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INNOCENTS ABROAD: THE HAZARDS OF INTERNATIONAL JOINT VENTURES WITH PYRAMIDAL GROUP FIRMS

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We examine international joint ventures in the telecommunications industry in Brazil, where pyramidal groups are ubiquitous. We explain how corporate governance differences between pyramidal groups versus widely held freestanding firms can lead to joint venture failures. Our empirical results show that joint ventures between pyramidal group-member firms and partners from countries where pyramids are rare have significantly elevated failure rates, while joint ventures with partners from countries where pyramidal groups are ubiquitous are more likely to succeed. Further, we provide clinical examples illustrating the mechanisms driving divergent partnership performance. © 2014 The Authors. Global Strategy Journal published by John Wiley & Sons Ltd on behalf of Strategic Management Society.

INTRODUCTION

The occurrence of international joint ventures (IJVs) has increased dramatically over the last few decades, yet IJVs continue to have high termination rates, at 30 to 70 percent (Franko, 1971; Harrigan, 1988; Kogut, 1989; Inkpen and Beamish, 1997; Reuer, 2001). The last two decades of research on this topic have provided insightful explanations for some IJV terminations. One school of thought argues that joint venturing is a part of an organizational learning process (e.g., Kogut, 1989; Hamel, 1991; Inkpen and Beamish, 1997; Inkpen, 2000; Nakamura, Shaver, and Yeung, 1996). Joint ventures are dissolved once their intended purposes are attained (Makino *et al*., 2007), particularly when the capabilities of two partners become too similar (Nakamura *et al*., 1996).

This learning proposition assumes that firms do not have full information about a host market or business opportunities. Naturally, then, a second school of thought argues that some terminations represent business failures driven by unanticipated fundamental differences between partner firms, which leads to unstable partnership (Franko, 1971; Harrigan, 1988; Kogut, 1989; Reuer, 2001; Reuer *et al*., 2013). Scholars of this conviction have demonstrated that *unintended failures* result from conflicts in knowledge sharing, competitive rivalry (Kogut, 1989; Park and Russo, 1996), and poor performance (Barkema, Bell, and Pennings, 1996; Barkema and Vermeulen, 1997; Makino *et al*., 2007).

These unintended terminations (Makino *et al*., 2007) occur either at formation (e.g., in the selection of partners) or post formation, when unanticipated events occur. Some studies (Hambrick *et al*., 2001; Reuer and Miller, 1997; Reuer, Zollo, and Singh,

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2002; Reuer *et al*., 2013) focus on formation issues and reveal that poor partner selection, contract terms, and board composition significantly contribute to IJV failures. Other studies (Franko, 1971; Parkhe, 1993a; Ariño and de la Torre, 1998; Reuer *et al*., 2002) examine post-formation joint venture partner interactions, where unanticipated events occur, and find similar results.

This study enriches the plausible explanations for unintended IJV failures by combining the partner choice and post-formation interaction arguments. We argue that a lack of understanding of the joint venture partner's corporate governance and ownership structure subjects a partnering firm to expropriation risks and, thus, unsatisfactory performance unless the governance incentives are aligned and rights are protected.

Based on data on 96 multinational subsidiaries' entries into the Brazilian telecommunications industry from 1997 through 2004, our hazard rate regressions show that joint ventures between widely held freestanding firms and pyramidal group firms are most at risk for failure, while partnering between two firms with compatible governance structures is less hazardous. Our field research includes studies of joint venture governance agreements and interviews with senior executives about their experiences and lessons learned from unanticipated partner behaviors. We consolidate the information into four clinical examples to illustrate the causal mechanisms of international joint venture failure and success (Parkhe, 1993b). These examples showcase how *widely held freestanding* firms unfamiliar with pyramidal groups lost control of their joint ventures, suffered from wealth expropriation, and ultimately exited these underperforming joint ventures. In contrast, joint ventures of pyramidal group firms with other pyramidal group firms have the highest incidence of survival. In these cases, partnering firms understand each other's governance and related incentives and, thus, engage each other on reciprocating arrangements that safeguard the joint venture's success.

This article proceeds as follows: the next section discusses differences in corporate governance and ownership around the world. An ownership form more commonly found outside of the U.S. is pyramidal groups; we discuss how and why pyramidal group control structures are particularly problematic for a partnering firm unfamiliar with pyramidal groups. We then present empirical results linking joint ventures' statistical hazard rates in the Brazilian telecommunications industry to foreign partners' unfamiliarity with pyramidal groups. Next we introduce the case analyses that explore partners' strategic interactions. The information affirms our interpretation that a partner unfamiliar with pyramidal group behavior falls victim to a pyramidal partner's expropriation, leading to unsatisfactory joint venture experiences. Techniques for expropriating wealth from foreign joint venture partners are explained. Countermeasures adopted by joint venture partners familiar with pyramidal groups are described, and hazard rate analysis is used to gauge their effectiveness. We conclude with a discussion and implications for strategy scholars and foreign investment managers.

CORPORATE GOVERNANCE AND OWNERSHIP AROUND THE WORLD

The international corporate governance literature describes large cross-country variations in corporate governance (Granovetter, 1994; La Porta *et al*., 1999; Aguilera, Desender, and Kabbach-Castro, 2012; Colpan, Hikino, and Lincoln (2010). Widely held freestanding firms are common only in the United States, the United Kingdom, the Netherlands, and Ireland (Morck, Wolfenzon, and Yeung, 2005). Elsewhere, controlling shareholders—usually very wealthy families and occasionally state-owned enterprises (SOE)—prevail. La Porta *et al*. (1999) examine 27 high-income countries and find that, using a 20 percent definition of control and taking worldwide averages, only 36 percent of large firms are widely held. The remaining 54 percent are affiliated with pyramidal groups. Of this majority, two-thirds are controlled by families and one-third by SOEs. Similarly, regional studies on corporate ownership also find a high incidence of pyramidal ownership—Morck, Stangeland, and Yeung (2000) report a high incidence of pyramidal group control in large Canadian firms; in nine East Asian countries, Claessens, Djankov, and Lang (2000) find a controlling shareholder in more than 67 percent of the firms; Faccio and Lang (2002) find that 37 percent of Western European firms are widely held firms and 44 percent are family controlled; and Pedersen and Thomsen (1997) find similar results in 12 European countries. Fogel (2006) confirms the preponderance of wealthy family control over the 10 largest business entities (groups or freestanding firms) in most countries. In Brazil, Portugal, Mexico, Argentina,

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Greece, Turkey, Italy, Israel, Malaysia, Indonesia, India, the Philippines, Taiwan, and Thailand, the top 10 entities are predominantly pyramidal groups, while in the U.S., the U.K., and Australia, the top 10 entities are predominantly widely held firms.

Understanding variation in corporate governance and institutional environments across countries is important for firms considering international joint ventures. Prior theoretical and empirical research on IJVs has warned parent firms of corporate governance and agency issues due to conflicts stemming from shared ownership and control (e.g., Franko, 1971). Reuer and Miller (1997) show that IJV gains or losses are related to each partner's ownership and agency incentives, and a joint venture is unstable when partners' incentives are misaligned. Using an experimental approach, Reuer *et al*. (2013) show that managers tend to strategically mitigate adverse selection risks inherent in various corporate governance forms (i.e., joint ventures versus acquisitions).

In practice, this calls for an in-depth understanding of the variation in corporate governance norms and the country's institutional environment—its regulations, laws, property rights, dominant shareholder appropriation behavior, etc. (Henisz, 2000; Siegel and Larson, 2009; Perkins, 2014). Without a contextualized understanding of these institutions, joint venture partners can misconstrue each other's behavior and, perhaps unwittingly, expose themselves to avoidable expropriation risks. In the following subsection, we describe the basic corporate governance problems associated with pyramidal groups. In a subsequent section, we use clinical cases to illustrate how these problems, when unnoticed, can lead to joint venture failures.

Pyramidal group ownership structure

Pyramidal groups are collections of firms with corporate governance structures that differ markedly from those of widely held freestanding firms in three primary ways. First, pyramidal groups have one apex firm or very rarely a few apex firms, with one dominant owner controlling the apex firm and a group of tiered firms below. Because most often the dominant owner is a wealthy family (La Porta *et al*., 1999), the literature refers to this corporate governance structure as a *family pyramid* (Claessens *et al*., 2000; Faccio and Lang, 2002; Fogel, 2006; Morck *et al*., 2005) such as the Carlos Slim Helú (the Mexican billionaire) pyramidal group.

Second, the controlling owner typically affects control through chains of intercorporate equity blocks connecting the apex firm to each member firm in the group. The outcome is that, by pyramiding, a controlling owner leverages his/her wealth into a vast amount of controlled corporate assets while having limited equity participation in many of the controlled units, especially at the lower tiers.

