescott, J. E. (2002). Strategic alliances as social capital: A multidimensional view. *Strategic management journal*, 23(9), 795-816.
- Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of management review*, 24(2), 308-324.
- Lavie, D., & Miller, S. R. (2008). Alliance portfolio internationalization and firm performance. *Organization science*, 19(4), 623-646.
- Lee, D. (Don), Kirkpatrick-Husk, K., & Madhavan, R. (2017). Diversity in Alliance Portfolios and Performance Outcomes: A Meta-Analysis. *Journal of Management*, 43(5), 1472-1497.
- Limodio, N. (2011). *The success of infrastructure projects in low-income countries and the role of selectivity*. The World Bank.
- Lin, X., & Germain, R. (1998). Sustaining satisfactory joint venture relationships: The role of conflict resolution strategy. *Journal of International Business Studies*, 29(1), 179-196.
- Lumineau, F., & Henderson, J. E. (2012). The influence of relational experience and contractual governance on the negotiation strategy in buyer-supplier disputes. *Journal of Operations Management*, 30(5), 382-395.
- Lumineau, F., & Malhotra, D. (2011). Shadow of the contract: How contract structure shapes interfirm dispute resolution. *Strategic Management Journal*, 32(5), 532-555.
- Lumineau, F., Eckerd, S., & Handley, S. (2015). Inter-organizational conflicts: Research overview, challenges, and opportunities. *Journal of Strategic Contracting and Negotiation*, 1(1), 42-64.
- Luo, Y. (2001). Determinants of entry in an emerging economy: A multilevel approach. *Journal of Management Studies*, 38(3), 443-472.

- Mahalingam, A., Levitt, R. E., & Scott, W. R. (2011). Rules versus results: Source and resolutions of institutional conflicts on Indian metro railway projects. *Global projects: Institutional and political challenges*, 113-134.
- Malhotra, D., & Lumineau, F. (2011). Trust and collaboration in the aftermath of conflict: The effects of contract structure. *Academy of Management Journal*, 54(5), 981-998.
- Malik, R., & Stone, R. W. (2018). Corporate influence in World Bank lending. *The Journal of Politics*, 80(1), 103-118.
- McLean, E. V. (2017). The politics of contract allocation in the World Bank. *The Review of International Organizations*, 12(2), 255-279.
- Mohr, A., Wang, C., & Goerzen, A. (2016). The impact of partner diversity within multiparty international joint ventures. *International Business Review*, 25(4), 883-894.
- Nartey, L. J., Henisz, W. J., & Dorobantu, S. (2018). Status climbing vs. bridging: Multinational stakeholder engagement strategies. *Strategy Science*, 3(2), 367-392.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge university press.
- Oliveira, N., & Lumineau, F. (2019). The dark side of interorganizational relationships: An integrative review and research agenda. *Journal of Management*, 45(1), 231-261.
- Park, S. H., & Ungson, G. R. (1997). The effect of national culture, organizational complementarity, and economic motivation on joint venture dissolution. *Academy of Management journal*, 40(2), 279-307.
- Parkhe, A. (1993). Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of management journal*, 36(4), 794-829.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual review of psychology*, 49(1), 65-85.
- Pfeffer, J., & Pfeffer, J. (1981). *Power in organizations* (Vol. 33). Marshfield, MA: Pitman.
- Schilke, O., & Lumineau, F. (2018). The double-edged effect of contracts on alliance performance. *Journal of Management*, 44(7), 2827-2858.
- Scott, W. R., Levitt, R. E., & Orr, R. J. (Eds.). (2011). *Global projects: Institutional and political challenges*. Cambridge University Press.
- Sherif, Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The Robbers Cave experiment* (Vol. 10). Norman, OK: University Book Exchange.
- Sidanius, J., & Pratto, F. (2004). *Social dominance theory: A new synthesis*.
- Söderlund, J. (2004). Building theories of project management: past research, questions for the future. *International journal of project management*, 22(3), 183-191.
- Steensma, H. K., & Lyles, M. A. (2000). Explaining IJV survival in a transitional economy through social exchange and knowledge-based perspectives. *Strategic management journal*, 21(8), 831-851.
- Tiedens, L. Z., & Fragale, A. R. (2003). Power moves: complementarity in dominant and submissive nonverbal behavior. *Journal of personality and social psychology*, 84(3), 558.
- Van den Steen, E. (2010). Culture clash: The costs and benefits of homogeneity. *Management Science*, 56(10), 1718-1738.
- Wassmer, U. (2010). Alliance portfolios: A review and research agenda. *Journal of management*, 36(1), 141-171.
- Weber, Max. *Economy and society: An outline of interpretive sociology*. Vol. 1. Univ of California Press, 1978.
- Weber, Y., Shenkar, O., & Raveh, A. (1996). National and corporate cultural fit in mergers/acquisitions: An exploratory study. *Management science*, 42(8), 1215-1227.
- Wittenbaum, G. M., Hollingshead, A. B., & Botero, I. C. (2004). From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm. *Communication Monographs*, 71(3), 286-310.

