Corporate Governance and Investors' Perceptions of Foreign IPO Value:

An Institutional Perspective

ABSTRACT

We build on sociology-grounded research on financial market behavior and suggest a "nested" legitimacy framework to explore U.S. investor perceptions of foreign IPO value. We draw on a fuzzy-set theoretic approach to demonstrate how different combinations of monitoring and incentive-based corporate governance mechanisms lead to the same level of investor valuations of firms. We also argue that institutional factors related to the minority shareholder protection strength in the foreign IPO's home country represent a boundary condition that affects the number of governance mechanisms required to achieve U.S. investors' high value perceptions. Our findings, drawn from a unique, hand-collected dataset of foreign IPOs in the U.S, contribute to the sociological perspective on comparative corporate governance and the inter-dependencies between organizations and institutions.

Key Words: Comparative Corporate Governance, Foreign IPOs, Fuzzy-set methods.

INTRODUCTION

The rapid globalization of financial markets in recent years has been accompanied by a growing number of companies raising capital abroad. Since the late 1990s, foreign Initial Public Offerings (IPOs)—private firms that bypass stock exchanges in their country of origin to 'go public' on a foreign stock exchange (Hursti & Mauli, 2007)—have become a significant class of companies, particularly in the U.S. These foreign firms seek equity financing not only for financial goals, but also for marketing, political, and employee relations benefits (Saudagaran, 1988). However, foreign IPOs may suffer from various liabilities of foreignness and have less legitimacy among investors compared to domestic listings (Bell, Filatotchev, & Rasheed, 2012). Although foreign firms may try to increase their appeal to U.S. investors by complying with their expectations in terms of corporate governance, a growing number of finance and management studies (Bruner, Chaplinsky, & Ramchand, 2006; Francis, Hasan, Lothian, & Sun, 2010; Moore, Bell, Filatotchev, & Rasheed, 2012) demonstrate that home country institutional environments significantly affect their valuations and, ultimately, the success of the foreign IPO. At present, there is a dearth of research on how governance factors influence host county investors' perceptions of foreign IPO value, and how these perceptions are affected by the firm's home country institutional environments.

Finance and management researchers have traditionally relied upon the agency perspective to understand the complex inter-relationships between IPO corporate governance and stock market performance. These studies assume that an IPO firm may rationally use multiple governance mechanisms to mitigate agency conflicts between its insiders and public market investors to optimize the stock market valuations (Francis et al., 2010). Agency-grounded governance studies often conceptualize and operationalize monitoring, managerial incentives, and other types of governance mechanisms as independent, each having its own unique ability to influence the behaviors of stock market participants (Beatty & Zajac, 1994; Sanders & Boivie, 2004). In combination, these governance mechanisms are expected to have an additive positive effect on the investors' perceptions of the IPO firm's value. However, a growing body of research maintains that corporate governance mechanisms should not be considered in isolation from each other. Instead, they should be examined as 'bundles' when determining their overall impact because governance mechanisms can be functionally equivalent (Aguilera, Filatotchev, Gospel, & Jackson, 2008).

More recently, sociological approaches to financial market behavior suggest that market values and stock market reactions to firm-level factors are socially constructed (Zajac & Westphal, 2004, 1995). As a result, stock market valuations are an outcome of investors' perceptions of the firm's legitimacy rather than rational, efficiency-centered investor decisions. Legitimacy is defined as a "generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate, within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574). This research sustains that the agency perspective dominating corporate governance debates since the mid-1980s has become a powerful and entrenched institutional logic or set of "beliefs and rules that shape the cognitions and behaviors of actors" (Dunn & Jones, 2010: 114). When faced with uncertainty associated with the process of IPO, investors are more likely to focus on institutionalized rules when evaluating the quality of IPO firms (Pollock, Fund, & Baker, 2009). This institutional logic frames the process of investor assessment of various governance mechanisms because they are perceived as standard and useful, and may even be taken-for-granted. Indeed, monitoring and incentive alignment governance mechanisms are generally regarded as necessary to achieve successful IPOs, and are legitimated in large part by their presumed efficacy in the highly uncertain IPO market environment. It is unclear, however, what institutional mechanisms link adherence to a specific constellation of governance factors and investors' perceptions in the specific case of IPO firms which choose to bypass their home country capital markets and make their first public equity offers on U.S. exchanges.