Let us illustrate: a rich family can split $1 billion of family money into two and let each be the equity participation of a public company of $1 billion. Assuming that 50 percent of equity shares is enough for control, the family now controls two public corporations with a total of $2 billion in corporate assets. Repeating the act once, the family leverages the $1 billion family wealth to control four $1 billion corporations while maintaining only 25 percent equity participation in each. Repeating the act multiple times, the family creates N layers of firms to leverage the $1 billion to control, in consolidation, $\$2^{N-1}$ billion corporation assets while maintaining only $1/2^{N-1}$ equity participation in the N^{th} layer, $1/2^{N-2}$ in the $N\text{-}1^{th}$ layer, and so on. The more tiers added, the greater the number of firms controlled and the smaller the equity participation in the firms on the added tiers. Public shareholders and joint venture partners supply additional equity to listed firms in each tier, allowing each tier to have a total capitalization much greater than the one above it. At each layer, an upper-tier firm controls a multitude of lower-tier firms, hence the term *pyramidal group*. The leverage created in these vertically linked ownership structures often results in the *separation of ownership and control* in the lower tiers of the pyramid.

For most group firms, the dominant shareholder's control is further strengthened by additional means. The family can expand its voting power relative to its actual ownership stake by holding super-voting shares (more than one vote per share), golden shares (single shares carrying 51% of all votes), corporate charters limiting shareholders' voting rights (specifying, for instance, that the family appoints over half the directors), dual class shares (Almeida and Wolfenzon, 2006; Kabbach-Castro, Crespi-Cladera, and Aguilera, 2012), and other control-enhancing mechanisms. Cross-holdings—firms holding equity blocks in other firms at equivalent or higher tiers—can make the position, or membership, of a firm in a pyramidal group hard for outsiders to gauge and its managers' actions difficult to predict.

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Third, pyramidal groups differ from widely held firms and other forms of business groups in that the dominant owner of the apex firm essentially appoints the top management of every firm in his/her group. This is because the board of every firm is appointed by the board of its parent firm in the tier above. These appointees are usually the dominant shareholder him/herself or his/her close relatives or loyal associates. To further secure control throughout the pyramid, the dominant owner typically also appoints trusted associates and family members to key executive management positions in all significant firms. In essence, this means that the interest of the dominant owner of the apex firm is effectively represented at all levels. A convenient means to track relationships between group member firms, as shown in Khanna and Thomas (2009), is through director interlocks of listed pyramidal group member firms.

Although La Porta *et al*. (1999) show pyramidal groups to be by far the most prominent governance structure in most countries, other sorts of business groups also exist.[1] The most well known are the Japanese *keiretsu*—constellations of major firms, each holding tiny equity stakes in all the others. Collectively, these stakes sum to control blocks, so each firm is 'controlled' by all the others, with no wealthy family or other single controlling owner in the picture. The major firms in the *keiretsu* then each serve as apex firms for their own pyramidal groups (Morck and Nakamura, 2005). Business groups should also not be confused with *conglomerates*, which are single freestanding firms with divisions active in many industries. Conglomerates, thus, do not provide the scope for leveraging substantial family fortunes into undisputable control over corporate assets worth vastly more, as pyramids do. In fact, in the U.S. case, large conglomerates are generally widely held and professionally managed, not controlled by wealthy families. There are other seemingly similar entities to pyramidal group firms—such as U.S. real estate businesses, which often have 100 percent owned subsidiaries but incorporate properties separately for liability reasons, or U.S. family-owned firms characterized by Villalonga and Amit (2009). It is worth reiterating, however, that the controlling owner in a pyramidal group setting typically controls all the corporate members of the pyramidal group without having equity participation that is commensurate with his/her level of control. Our focus is on pyramidal groups. All of our arguments may not apply fully to these other sorts of business groups.

Pyramidal group agency issues and expropriation risks

Berle and Means (1932) show that pyramids generate far more extreme separations of ownership from control than widely held freestanding firms. A long string of literature (e.g., Bebchuk, Kraakman, and Triantis, 2000; Berle and Means, 1932; Bonbright and Means, 1932; Morck *et al*., 2005) shows that such leveraged ownership structures induce corporate governance problems unfamiliar to managers from countries whose corporate sectors are populated by widely held freestanding firms. The fundamental differences stem from the three characteristics of pyramids described earlier. Agency problems arise because of conflicts between member firms' public shareholders or joint venture partners and the dominant owner of the apex firm.

These conflicts overshadow the more standard agency problems between generic shareholders (principal) and hired managers (agents) described by Jensen and Meckling (1976). Unlike in the case of a widely held freestanding firm, in a pyramid with a dominant owner, the principal and the agent are one and the same. Therefore, pyramiding modifies our basic framework for understanding agency problems in several critical ways that may place joint venture partners unfamiliar with such agency issues at risk.

Agency incentive alignment

The general corporate governance assumption is that the dominant owners should serve the interest of member firms' shareholders by monitoring and disciplining the manager because of his/her dominant control of a company. However, in a pyramid, because the controlling interest of the dominant owner of the apex firm is hard to dislodge (Morck, Shleifer, and Vishny, 1988) and he/she has full control of the appointment and dismissal of senior executives, managers serve the interest of the dominant owner of the apex firm. In extreme cases, the dominant owner of the apex firm and/or his/her appointed managers become entrenched, often locked into a coveted control position through

[1] Pyramidal groups, plus other such corporate groups, are commonly denoted 'business groups' (Khanna and Rivkin, 2001; Khanna and Palepu, 2000; Chang and Hong, 2002; Khanna and Yafeh, 2007), and their interfirm ties are called 'group affiliations' (Chang, 2003).

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umbrella agreements, which serve to regulate future contractual clauses. Without penetrable external pressures, the insiders of pyramid member firms are essentially immune to challenges from minority shareholders that otherwise constrain the self-interest of professional managers in widely held freestanding firms.

A logical strategic response intended to supervene a change in control would require buying out the controlling shareholder. However, this rarely occurs because the controlling shareholder of a pyramidal group can glean substantial *private benefits of control* (Bebchuk *et al*., 2000; Dyck and Zingales, 2004; Nenova, 2000). These benefits are not only perks akin to those extracted by professional managers of widely held firms, but also tangible and intangible rewards uniquely attainable by controlling a vast group of firms. Since the dominant owner extracts private benefits of control as well as the normal returns due a shareholder, buying him/her out costs more than buying shares on the open market. The more astute the controlling shareholder, the higher the cost. This adds an *adverse selection problem* to the previously specified governance problems potentially present when partnering with pyramidal groups.

The extraction of private benefits of control by the controlling shareholder often requires that a given pyramidal group-member firm deliberately pursues policies other than value maximization. In countries where officers and directors have a duty to act for the controlling shareholders of their firm, such behavior must be secret. In other countries, however, officers' and directors' fiduciary duty is to their business group, not to any particular firm (Johnson *et al*., 2000). In any case, the tight links of member firms' officers and directors to the pyramid's controlling shareholder, the complex web of cross-holdings that often obscures the identity of the controlling shareholder, and the use of unlisted firms as intermediaries can effectively obscure such policies. All of these incentives vastly facilitate self-dealing when compared with freestanding firms.

The controlling shareholder at the pyramid's apex then often shunts wealth away from outside investors by shifting resources between pyramidal member firms. Profits are often moved away from firms mainly owned by outside investors, toward firms mainly owned by the group's controlling shareholder. To this end, the controlling shareholder can direct group firms mainly owned by joint venture partners to enter disadvantageous agreements with firms in which his/her real ownership stake is large. Such transactions between seemingly independent firms that actually share a common ultimate controlling shareholder are called *tunneling* in the finance literature (Johnson *et al*., 2000) and *self-dealing* in corporate law. Tunneling tactics include transfer pricing and opportunistically adjusting invoice prices in intragroup trading of goods and services, as well as other forms of income shifting. Kumar (2010) demonstrates that such noncooperative behavior and use of private benefits of control destroys firm performance. This misalignment of governance incentives is a hazard for firms unfamiliar with *pyramiding* and forming an international joint venture with a partner from a pyramidal group.

> *Hypothesis 1: IJV partners with nonpyramidal corporate governance structures that partner with pyramidal groups are more likely to fail than other JV ownership combinations or wholly owned subsidiaries.*

Asymmetric leverage

It follows that in pyramidal groups, the smaller the apex controlling firm's effective equity participation in lower tier firms, the greater its incentives in expropriating resources from these firms, which include IJVs the pyramid forms. Since leverage is created between tiers down the chain of control in pyramidal ownership structures, the lower the tier, the smaller the equity participation. Joint venture partners accustomed to one vote, one share governance norms, such as in the U.S., may not even know of the ultimate controlling apex firm and are exposed to these expropriation risks when partnering with firms in a pyramidal group. The risk is greater the lower the pyramidal structure tier with which it is partnering.