- Wuyts, S., & Dutta, S. (2014). Benefiting from alliance portfolio diversity: The role of past internal knowledge creation strategy. *Journal of Management*, 40(6), 1653-1674.
- Xu, D., & Shenkar, O. (2002). Note: Institutional distance and the multinational enterprise. *Academy of Management review*, 27(4), 608-618.
- Zaghloul, R., & Hartman, F. (2003). Construction contracts: the cost of mistrust. *International Journal of Project Management*, 21(6), 419-424.
- Zhang, L., Gupta, A. K., & Hallen, B. L. (2017). The conditional importance of prior ties: A group-level analysis of venture capital syndication. *Academy of Management Journal*, 60(4), 1360-1386.
- Zhou, K. Z., & Poppo, L. (2010). Exchange hazards, relational reliability, and contracts in China: The contingent role of legal enforceability. *Journal of International Business Studies*, 41(5), 861-881.

TABLE 1: Descriptive Statistics and Correlation Matrix

Variable	Mean	Std. Dev.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Level of Conflict	0.026	0.094	0	1.6522									
(2) Variety of Functional Roles	0.75	0.21	0	1.00	0.01								
(3) Separation in Inst. Values	16.7	11.4	0	51.0	0.07	0.26							
(4) Financial Disparity	0.23	0.17	0.01	0.99	0.03	0.05	-0.01						
(5) Partner Experience	18.4	74.7	0	2779	-0.01	-0.01	0.06	-0.14					
(6) Country Experience	1300	1320	0	2856	0.00	0.21	0.15	-0.11	0.11				
(7) Project Size (\$)	5.25E+07	1.23E+08	58399	2.01E+09	0.17	-0.06	0.04	-0.04	0.09	-0.09			
(8) Project Length (Years)	7.4	2.1	1	17	0.04	0.16	0.07	-0.18	0.06	0.09	0.19		
(9) Host Country GDP / Capita	4345	3715	282	23160	-0.03	-0.06	-0.34	0.04	-0.05	-0.01	0.03	-0.01	
(10) Host Country Inst. Strength	35.3	15.4	0.8	86.1	-0.04	-0.05	-0.42	0.02	-0.09	-0.13	0.00	0.01	0.63