In addition, when seeking to exploit overseas capital markets, foreign IPO firms are exposed to potentially different institutional logics in their home and host countries. Because the process of legitimation involves the interaction of both country-level institutions and firm-level practices (Moore et al., 2012), there is a need to better understand how differences in home/host country institutional logics impact investors' perceptions of firm governance. Foreign IPOs listing in the U.S. represent a unique laboratory for theory building related to the complex inter-play between macro-factors, particularly those associated with the home country regulatory institutions, and firm-level governance, since these firms often originate in countries with different governance regulations than the U.S. There is little research investigating whether dissimilarities in home/host country institutional logics impact the process of legitimation through adoption of various practices within the firm's overall governance "bundle."

These theoretical gaps lead to two related questions that have not been addressed in previous studies of IPO governance. First, given that the firm's governance mechanisms are important in managing the perceptions of the stock market investors, can different bundles of governance mechanisms in foreign IPO firms lead to the same perceived valuation outcomes; Second, how is this process of gaining legitimacy through governance mechanisms affected by differences between the foreign IPO firm's home and host country institutional contexts? By answering these questions, we make a number of theoretical and empirical contributions to existing sociological understanding of both financial markets in general and corporate governance in particular. First, from the sociological perspective, governance mechanisms underpin the process of legitimation of the foreign IPO within the U.S. investor community. Yet, unintended outcomes can occur when firms adhere to multiple, and perhaps redundant, governance mechanisms (Aguilera et al., 2008; Pollock, Chen, Jackson & Hambrick, 2010). Hence, our focus is on the boundary conditions that determine how different combinations, or "bundles," of governance mechanisms in foreign IPO firms might lead to similar investors' perceptions of their value. Second, we offer a "nested" model of legitimacy where investor perceptions of the foreign IPO firm's overall legitimacy fall at the intersection of the cognitive and regulatory institutional domains. We sustain that IPO firms can have flexibility in terms of obtaining legitimacy from their governance "bundles" only when they meet a minimal regulatory legitimacy threshold, i.e., they come from strong governance jurisdictions. Conversely, IPO firms originating from countries with institutional environments granting weak minority shareholder protections will have to adopt a larger number of governance mechanisms to gain the same level of legitimacy as IPOs from strong governance jurisdictions. Our research, therefore, provides an important extension to previous sociology-grounded studies of financial markets by showing how the complex interplay of multi-level governance factors affects investor perceptions of firm value which may be of relevance to other contexts such as international cross-listings and debt financing.

Finally, because our theoretical approach addresses the interplay between bundles of firm-level governance mechanisms and country-level institutional factors, the traditional methods used in the majority of IPO studies have limited capability to tackle our research questions. Therefore, we also make a methodological contribution to IPO governance research by testing our conceptual model using Fuzzy Set Qualitative Comparative Analysis (fs/QCA) (Ragin, 2008). Fs/QCA's intent is not to isolate the net, independent effects of single explanatory factors on a particular outcome, but rather to identify the combinations of factors that bring about the particular outcome in question (Ragin, 2008). This methodological advance allows us to probe deeper empirically and theoretically into the many factors that affect the stock market legitimation processes. Furthermore, we can demonstrate that a firm's legitimacy may be underpinned not only by a complex interplay between governance practices and macro-institutions, but also by other organizational and third party contingencies associated with the IPO process.

THEORY AND HYPOTHESES

IPO Corporate Governance Mechanisms and Legitimacy

IPO studies within financial economics and management fields have developed a substantial body of research seeking to link stock-market performance with governance characteristics of an IPO firm. Grounded within the agency theory, these studies emphasize rational adaptation of IPO firms to a set of external market conditions and contractual relationships between insiders, early stage investors, underwriters and public market investors that are associated with potential agency costs of moral hazard and adverse selection (Certo, Daily, & Dalton, 2001; Filatotchev & Bishop, 2002; Sanders & Boivie, 2004). Studies advancing the agency perspective to understand IPO valuations argue that facing these costs an IPO firm should rationally respond by enhancing its governance mechanisms, such as board monitoring and executive incentives, to reduce informational asymmetries and convey its quality to investors and ultimately improve its stock-market value.