> *Hypothesis 2: International joint ventures formed with a tier level difference in the parent firms' ownership structure are more likely to fail.*

Risk mitigating strategies

Sophisticated managers will attempt to mitigate the expropriation risks when forming joint ventures with pyramidal group firms. Generically, strategies of reciprocity are adopted—some adopt cross-shareholdings of the joint venture partner's parent firm, while others adopt multiple point competition strategies (i.e., price wars in other markets of

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co-location), which constitutes a threat of retaliatory response to noncooperative behavior. In the international strategy literature, Kumar (2010) shows that noncooperative partner behavior destroys firm performance. In an earlier paper, Kogut (1989) demonstrates that noncooperative behavior by a joint venture partner is punishable through reciprocity generated in other linked contractual relationships. Luo (2002) demonstrates that clauses to disincentivize opportunistic behavior induce cooperation and enhance performance in joint ventures. Therefore, we postulate that stronger mutual commitment intensity will create incentives to stabilize the potential spiraling down effect when partner conflicts arise.

> *Hypothesis 3: Joint venture partners with higher levels of mutual commitment intensity are more likely to survive versus joint ventures not using reciprocity strategies.*

Bounded rationality and international joint venturing blind spots

In many instances, joint venturing with a pyramidal group firm cannot be avoided because of host country politics and regulations. Particularly, in the case of recent privatizations, governments often mandate local partnerships.[2] However, in the current era of high information flow, joint venture partners should be aware of the risks described earlier. These errors in decision making suggest that bounded rationality may play a role.

Surprisingly, a common observation from our executive interviews was that managers from countries dominated by widely held firms had a low level of awareness of the corporate governance problems inherent in pyramidal groups. They failed to anticipate their partner's actions. Or, they made *safeguard contracts* with an inadequate awareness of their ineffectiveness.[3]

Like many known bounded rationality problems (March and Simon, 1958) that affect strategic decision making (e.g., disruptive technologies) (Bower and Christensen, 1995), competitive decision making (Zajac and Bazerman, 1991), and misperceiving competition (Porac *et al*., 1995), under-appreciation of pyramidal group governance behaviors show foreign investment managers to be bounded rationally by unforeseeable information voids. Porter (1980: 59) dubs such perceptual limitations strategic *blind spots* and argues that they occur where a competitor 'will either not see the significance of events at all, will perceive them incorrectly, or will perceive them only very slowly.' Zajac and Bazerman (1991) analogously link *blind spots* to *judgment errors* in managerial decision making of competition.

Strategic blind spots not only limit managers' perceptions of reality but can also undermine their strategic plans and cause suboptimal performance. Foreign joint venture partners of freestanding firms, like the U.S., with blind spots regarding pyramidal group governance issues, may be exposed to unexpected wealth expropriation by their pyramidal group partners. Unaware of these risks *ex ante* and unable to protect their interests *ex post*, these joint venture partners are likely to exit prematurely. Often no laws are broken, so the foreign partner has little recourse but to cut its losses. Fully informed foreign firms would, of course, avoid these problems by either avoiding such joint ventures or negotiating effective contractual safeguards in advance. But if enough ill-informed foreign firms enter joint ventures with pyramid member firms, and if enough of the latter take advantage of that ignorance, we might detect performance distortions in overall joint venture statistics between foreign firms that enter alone (i.e., wholly owned subsidiaries) and different combinations of joint venture ownership structure with pyramidal group firms. To better understand where the performance differences are rooted, we must examine the unintended post-formation events that lead to the joint ventures' demise. We expose these events in the clinical studies explored later.

EMPIRICAL EVIDENCE FROM BRAZIL

We present empirical findings from both statistical and clinical analyses of joint ventures with pyramidal group members. We collect data on foreign investment in the Brazilian telecommunications industry. Our field research includes interviews of senior executives at key multinational subsidiaries in Brazil and at their parent headquarters (in the U.S.,

[2] During the period of this study, the Brazilian Ministry of Communications restricted foreign ownership in the first privatization auction of mobile phone operators in mid-1997. Entering foreign firms had to form joint ventures until the regulation was lifted in 1998.

[3] Tyler Hamilton of the *Toronto Star* in an April 5, 2003 article entitled 'Retreat from Brazil,' reports of the common naïveté of Canadian managers in Brazil.

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Canada, Spain, and Portugal). While the sharp sectoral focus reduces the scope of our study, it greatly reduces our information costs and lets us collect detailed clinical information on multiple companies in comparable situations. We acknowledge that our results cannot be generalized without careful caveats.

Joint venture data

Our data include the population of foreign firms entering the Brazilian telecommunications industry through the regulatory approval process from 1997 to 2004. We focus on this time period for two specific reasons: (1) the telecommunications industry privatized in Brazil with the Telecommunications Act of 1997[4] in which the Brazilian government sold off 100 percent of its assets; and (2) left-side censoring concerns are alleviated by observing these firms from the beginning of the industry. We also selected the research context of Brazil because of the high likelihood that most local partners would be pyramidal group firms. Perkins and Zajac (2013) show that more than 80 percent of listed BOVESPA (Brazilian stock exchange) firms are affiliated with a business group. Given this corporate governance context, the phenomena we study is more easily observable.

The data we collected provided records for 96 joint ventures in which 66 foreign parents from 18 countries and 25 Brazilian parents participate. We define parent combination as each unique collection of parents in a joint venture and parent participation as a parent's presence in a given joint venture. A detailed explanation of measuring parent combinations and parent firm data is reported in the Appendix. Since some parent firms take stakes in joint ventures that are already formed and others withdraw from ongoing joint venture subsidiaries, our 96 joint ventures have 141 parent combinations in which both domestic and foreign firms participate. Joint ventures solely between Brazilian firms are excluded. Figure 1 indicates the distribution of joint venture *parent combinations* and of *parent firm* participation longevities.

Parent firms

We classify parent firms as *freestanding* (FS), members of *pyramidal groups* (PG), or members of *other sorts of business groups* such as Japanese *keiretsus* (OG). To be designated a pyramidal group member, a parent firm must belong to a business group having the key characteristics detailed earlier—tiers of listed firms controlled by other listed firms culminating at an apex firm. We follow La Porta *et al*. (1999) in inferring control from an equity block of 10 percent or more in the absence of a larger equity block. The apex firm can be a wealthy family, government agency, financial institution, or widely held firm. Though a few Brazilian pyramidal groups are controlled by state-owned banks and pension funds, most are controlled by wealthy families. Ultimate controlling shareholder identities are obtained from public and private company records and from interviews with executives.

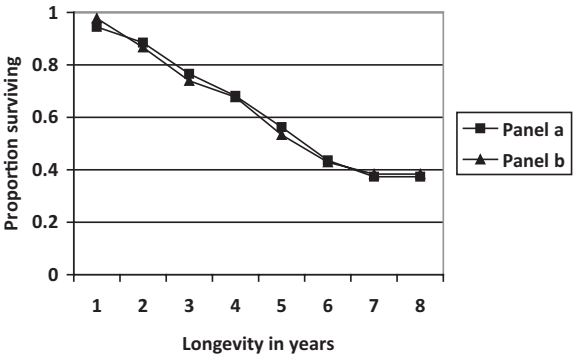

Figure 1. Joint venture parent combination survival rates Histogram showing the proportion of (1) joint venture parental combinations and (2) parent firms' participation surviving, by year.

Table 1 summarizes parent firm control descriptive statistics. All freestanding firms' parents are foreign. This is consistent with La Porta *et al*. (1999), Leal and Carvalhal da Silva (2005), and Fogel (2006), who document the rarity of dispersed ownership in Brazil.

Parent firm combinations

To test our hypotheses, the parent ownership combinations of our joint ventures are classified into five categories: (1) joint ventures between pyramidal group member firms (PG/PG); (2) joint ventures between pyramidal group member(s) and freestanding firm(s) (PG/FS); (3) joint ventures between pyramidal group member(s) and members of other business groups (PG/OG); (4) joint ventures between freestanding firms (FS/FS); and (5) Brazilian subsidiaries wholly owned by a single foreign parent (WO). See Table 2. None of our joint ventures

[4] Act 9472, July 16, 1997.

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Table 1. Parent firm control
Incidence of parent firms classified as freestanding, pyramidal group members, or other group member firms.