TABLE 2: Regression Model Predicting Conflict

Predicting Conflict	Model 1: Controls Only	Model 2: Variety of Functional Roles	Model 3: Separation in Institutional Values	Model 4: Financial Disparity	Model 5: Interaction of Separation & Disparity	Model 6: Full Model Direct Effects	Model 7: Long Projects (>7.4 years)	Model 8: Short Projects (<7.4 years)	Model 9: Interaction of Separation & Project Length
Variety of Functional Roles		0.0202+ (1.79)				0.0193+ (1.67)			
Separation in Institutional Values			1.13E-05 (0.04)		5.90E-04 (1.52)	-5.72E-05 (-0.20)	1.20E-03* (2.28)	6.05E-04 (-1.99)	-0.0018* (-2.56)
Financial Disparity				0.024+ (1.84)	0.055** (2.73)	0.022+ (1.69)			
Separation * Disparity					-0.0019* (-2.02)				
Separation * Project Length									2.53E-04** (2.81)
Partner Experience	-3.92E-05 (1.41)	-3.69E-05 (1.33)	-3.92E-05 (1.41)	-3.31E-05 (1.18)	-3.40E-05 (1.22)	-3.15E-05 (1.13)	-1.20E-05 (0.22)	-3.17E-05 (0.83)	-3.94E-05 (1.42)
Country Experience	3.01E-07 (0.16)	-4.03E-08 (-0.2)	2.95E-07 (0.15)	8.01E-07 (0.41)	5.72E-07 (0.29)	4.69E-07 (0.24)	1.32E-06 (0.59)	-2.17E-07 (0.06)	1.53E-07 (0.08)
Project Size (\$)	1.20e-10** (6.18)	1.21e-10** (6.23)	1.20e-10** (6.16)	1.20e-10** (6.19)	1.21e-10** (6.22)	1.21e-10** (6.23)	-1.34E-11 (-0.39)	1.48e-10** (5.41)	1.17e-10** (5.97)
Project Length (Years)	0.0028* (2.28)	0.0026* (2.14)	0.0028* (2.25)	0.0033** (2.61)	0.0031* (2.44)	0.0031* (2.46)	0.0050+ (1.9)	0.0015 (0.51)	-0.0014 (-0.73)
Host Country GDP	2.27E-05** (2.95)	2.31E-05** (3.01)	2.27E-05** (2.94)	2.24E-05** (2.92)	1.44E-05 (0.23)	2.28E-05** (2.97)	2.25E-05** (3.6)	-8.34E-06 (-0.78)	5.85E-06 (0.09)
Host Country Institutional Strength	-1.25E-03 (-0.49)	-1.49E-03 (-0.58)	-1.25E-03 (-0.49)	-1.04E-03 (-0.40)	-8.19E-04 (-0.26)	-1.27E-03 (-0.49)	-0.0013 (-0.60)	0.00334 (0.97)	-0.00124 (-0.40)
Year	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lending Instrument	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sector	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country	Y	Y	Y	Y	Y	Y	Y	Y	Y
lambda	6.26E-04 (0.2)	1.61E-04 (0.05)	5.59E-04 (0.16)	-6.81E-04 (-0.21)	-9.27E-04 (-0.26)	-6.88E-04 (-0.19)	-2.21E-03 (-0.53)	8.31E-04 (0.13)	4.68E-04 (0.13)
_cons	0.26+ (1.67)	0.28+ (1.82)	0.26+ (1.67)	0.24 (1.56)	-0.032 (-0.17)	0.27+ (1.71)	-0.092 (-0.57)	-0.074 (-0.63)	0.044 (0.24)
N	2147	2147	2147	2147	2147	2147	1015	1132	2147

t statistics in parentheses
+p<0.10, *p<0.05, **p<0.01

TABLE 3: Segments of High Conflict Projects

All High Conflict Projects	Obs	Mean	Std. Dev.	Min	Max
Mediation Score	424	0.040	0.090	0.000	0.601
Participation Score	424	0.062	0.155	0.000	1.704

Performance Stayed Same or Slight decrease	Obs	Mean	Std. Dev.	Min	Max
Mediation Score	346	0.039	0.090	0.000	0.601
Participation Score	346	0.065	0.165	0.000	1.704

Performance Worsened	Obs	Mean	Std. Dev.	Min	Max
Mediation Score	66	0.047	0.095	0.000	0.415
Participation Score	66	0.045	0.098	0.000	0.620

Performance Improved	Obs	Mean	Std. Dev.	Min	Max
Mediation Score	12	0.028	0.058	0.000	0.182
Participation Score	12	0.046	0.090	0.000	0.310