However, the results of a large body of empirical studies of the agency-grounded governance predictors of IPO performance are inconclusive. This particularly extends to the three most salient governance mechanisms identified in IPO research: board independence (see Arthurs, Hokinsson, Busenitz, & Johnson, 2008 relative to Certo, Daily, and Dalton, 2001); equity based compensation (see Ellul & Pagano, 2006 relative to Filatotchev & Bishop, 2002; Lowry & Murphy, 2007); and monitoring by venture capital (VC) firms (Bruton et al., 2010). These mixed results are further confirmed by Daily, Certo, Dalton, and Roengpitya (2003)'s meta-analysis of IPO research uncovering considerable empirical ambiguity in the hypothesized governance-performance relationships.

A number of organizational theorists have put forward a sociological perspective on corporate and investor behavior questioning the rather simplified, rational assumptions of agency-driven research. These studies suggest that dominant governance beliefs based on the agency model of corporate control have become an institutional logic that underpins the process of firm legitimation among investors (Zajac & Westphal, 2004). For example, scholars argue that "considerable uncertainty inherent in valuations, which is compounded by the social nature of investing, gives special urgency to the need for legitimacy" (Zuckerman, 1999: 1401). Within this line of analysis, Pollock, Rindova and Maggitti (2008) demonstrate that in the face of increasing uncertainty, such as within the IPO process, firms are more likely to follow institutionalized rules which are taken for granted in organizational decision-making. Yet, we know little about how different constellations of governance mechanisms affect investor perceptions of firm value.

Neo-institutional theory (Kraatz & Zajac, 1996; Meyer & Rowan, 1977; Scott, 2001) suggests that governance mechanisms of IPO firms are a product not only of coordinative demands imposed by the market efficiency concerns, but also of rationalized norms legitimizing the adoption of appropriate governance practices (Zajac & Westphal, 2004). The neo-institutional perspective enables our analysis to focus less attention on the individual efficiency outcomes of different governance mechanisms that are at the core of agency perspective, and instead center our theoretical efforts on understanding how governance mechanisms affect the firm's legitimacy through perceptions of external assessors of organizational legitimacy, or the stock-market "audience" (Deephouse & Suchman, 2008, Zuckerman, 1999), such as the investor community. Capital markets represent a particularly useful setting for studying social processes that capture legitimation and, hence, investors' valuation of IPO firms (Higgins & Gulati, 2006; Pollock et al., 2008).

In addition, an institutional approach to corporate governance research maintains that "corporate governance systems themselves are embedded in larger institutional and legal frameworks" (Fiss 2008: 390). Thus, the process of legitimation may be contingent on the institutional environment within which the firm operates (Chung & Luo, 2008), in particular the extent of protection of minority investors (Bruton et al., 2010). Importantly, Berger, Ridgeway, Fisek and Norman (1998: 379) suggest that "legitimation is inherently a multilevel process" requiring a theory that involves analysis of factors at "both the local level of the object of legitimation and the level of encompassing social framework." Governance research is increasingly recognizing that firm-level governance should be analyzed in conjunction with institutional factors, such as laws and regulations (Aguilera et al., 2008; Bruno & Claessens, 2007). However, extant IPO research neglects the importance of the effects of firm's home country institutional environment on the investors' perceptions of overall IPO governance “bundle.” In the following section, we discuss IPO firm legitimation based on firm governance and the IPOs’ home country institutions.

“Nested” Legitimacy: Home Country Institutions and Firm-Level Corporate Governance

Our previous discussion suggests U.S. investors’ perceptions of foreign IPO firm value may be based on what sociology-grounded research describes as a “nested” legitimacy framework (Deephouse & Suchman, 2008; Holm, 1995). Within this framework, “the institutional arrangements at one level constitute the subject matter of an institutional system at a higher level” (Holm, 1995: 400). In the context of foreign firms making their capital market debut on U.S. stock exchanges, “perceptions of organizational legitimacy shape investor behavior” (Tost, 2011: 686) when investors evaluate how well the foreign IPO firm complies with their perceptions of “good governance.” A “good governance” bundle in a foreign IPO brings cognitive legitimacy (Scott, 2001) because it is “understood, recognizable, and located within the set of the widely held cognitive structures of its institutional environment” (Sanders & Tuschke, 2007:33). However, this process of gaining legitimacy through governance does not develop in isolation from investors’ perceptions of the foreign IPO firm’s home country regulatory institutional environment. The foreign IPO firm’s overall legitimacy, therefore, falls at the intersection of the cognitive and regulatory institutional domains associated with its governance bundle and home country legal environment, in line with more recent research on social judgements of organizations (Bitektine, 2011; Tosi, 2011).