Control classification	Symbol	Brazilian	Foreign	Total
Freestanding[5]	FS	0	37	37
Pyramidal group member	PG	25	22	47
Other group member	OG	0	7	7
Total		25	66	91

Table 2. Parent combination control structures

Parent combination	Symbol	Foreign	Mixed	Total
All parents are freestanding firms	FS/FS	7	0	7
All parents belong to pyramidal groups	PG/PG	17	25	42
Freestanding and pyramidal group parents	PG/FS	6	22	28
Pyramidal and other group parents	PG/OG	4	2	6
Total joint venture parent combinations		34	49	83
Wholly owned subsidiaries of a foreign parent	WO	48	0	48
Total parent combinations		**82**	**49**	**131**

have parents that are all members of other business groups (OG) or that are other business groups (OG) and freestanding firms (FS).

Tier differences

To capture the tier difference between joint venture partners' ownership structures, we can obviously observe this variable only on the subsample of the data that are joint ventures. The same applies to the commitment intensity variable. Tier difference is measured as the difference in the number of tiers of pyramided firms between the joint venture's immediate parents and their pyramid's apex firms.

Commitment intensity

To see if joint ventures between two pyramidal groups are less prone to failure when their parents make a reciprocating commitment, we acquired a measure of *relative commitment intensity*. We measure commitment intensity as an indicator variable of whether any of the joint venture member firms hold equity blocks in member firms of the other partner's parent firm or if the two partners have multiple point competition through joint ventures in other Brazilian markets.

Research methodology

Empirically, our primary focus is to examine the categorical variations in failure rates among differing combinations of ownership structure. The empirical specifications most widely used to examine organizational failure are parametric duration models (e.g., log logistic model) because of the strong assumptions related to the distribution of time to failure and the inclusion of relevant covariates. We use this classical positivist empirical approach as a baseline to be able to compare prior studies of this nature and rule out alternative explanations of international joint venture failures, such as political hazards (Henisz, 2000), cultural distance (Hofstede, 1980; Barkema *et al*., 1996; Barkema and Vermeulen, 1997; Makino *et al*., 2007), evolving capabilities (Nakamura *et al*., 1996), IJV size (Makino *et al*., 2007), and regulatory experience (Perkins, 2014). We also conduct this parametric survival analysis (using log-logistic, Weibull and

[5] Note that freestanding firms include both widely held firms, like MCI, and firms with controlling shareholders. Of the 37 freestanding parents, 34 are American and all have only one-vote-per-share common equity. Of the others, one Canadian parent and one Japanese parent are private, and one Canadian parent is listed and has multiple classes of common shares. Dropping observations involving these few firms does not qualitatively change our results. Sixteen out of the 66 parent firms are widely held (14 are stand-alone firms and two are part of groups).

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Table 3. Parametric survival analysis[a]

Variables	Log logistic	Gompertz	Weibull
Sales revenue (log)	0.008*	–0.122	–0.122
	(0.00)	(0.11)	(0.11)
POLCONV distance (Henisz, 2000)	–0.474**	12.139**	12.133**
	(0.15)	(4.16)	(4.16)
Cultural distance (Hofstede, 1980)	–0.025**	0.561**	0.56**
	(0.01)	(0.19)	(0.19)
Geographic distance	0***	0.001***	0.001***
	0.00	0.00	0.00
Regulatory distance (Perkins, 2014)	–0.002	0.036*	0.037*
	(0.00)	(0.02)	(0.02)
Parent combination—PG/PG	–0.047	0.757	0.773
	(0.03)	(0.86)	(0.87)
Parent combination—PG/FS	–0.077***	1.681*	1.685*
	(0.02)	(0.67)	(0.67)
Parent combination—PG/OG	0.034	0.754	0.763
	(0.04)	(0.77)	(0.77)
Parent combination—FS/FS	Omitted	Omitted	Omitted
SIC code fixed effects	Yes	Yes	Yes
N	138	138	138
Log likelihood	81.814	77.805	78.196

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$; Constant not reported for brevity.
[a]Counter to the log-logistic (AFT) model, in both of these proportional hazard models, Gompertz and Weibull, coefficient interpretation is opposite the direction of the sign, meaning that a positive and significant coefficient has a negative effect on the hazard.

Gompertz specifications) to rule out duration dependence and distribution of failure concerns that could be problematic in interpreting the cumulative hazard rate.

However, because our primary concern is to examine the variation in corporate governance structures of joint venture formations, we specify a nonparametric cumulative hazard rate analysis to best focus on the categorical interpretations of the risk of hazard between the different types of ownership structure combinations. We estimate cumulative hazard rates for joint ventures in each of the parent ownership combination categories by summing the total number of failures (defined as exit not due to acquisitions, regulatory shifts, geographic consolidation, or other intended terminations) from July 1997 to December 2004 in the category, and then dividing this by the category's total time to failure—the sum of the years survived by all of the joint venture firms in the parent ownership combination category. For comparison, we report analogous statistics for the full sample, wholly owned subsidiaries as a baseline of foreign entry failure, joint ventures whose parents are partly Brazilian, and joint ventures whose parents are all foreign. To test for statistical significance between categorical hazard rates, we use the Blossfeld and Rohwer (2002) suggested methodology of comparing the standard errors and confidence intervals of the categorical stratified groups' hazard functions. For further validation, we additionally conduct a log-rank homogeneity test for statistical significance.

Statistical observations

Table 3 reveals the results from the parametric baseline models. These results are consistent with empirical methodologies used in related studies (Makino *et al*., 2007). Results reveal that controlling for alternate explanations, joint venture failure rates are significantly higher when the ownership structure and incentives vary. PG/FS joint venture structures are significantly more likely to fail based on the results from the Weibull ($p < 0.05$), Gompertz ($p < 0.05$), and log-logistic ($p < 0.001$) distributional forms. To examine the variation in performance between these parent ownership combinations, we turn to the categorical hazard rate model results.

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Table 4. Categorical hazard rate estimates

Ownership structure	Hazard rate	Successes	Failures	Totals
All parents are pyramid members (PG/PG)	0.08	31	12	43
Brazilian and foreign parents	0.12	15	10	25
All parents are foreign	0.02	16	2	18
All parents are freestanding (and foreign) (FS/FS)	0.26	2	4	6
Freestanding and pyramid member parents (PG/FS)	0.27	2	26	28
Pyramid and other group member parents (PG/OG)	0.20	2	4	6
Brazilian PG and foreign non-PG parents	0.22	3	21	24
Foreign PG and foreign non-PG parents	0.44	1	9	10
All joint ventures	0.16[6]	36	47	83
Wholly owned subsidiary (WO) of foreign parents	0.04	41	7	48
Total (joint ventures and wholly owned subsidiaries)	**0.11**	**77**	**54**	**131**

Table 4 examines parent ownership combination failure rates. Columns 3 and 4 report successes (survivals) and failures (exits) with the total number of cases in the last column. Column 2 reports the implied cumulative hazard rates. The descriptive statistics reveal that 53 of the 131 subsidiaries failed within our 1997 to 2004 window, implying a cumulative 11 percent hazard rate. Herein, we find support for Hypothesis 1.

Joint ventures, with a 16 percent hazard rate, are four times more likely to fail than wholly owned subsidiaries, with a mere 4 percent hazard rate, and the difference is highly statistically significant. This is consistent with the well-known joint venture instability (Kogut, 1988; Makino *et al*., 2007) and is also sensible, since stronger foreign parents are perhaps more likely to self-select to establish wholly owned subsidiaries. Hence, their subsidiaries expectedly have higher survival rates, which may be reflective of avoiding both endogenous and exogenous expropriation risks from taking on a partner.

Pyramidal group members partnering with other pyramidal group members (PG/PG parental combinations) have the lowest failure rate, only 8 percent, among all joint venture ownership structures. This percentage is statistically indistinguishable from wholly owned subsidiaries' hazard rate of 4 percent. This suggests that pyramidal foreign entrants are more aware of the expropriation risks associated with pyramidal schemes and strategically compensate to mitigate the foreseeable pitfalls revealed to these informed managers.

Interestingly, however, all other parent combinations feature markedly higher hazard rates: 26 percent for FS/FS combinations, 27 percent for PG/FS combinations, and 20 percent for PG/OG combinations. The elevated hazard rate for FS/FS combinations is perhaps unsurprising. All freestanding parents but three are from the U.S. and the U.K. (two from Canada and one from Japan). These parents' home countries have stable public policy regimes and high property rights protection, which is not the case in Brazil. These institutional discrepancies are the sources of the liabilities of foreignness well known in the international business literature (Zaheer, 1995). FDI theory advises foreign firms to seek local partners to reduce their *liability of foreignness*—their risk of misstep, or even government expropriation, due to unfamiliarity with local institutions (Henisz, 2000; Zaheer and Mosakowski, 1997). However, this strategy may be a double-edged sword for those partnering with pyramids.