FIGURE 1: Share of Financial Revenues by Partner

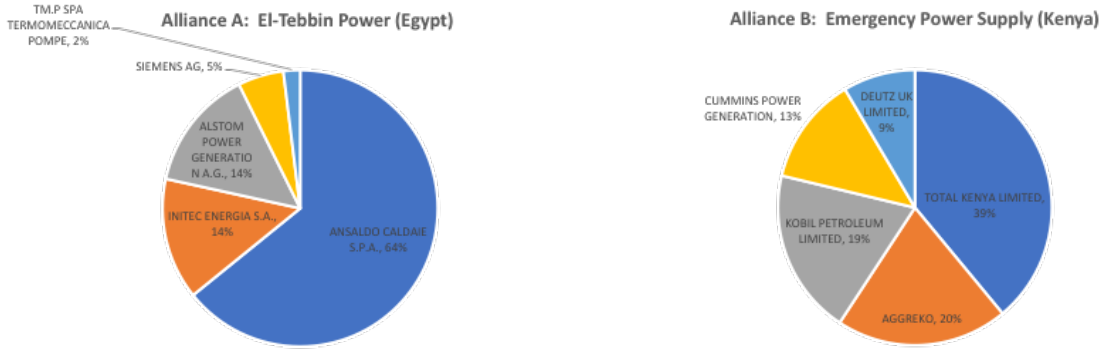


FIGURE 2: Project Descriptions

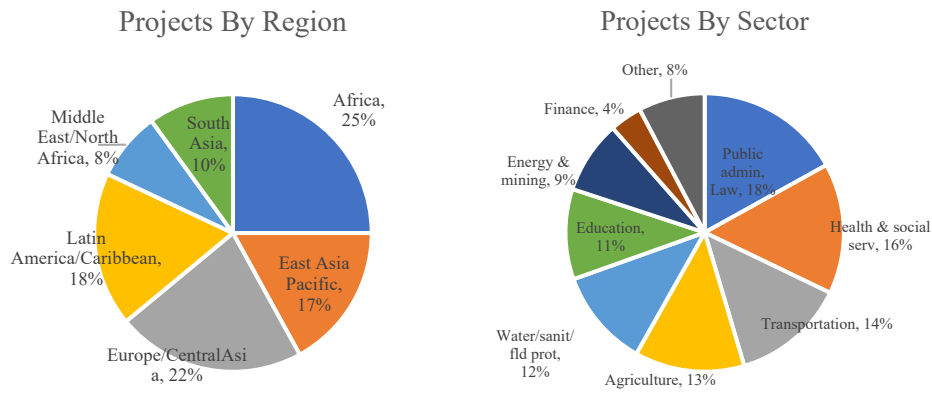


FIGURE 3: Marginal Effects on Performance

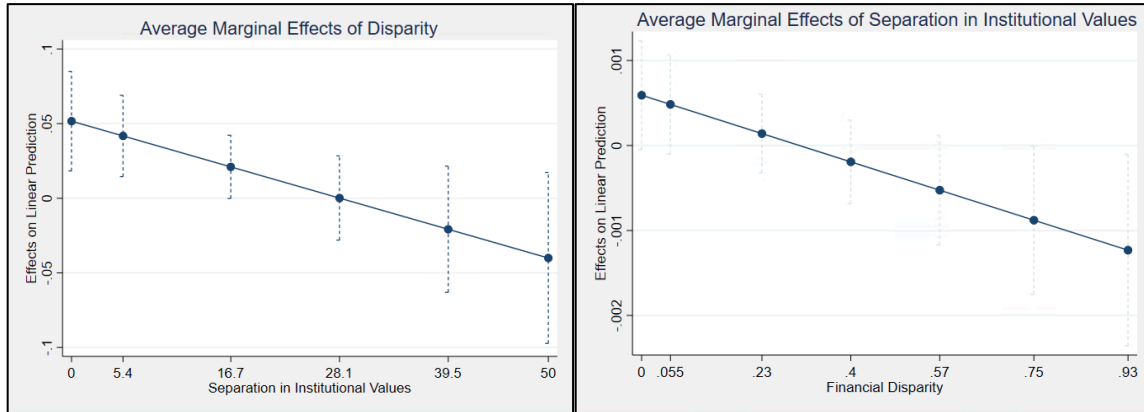


FIGURE 4: Project Performance Over Time