Still, parents that are the PG type themselves ought to be familiar with such institutional environments. Indeed, some of these PG-type owners are local Brazilian firms. Interestingly, the PG/FS combination has the most alarming hazard rates of 27 percent (more than three times the rate of PG/PG partnerships). Their cumulative hazard rate is very similar to that of the FS/FS joint ventures. This is consistent with the findings reported in Table 3.

These results show that firms may well form joint ventures to pool capabilities, including dealing with poor local institutions, but do not necessarily imply a positive ending. In particular, joint venturing with a pyramidal group member firm may expose the partner to different problems—a set of corporate governance problems—and unfamiliarity with those

[6] This figure represents the hazard rate for all joint ventures combined (PG/PG, PG/FS, PG/OG, and FS/FS).

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Table 5. Cumulative hazard rates by parental firm tier difference

Tier difference	Hazard rate	Successes	Failures	Total
0	0.01	25	1	26
1	0.14	6	10	16
2	0.28	1	17	18
3	0.32	0	9	9
4	1.00	0	1	1
Total parent-level observations		32	38	70

problems can portend failure. Parents belonging to pyramidal groups clearly ought to be familiar with pyramiding and, thus, ought not to be blindsided by the strategies of other pyramidal group member firms. The low hazard rates of PG/PG combinations provide support for the idea that partners familiar with pyramiding can effectively counter potential problems and, thus, realize the benefit of joint ventures, which results in both a successful pooling of capabilities and leveraging of complementary strengths.

Finer parsing of the sample of joint ventures in which a nonpyramiding parent matching with a pyramiding parent shows that having a Brazilian firm in the parental combination does matter. Note that all Brazilian parents are pyramidal group members; hence, the comparison reveals the impact of the presence of a Brazilian parent given that matched parents are pyramidal rather than nonpyramidal. The combinations that include a Brazilian parent have hazard rates of only 22 percent versus 44 percent for those that do not. That means Brazilian parents can help joint ventures mitigate foreign liabilities. Still, the 22 percent figure (for Brazilian PG vs foreign non-PG parent) significantly ($p < 0.01$) exceeds the 12 percent hazard rate for PG/PG combinations with a Brazilian parent, which shows the corporate governance hazard that nonpyramiding foreign parents face. To reiterate, these results imply that although a Brazilian parent can help counter poor local institutions, a foreign nonpyramiding parent's unfamiliarity with pyramidal corporate governance problems is another source of liability.[7] These results provide additional support for Hypothesis 1.

To examine Hypothesis 2, we restrict our attention to joint ventures with pyramidal group member firms. Agency problems in pyramidal group firms should be greater the lower the cash flow rights of the controlling shareholder (Bebchuk *et al*., 2000; Claessens *et al*., 2002), which usually occurs in firms in a pyramid's lower tiers. We find the most lasting joint ventures to be those formed by higher-tier firms of two parent firms. We find that those whose parents have the greatest ownership structure tier disparity have the highest cumulative hazard rates (100%). Joint ventures whose parents have matching tier levels in the ownership structure display the lowest hazard rate (1%). Table 5 illustrates these findings, which support Hypothesis 2. To demonstrate the challenges of tier differences in the corporate governance of IJVs, we later provide a clinical example of the joint venture between *Algar Group* of Brazil and *SK Telecom* of South Korea. The tier difference between the two parents is four (five tiers minus one) and is the most extreme disparity in ownership incentive alignment in our sample.

Table 6 summarizes our findings for Hypothesis 3. A higher relative commitment intensity is associated with a hazard rate of only 1 percent, while joint ventures whose parents lack commitment intensity confront a 21 percent hazard rate. Joint ventures whose parents have more points of contact, realigning the corporate governance incentives in the joint venture, are more likely to survive.

Clinical evidence of mechanisms that lead to failure

Our statistical results suggest that parent firms with less prior exposure to pyramidal groups who enter a joint venture with a pyramidal group member firm tend to exit from these ventures earlier. We conjecture that the former are blindsided when governance

[7] The PG/PG combinations with and without Brazilian partners are not significantly different, nor do they differ significantly, from the 4 percent hazard rate for wholly owned subsidiaries.

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Table 6. Cumulative hazard rates by pyramids' commitment intensity

Multiple points of contact	Hazard rate	Success	Failures	Total
No	0.21	14	37	51
Yes	0.01	19	1	20
Total parent-level observations		33	38	71

problems associated with pyramidal groups occur, reevaluate their likely returns from continuing the joint venture, and decide to cut their losses by withdrawing. The hazard rate correlations alone do not necessarily imply this chain of causation. Standard empirical techniques to detect such causal chains are inherently ineffective because contextual information is hard to thoroughly collect and codify for all the involved cases. We resort to clinical case studies to reveal the causal mechanisms in our hazard rate observations. Parkhe (1993b) suggests such a case approach is helpful when trying to solve messy puzzles of interfirm managerial behavior in international joint ventures. Other international joint venture case studies have shown usefulness in similar approaches (Ariño and de la Torre, 1998; Parkhe, 1993b). Based on Yin's (2003) case methodology, we use a multi-case design to capture the variations in hazardous outcomes shown in Tables 2–5. We select cases based on 'replication logic' (Yin, 2003) and 'theoretical sampling' (Glaser and Strauss, 1967), which illustrate our theory, provide examples of polar strategies, and are representative of the population's joint venture ownership combinations.

Unintended post-formation events

Our interviews with senior executives and industry experts generate illuminating information. The clinical information shows that parents from host countries where pyramidal groups are rare or absent indeed have blind spots about pyramidal group partners' behavior. Unaware that their immediate partner firm and other seemingly independent firms all belong to the same group with the same ultimate controlling shareholder, foreign parents misgauge their partners' agency problems; e.g., they fail to anticipate that their partners would sacrifice their own joint venture's interest for the interest of their pyramidal group or their controlling shareholder. Thus, in some cases, they fail to protect their control rights and, in other cases, are not even aware of the importance of control rights at the outset. Finally, we also learn how parents familiar with pyramidal groups mitigate these risks. We report these cases next.

TIW and *Opportunity*—PG/FS ownership combination

Telesystem International Wireless (*TIW*), a Canadian telecommunications firm, which we classify as a freestanding firm (FS), entered a joint venture with a member of a Brazilian pyramidal group (PG), *Opportunity*, controlled by the Brazilian financial tycoon Daniel Dantas and his family. Dantas and his group acted as general partners and managers for several private equity funds set up in Brazil and the Cayman Islands. The Brazilian partnerships had various pension funds of state-owned enterprises as their investors.

Canada's big business sector is a mixture of pyramidal group firms and widely held freestanding firms, where 45 percent of the largest firms are family controlled (Fogel, 2006). However, the country also has a highly efficient common law judicial system overseeing business law (though a civil code governs most other legal areas in Québec). Canadian pyramidal groups must disclose all of their intercorporate equity blocks and the identities, voting stakes, and ownership stakes of their ultimate controlling shareholders. Unlike Brazil, third-party transactions between group member firms must be disclosed promptly, and large intragroup transactions, in which significant tunneling might be possible, require the approval of a majority of disinterested public shareholders. The officers and directors of Canadian pyramidal group member firms have an unambiguous fiduciary duty to their firm, not its pyramidal group or controlling shareholder. Canadian firms entering Brazil might innocently expect analogous checks and balances and, thus, could misjudge the actual business environment there.

TIW established the joint venture *Telpart Participaçoes* (*Telpart* for short) amidst the Brazilian telecommunications privatization from former

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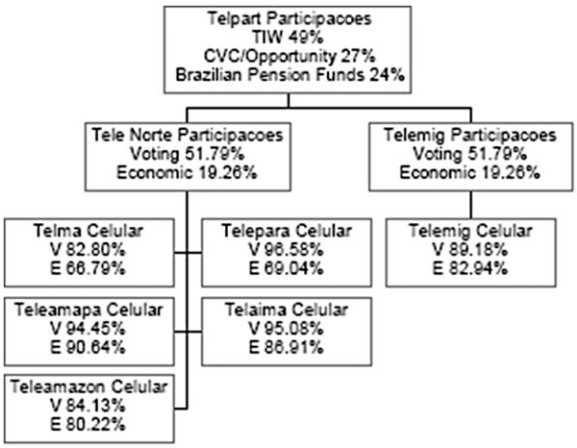

Figure 2. The structure of *TIW*'s joint venture with *Opportunity* in 1998 (PG/FS)
Source: Company reports; equity stakes are denoted by E or no notation; voting stakes are denoted by V.

assets of *Telebras*. The initial joint venture agreement deemed *TIW* the largest shareholder, with a stake just under 49 percent and joint control of the board. The Brazilian partner, *Opportunity*, had a clear minority position—a 27 percent equity stake—and pension funds for state-owned companies owned the remaining 24 percent. According to *TIW's* company reports, their equity block put them at the helm of the joint venture and, thus, in charge of a multitude of controlled Brazilian subsidiaries. Figure 2 depicts this structure.

Then within weeks of the joint venture formation, the corporate governance and ownership structure shifted. *Opportunity* used a holding company, *Newtel* (not shown in the figure), to acquire and consolidate control over *Telpart*. *Opportunity* convinced the pension funds to exchange their 24 percent in *Telpart* for a 49 percent holding in *Newtel*. The result was that the pension funds would hold 49 percent, but *Opportunity* would own 51 percent of *Newtel*, which would, in turn, hold 51 percent of *Telpart*. This transfer was made in secret; *TIW* was not informed of the terms and substance of the arrangement until December 1998. The terms were remarkable, for the pension funds delegated their voting rights to *Opportunity* appointees and relinquished any veto rights and liquidity rights they would have had had they remained direct investors in *Telpart*. *Newtel* was now firmly ensconced in the *Opportunity* pyramidal group's control structure. This pyramidal structure gave *Opportunity* a majority voting block (51%), controlling *Telpart* despite its minority ownership stake that is 27 percent in terms of equity participation. As soon as this restructuring was complete, *Opportunity* inserted its own management into *Telpart* as top managers, ignoring *TIW*s protests. The joint venture was now a fourth-tier member firm in the *Opportunity* pyramid and *TIW* was now a minority shareholder of a pyramidal group member firm.

TIW took *Opportunit*y to court in Brazil repeatedly, but to no avail. According to the *Gazeta Mercantil* (2003): *'After no success with battling Opportunity over the new structure, TIW . . . secured an injunction annulling Newtel, forcing the re-instatement of the original Telpart contract.'*

The *Toronto Star* (Hamilton, 2003) reported: '*Over the next two years, as many as 20 lawsuits in and outside of Brazil were launched. Walkouts became common at the Telpart board meetings. Opportunity repeatedly made offers to TIW* (but those offers) *were rebuffed as inadequate. Meanwhile, Dantas* (the controlling shareholder of *Opportunity*'s apex firm) *was calling the shots. The Brazilian was choosing management, appointing directors and approving questionable non-operating expenses. TIW's influence was quickly waning.'*

TIW's top managers clearly expected neither their erstwhile partner to seize control and shut *TIW* out nor the weak protection the local judiciaries offered them. *TIW*, *Opportunity*, and the pension funds had a *memorandum of understanding* outlining certain rights and obligations, including rights of first refusal, tag-along rights, veto rights, and rights to proportional representation, all supplemental to the original agreement between *TIW* and *Opportunity*. *TIW*'s management was astounded that the Brazilian courts were not on its side to enforce these rights.

With *TIW* thus disconnected, *Opportunity* sent *Telpart* down a radically new path seemingly not in the best interest of the joint venture. Amid the ongoing court battles, the joint venture's performance deteriorated rapidly. From 1998 through 2000, under *TIW* control, all the joint venture's subsidiaries posted positive net incomes. But as soon as *Opportunity* seized control, profits declined from R$13 million to -$R7 million in less than a year. By 2002, their combined losses debased at -$R30 million. One insider suspected *tunneling* because of the sharp deterioration of *Telpart*'s financial performance after *Opportunity*'s stealth attack. Note, though, that we obtained no concrete proof that wealth was transferred from *Telpart* to *Opportunity*

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or to Dantas, its new controlling shareholder. In 2003, *TIW*'s main shareholders, exhausted by the draining of energy and capital, discontinued its capital infusions to the joint venture and negotiated an exit—they sold their stakes to *Opportunity* for U.S. $70 million, a fraction of *TIW*'s total capital infusions estimated at U.S. $390 million (Reuters News Agency, 1998).

Some executives at competing telecommunications firms were willing to comment on the *TIW* dispute with *Opportunity*. One interviewee, an executive at another firm successfully operating a joint venture in Brazil, explained that:

> *'It is always about ownership structures. It is all about how to structure the deals. Telemig (one of TIW's Brazilian subsidiaries) failed in Brazil because they did not know how to work with the Brazilians. They did not understand the ownership laws and how to work this system.'*

A second executive offered the following perspective:

> *'TIW chose the wrong partner and got ripped off . . . They did not know how to fight for control the right way like Telecom Italia, who took their battle to the government and the telecom regulators for control* (of Telecom Italia's Brazilian subsidiary).

Another interviewee stated that:

> '*TIW was squeezed out by their partner, Opportunity. Wrestling control of Telpart from Dantas (Opportunity's owner) has become too costly, and the uncertainty around the battle was hurting TIW.*'

This case clearly illustrates the direction of causation and the reasons for the joint venture's failure. *TIW*, an otherwise seemingly well managed firm, failed to appreciate the complex machinations and obscure chain of control manipulations possible for pyramidal groups in Brazil. Once it lost control, *TIW* found that the Brazil judiciary offered no effective redress, despite terms in its agreements with *Opportunity* that it had relied upon. Again, this illustrates that *TIW* was under-informed and made judgments based on its home experiences.

Bell South and Safra Family—PG/FS ownership combination

Bell South, a widely held freestanding American firm, and *Verbier*, a holding company in Brazil's *Safra* pyramidal group, established a joint venture called *BCP* to provide cellular service in the Sao Paulo region, one of the most competitive markets in Brazil. *Bell South* held 45.4 percent of *BCP*, leaving the *Safra* firm with 44 percent. According to the shareholder agreement, *Bell South* delegated control to Moises and Joseph Safra, the controlling shareholders of the *Safra* pyramid's apex firm. An internal *Bell South* document reveals a remarkable internationalization strategy that intentionally granted decision-making authority to foreign partners, apparently in the hope that a consensus would always emerge. The Safra brothers (henceforth, *Safras*) gained rights to 'approve business plans and agree upon decision making as to the timing and amount of cash disbursements' (Bell South, 1999).

A former top executive at *Bell South* in Brazil recalled that '(at) first we started off as the decision maker in the partnership. But then things started to reveal that we did not have the right partner. This was a problem we were nervous about because things all of a sudden started to change.' The *Safras* routinely rejected *Bell South's* plans for enhancing *BCP*'s value, nixing, for example, a mass marketing strategy for recouping the $2.6 billion telecom license cost. Instead, the *Safras* explored niche markets, which forestalled the need for additional capital. *Bell South* proposed a consolidation after the 1999 Real devaluation, but the *Safras* refused. The joint venture grew increasingly inefficient, accumulating an overwhelming $R4.8 billion in losses. Bell South proposed a 95 percent equity offering to recapitalize *BCP*; but the *Safras* arranged debt financing—adding more than $R4.8 billion in debt by 2001. In each case, the *Safras*' focus was control. Accepting outside equity financing or further injections from the parent firms would have imperiled their control rights. A capital conserving strategy, augmented by debt financing, ran no such risk.

The importance to Brazilian controlling shareholders of extracting private benefits from the businesses they control readily explains this strategy. Following Bebchuk *et al*. (2000), the *Safras* can be thought of as maximizing their wealth or the sum of the fraction of the firm value they own and the private benefits they obtain by having a high level of control. While injecting outside capital may raise the firm value and, thus, the fraction of the firm value they own, doing so dilutes the *Safras'* control and, thus, may deplete their private benefits. The *Safras*' total wealth may actually decline as a consequence.

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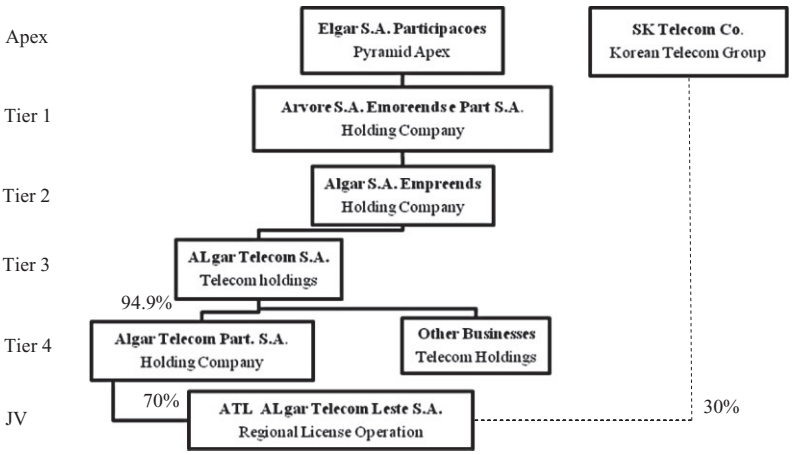

Figure 3. The position of the joint venture ATL within the Algar Pyramid (OG/PG)
Source: Valor Grandes Grupos (2002)

Unfamiliar with this reasoning, *Bell South*'s managers remained mystified by their partner's seemingly economic irrationality.

Unsurprisingly, trust between the partners eroded quickly, but *Bell South* had few options. It offered to buy all of *BCP* in 2001, but the brothers declined each of the increasingly generous offers. Clearly, *Bell South* failed to appreciate the magnitude of *private benefits* in the brothers' calculations and may well have failed to account for it at all.

In 2002, when *BCP* fortuitously missed a $R375 million debt payment, *Bell South* seized the opportunity to force it into bankruptcy. The *Financial Times* reported in April 2002 that the default occurred after a disagreement between shareholders over future capitalization plans. In 2003, *BCP* was liquidated and its assets sold to *America Movil* of Mexico. The final agreement stated that '*Bell South* will transfer its entire 45.4 percent stake in *BCP* (to creditors), while Brazil-based *Verbier* (a Safra holding company) will retain an undisclosed minority stake in the wireless operator' (Espicom Business Intelligence, 2003: 7).

This example highlights two issues. First, *Bell South*, even more so than *TIW*, failed to value direct control—assuming that all the partners would gain by running the joint venture efficiently. Second, when the pyramids seized control, they ran the joint ventures in ways perfectly rational from their controlling shareholders' perspectives, but incomprehensible to the managers of a freestanding firm. To them, the value of the private benefits the controlling shareholders can extract via tunneling or other mechanisms in a developing economy was an 'unknown unknown.'

Sunkyong and Algar—PG/OG ownership combination

In 1998, *SunKyong (SK) Telecom*, which we classified as OG because it is a chaebol, partnered with a bottom-tier firm of the *Algar* Group, a Brazilian pyramid (PG), as illustrated in Figure 3. The joint venture, *ATL*, planned to bring *SK*'s proprietary CDMA-based cellular technology to Brazil. *SK* provided technology and capital, but held only 30 percent of the joint venture, effectively delegating control to *Algar*. *SK* executives apparently assumed that *Algar* would seek to maximize the value of its stake in *ATL* by applying *SK*'s technology quickly, widely, and efficiently, and they evidently saw no need for a majority stake. *SK* executives subsequently learned that *Algar*'s controlling shareholder was involved in another joint venture to bring TMDA, a rival cellular technology, to Brazil. *SK* not only wasted its capital, but found its joint venture partner's true financial incentives to be diametrically opposed to the success of its technology in Brazil. Deprived of information about the joint venture's operations and profits, *SK* withdrew by early 2000.

While this case is extreme, several other examples feature seemingly sophisticated foreign firms—such as *SBC* and *Bell Canada*—signing joint venture agreements with Brazilian pyramidal group firms and leaving control rights tenuously defined.

Risk mitigating strategies

Each of the cases presented highlights the unscrupulous agency behaviors of the pyramidal partners in the joint venture. In one last case we will discuss next, both parent firms' managers presumably under-

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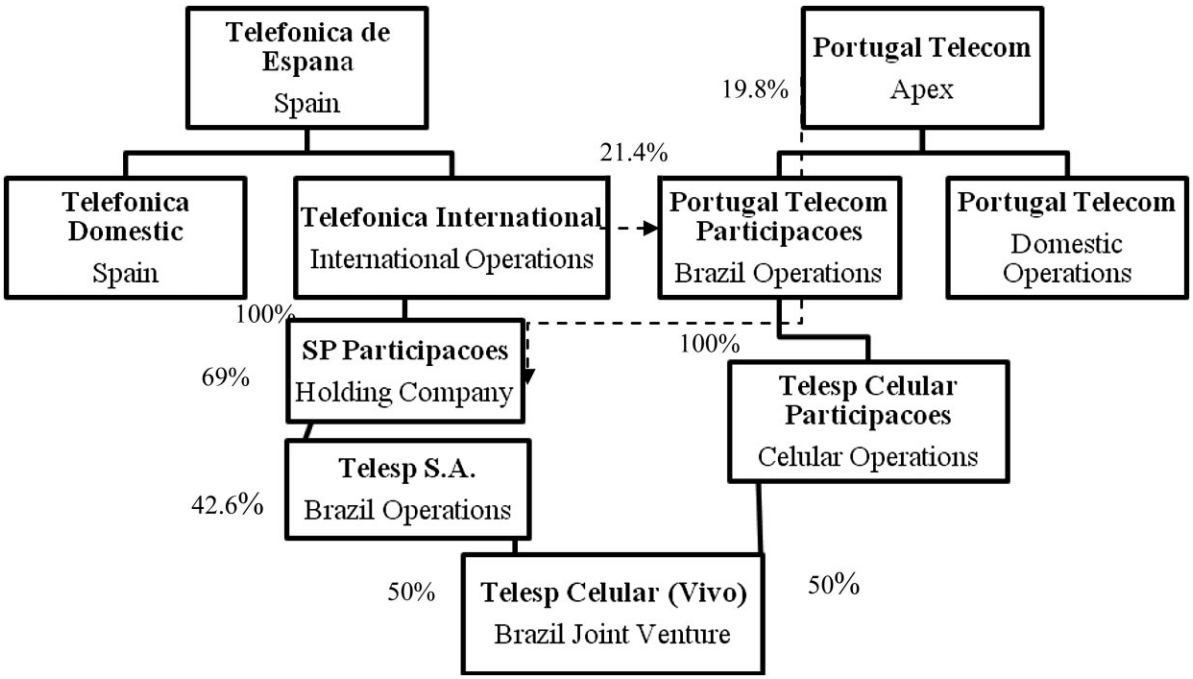

Figure 4. Interpyramidal equity blocks associated with Brazilian joint ventures between *Portugal Telecom* Pyramidal Group and Spain's *Telefonica* Pyramidal Group (PG/PG)
Source: ANATEL (2014)

stand the corporate governance issues associated with pyramids. The parents often build safeguards into the joint venture to prevent the sorts of problems described in the previous cases. One way of doing this is to arrange multiple points of competition and interaction. These strategies instill both parents with ongoing incentives to be trustworthy partners by giving each other multiple opportunities to retaliate if the other acts opportunistically. Thus, forewarned and forearmed, the partners maintain a high level of reciprocal trust. This is consistent with Harrigan (1988), who suggests joint venture partnerships are more effective when their parents' bargaining power is evenly matched. It also exemplifies the reasoning of Bernheim and Whinston (1990), who show that *multiple simultaneous games* heighten the players' incentives to cooperate by raising both the punishment for cheating and the reward for cooperation.

Telefonica and Portugal Telecom—PG/PG ownership combination

An illustrative case is the success of Spain's *Telefonica and Portugal Telecom* in Brazil. Both are members of formerly state-controlled pyramidal groups established long before telecom privatizations in their respective home countries. Both are also parent firms from host countries where pyramiding is commonplace. Three key distinctions differentiate their joint ventures: (1) cash flow and voting rights are always split exactly 50/50, and both parents always have equal say in the joint venture's strategy; (2) decision-making control is assigned to each parent, property by property, not allocated overall to one parent or the other; and (3) each parent takes equity stakes in several firms in the other's pyramidal group, including the apex. This strategy creates multiple points of contact between the two pyramidal groups and provides each with abundant ammunition to retaliate if the other breaks faith.

Portugal Telecom and *Telefonica* have eight joint venture subsidiaries in Brazil, including the *Vivo* brands and *Brasilcel*. Combined, these have a 60 percent market share. As each joint venture expanded, both parents injected capital in a step to preserve their 50/50 ownership split. Each parent also appointed direct representatives in each joint venture's management team. And each pyramidal group acquired and held equity blocks in the other, as illustrated in Figure 4. In each case, control was

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split—for example, their 2001 joint venture *Brasilcel* had a *Portugal Telecom* appointed CEO, and a *Telefonica* appointee chaired its board. As part of the joint venture agreement, *Telefonica* increased its stake in Portugal Telecom to 10 percent and Portugal Telecom increased its stakes in *Telefonica* to total 1.5 percent.

DISCUSSION

Pyramidal groups, the ubiquitous corporate governance and ownership structure globally, with the exception of the U.S. and the U.K., are dominated by freestanding firms and are incentivized to maximize not firm value, but the wealth and well-being of the pyramidal group's controlling shareholder. Thus, a clear distinction must be drawn between the corporate governance problems common in pyramidal group firms and those in freestanding firms. While governance problems in both cases arise from information asymmetry and incentive misalignments between insiders and public shareholders, there are important differences in the way these play out when the two governance structures are combined in a joint venture.

In both pyramidal group firms and freestanding firms, insiders often have miniscule equity holdings. But in the former, these problems are compounded by the insiders typically having uncontestable control over all the firms in the pyramidal group. Governance in pyramidal groups is further complicated by a controlling shareholder ruling many distinct and separately listed and unlisted firms. This creates increased opportunities for self-dealing (i.e., tunneling, asset shifting) once the corporate veil has been drawn.

The coupling of impregnable control to miniscule real ownership by the controlling shareholder makes pyramidal group firms prime territory for exploiting naïve outside investors. Otherwise sophisticated top managers of foreign firms based in countries where pyramiding is rarer or public shareholders are better protected can be blindsided by these governance problems when entering joint ventures with pyramidal group firms. Auspiciously, top managers of foreign firms based in countries where pyramiding is common and little legal protection against controlling shareholders is provided appear to anticipate these governance problems and mitigate against expropriation of controlled firms more heavily.

Normally, investors are aware of governance problems in environments with which they are familiar. However, foreign firms are often forced to form international joint ventures due to regulations; they are stepping into unfamiliar territory. Using a mixed quantitative and clinical case approach, we show how under-informed but blindsided partners are exposed to governance-related expropriation risks in IJVs. Our statistical results show that the failure rates of IJVs in the Brazilian telecommunications industry are higher if a foreign parent's managers are unfamiliar with the governance problems of pyramidal groups. We also provide clinical cases that describe the causal mechanisms of these failures. This study contributes to our understanding of *unintended terminations* (Makino *et al*., 2007) by revealing that corporate governance and ownership structures, if not addressed strategically at the formation of a joint venture, can cause unintended post-formation events that lead to failure.

Implications

We offer the following as discussion points for strategy scholars and freestanding firm managers contemplating joint ventures with pyramidal group firms: first, assuming the local partner is the immediate local parent firm of the joint venture can be a fatal flaw. In locations where pyramids are prevalent, the firm's ultimate controlling shareholder is often a politically connected and very wealthy local family. Thus, it is important to know the local partner's true *span of control* between the tiers in the pyramidal structure. It is often difficult to detect who the ultimate controlling shareholder is at the apex of the pyramid because, in many cases, the upper tiers are privately held firms. For example, in one of our case investigations, we found that even the Brazilian telecommunications regulator, ANATEL, did not know who the true owner of a sixth-tier firm was in *Brasil Telecom* and mandated that the ultimate shareholder be revealed to the joint venture partners.[8] This issue places an increased importance on due diligence even for the most prudent investment manager.

Another lesson gleaned from the cases is to focus on maintaining control rights. Pyramidal groups are

[8] Neither Citibank's managers (the joint venture partner) nor the Brazilian telecommunications regulatory authority, ANATEL, fully understood the six tiers of holding companies, obscured by various crossholdings that hid *Brasil Telecom's* ultimate controlling shareholder. See Perkins (2007) for details.

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first and foremost about subjecting a huge constellation of seemingly distinct firms to the control of a single ultimate controlling shareholder. That controlling shareholder is highly savvy at strategically seizing and locking in control. The foreign partner should always make its control rights explicit. If a majority voting stake cannot be secured, a 50/50 split is a viable alternative. Accepting a minority voting interest is risky unless the local partner's incentives to make the joint venture a success are unambiguous.

There is more than one way to control a joint venture. In many cases, majority equity ownership is not an option because of local ownership regulations. In such cases, one interviewee from *Portugal Telecom* stated: *'When we do not have equity control, we obtain management control through separate management contracts. We never just forfeit to be financial investors.'* The agreement establishing the joint venture can allocate rights to appoint the CEO, chair, or a majority of directors, regardless of the equity stakes held by the joint venture's parents.

We find that joint ventures between pyramidal group member firms persist longer if their partners are more equally committed and if each has opportunities to retaliate for any bad faith shown by the other. Thus, foreign partners thus cannot blindly rely on a local partner to maximize the value of a joint venture. Rather, foreign partners need to understand their local partners' incentives, protect their control rights over the joint venture, and arrange opportunities to retaliate when partners pursue actions contrary to their joint venture's interest. If these countervailing strategies are credible, they ensure trustworthy behavior by the local partner and need never be used.

How freestanding firms can achieve this when partnering with pyramidal group member firms is less clear. In industries where highly specialized *know-how* is a critical competitive advantage, a freestanding foreign parent can withhold critical knowledge to elicit trustworthy behavior from its local pyramidal group partner. In the case of telecoms and other territorial licenses, credible threats of retaliation entail facing multipoint competition.

Lastly, we acknowledge that our findings are preliminary and offer these suggestions in the hope of stimulating more extensive debate in the management, strategy, and international business literatures on the implications of dissonant corporate governance regimes. These findings point to the need to better understand how successful joint ventures establish long-term incentives of governance success. Beneficial future extensions of this research could explore the legal contracts (i.e., joint venture and shareholder agreements) and strategic contractual clauses used by pyramidal group firms to better understand and codify the governance incentives of such ownership structures. We enthusiastically invite further work along these lines and welcome both supporting evidence and alternative explanations of our findings.

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APPENDIX

Joint ventures usually have a clear set of parent firms, well defined beginnings, and unambiguous termination dates. However, ambiguities occasionally arise, so we require a clear set of rules for dealing with them. The following example encompasses all of the types of ambiguity we encounter and explains their resolutions: consider three parent companies, A, B, and C, that jointly own a subsidiary S in 1998. Suppose C sells its stake to B in 2002 and B sells its stake to A in 2003. Then, A exits the market in 2005. We record the joint venture's *parent combination* ABC as formed in 1998 and ended in 2002, the *parent combination* AB as formed in 2002 and ended in 2003, and (for completeness) the *parent combination* A (wholly owned) as formed in 2003 and ended in 2005.

We further record the *participations* of the parent companies A, B, and C in joint venture S as lasting from 1998 to 2005, 1998 to 2003, and 1998 to 2002, respectively. Note that if S was formed prior to 1997 (the first year of our data), we record it as beginning in 1997. This affects only three observations because almost all the entries occurred after the privatization and liberalization policies were implemented.[9] Before that, the telecommunications industry comprised entirely state-owned enterprises.

We further assemble all company press releases, analyst reports, and public press articles (from ISI Emerging Markets, Lexis-Nexis, and Factiva) that mention any of our joint ventures to determine the beginning and end of each parent firm's *participation* and the *parent combinations* in effect at each point in time. In almost all cases (88%), we can assign precise dates. In the remaining cases, we can determine only the month in which the parent firm's participation begins or ends; therefore, we take the last day of that month as the relevant date. The news records often also provide explanations of why each firm exited, which let us double check the explanations we obtain from executive interviews. This is useful because not all exits indicate failures (Kumar, 2005). This procedure identifies 10 observations as exits not clearly due to failures (intended failures) of the joint venture, which we drop. In five of these, one parent firm is replaced by another that is a member of the same business group due to intragroup equity cross holding restructurings. Since both the old and new parent firms have the same ultimate controlling shareholder, these are not clearly exits. We, therefore, drop these observations.[10] Three exits are induced by the Brazilian telecom regulator, ANATEL, which limits ownership in each of 12 geographic regions to forestall potential monopoly problems. In these three cases, the regulator orders a parent firm to reduce its ownership in one region as a precondition to expanding in another. While these forced withdrawals may be failures in that the parent failed to foresee and block the regulatory action, they are also arguably qualitatively different from all the others, which results from strategic decisions by the parent firms' managers with regard to the joint venture in question. Finally, we drop two cases where the parent firm divests in what appear to be profit-taking sales. Deleting these observations leaves us with 131 *parent combinations*. In the remaining cases, our searches through public news records and interviews with executives concur that the early withdrawal of a parent firm reflects its managers' disappointment regarding its share of earnings, control rights, or intellectual property utilization.

[9] Those three firms are Primus Telecommunications Group—entered in 1994; Matrix—entered in 1996; and Global One—entered in 1996.

[10] Note that freestanding firms include both widely held firms, like MCI, and firms with controlling shareholders. Of the 37 freestanding parents, 34 are American and all have only one-vote-per-share common equity. Of the others, one Canadian parent and one Japanese parent are private and one Canadian parent is listed and has multiple classes of common shares. Dropping observations involving these few firms does not qualitatively change our results. Sixteen out of the 66 parent firms are widely held (14 are stand alone firms and 2 are part of groups).

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