Although foreign IPOs consider the U.S. as a primary equity market, these firms’ production and distribution systems, business networks and other key characteristics are significantly “embedded” in their home countries (Bell et al., 2012). Foreign IPO firms are exposed to a different institutional logic before listing in the U.S., which might have a significant impact on investors' perceptions of their value because "multiple logics … may make agreement difficult and consensus impossible" (Dunn & Jones, 2010: 115). Greenwood, Raynard, Kodeih, Micelotta and Lounsbury (2011) argue that the higher the number of logics, the greater will be the complexity facing an organization and its audience. These authors emphasize the importance of formalized rules in terms of their impact on the complexity, in particular in organizations that are at a juncture of multiple institutional logics, such as foreign IPOs whose primary audience includes U.S. investors. This suggests that legitimation should be analyzed at multiple levels, including possible interactions among the levels (Deephouse & Suchman, 2008: 68-69). Hence, the process of legitimation through governance may be "nested" within a broader context of investors' perceptions of the legitimacy of institutions associated with the foreign IPO's home country. The nesting of firm-level governance with country-level institutions and the associated complexity it creates represent an important boundary condition that affects the foreign IPO's process of legitimation through firm-level governance in the eyes of U.S. investors. Although some recent studies emphasize this "nested" nature of cognitive and regulatory institutional factors (e.g., Bitektine, 2011; Fiss, 2008; Greenwood, Diaz, Li, & Lorente, 2010), there is little research on their intersection in the context of capital markets.

From the U.S. investor perspective, an especially relevant feature associated with foreign IPOs' home environment is the extent to which minority investor rights are protected by regulatory institutions. Neo-institutional theorists argue that regulatory institutions hold a preeminent place in shaping organizational legitimation (Deephouse & Suchman, 2008), chiefly in the realm of corporate governance. This is because "the logic of shareholder value maximization became the dominant guiding principle informing top management strategic decision making in listed firms as well as … the way institutional shareholders evaluated their performance” (Lok, 2010: 1305). Scott (1998) also highlights the importance of governmental organizations, legislation and court decisions as “primary regulative agents” on the structure and activities of organizations. The functions of a regulatory system include establishing rules to hold managers accountable to shareholders, ensuring shareholder voting privilege, preventing self-dealing by managers, protecting creditors, as well as enforcing these rules in practice. In countries with regulations lacking in these elements, U.S. investors may suspect that, for example, insiders or controlling shareholders may be diverting resources from the corporation to the detriment of minority investors (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2008; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). Other things being equal, this would negatively affect the firm’s legitimacy within the dominant logic of shareholder value maximization (Zajac & Westphal, 2004).

The nesting of firm-level governance with country-level institutions securing protection of investors in public markets has key implications for foreign IPOs. During their evaluations, investors attempt to gauge whether the firm will grow and succeed as a public firm in U.S. capital markets. Yet a cornerstone to their overall evaluation is the legitimacy U.S. investors attach to the regulative institutional environment from which the foreign IPO firm originates. As Tost (2011: 692) emphasizes, “regulative legitimacy represents social cues indicating the validity of the entity.” This forms an integral part of what Bitektine conceptualize as a model of the social judgment formation: “The evaluator selects the most appropriate form of judgment, given the context and objectives of his or her evaluation, and then conducts a search for information on the organization’s features that may be relevant for the selected form of judgment” (2011: 164).

In line with our nested legitimacy discussion above, foreign IPOs will likely have different paths available to them to achieve legitimacy in the eyes of investors contingent on the strengths of their home country regulative institutional environments. For example, IPO firms coming from countries with strong investor protection rules operate in a home institutional environment with an agency-grounded institutional logic, similar to the U.S. Similarities between the foreign IPO's home and host markets regulatory institutional logics reduce investor uncertainties and their need to rely on the firm's compliance with multiple governance mechanisms. The legitimacy of firm-level governance mechanisms being nested within home regulative institutions challenges the agency framework's assumption of the linear additivity of governance practices (e.g., "more governance is better") by suggesting a scope for different bundles of governance practices. In our context this means that equivalent levels of perceived IPO stock-market evaluation may be achieved by different and limited combinations of governance mechanisms when the firm has reached a certain level of the first-order, regulatory legitimacy. For example, Zuckerman (1999) describes a social process that explains why U.S. investors put a discount on companies which were not covered by the securities analysts specializing in their industry. He argues that gaining investor favor requires conformity with the audience's "minimal criteria," and the analysts' coverage represents the main differentiation from illegitimate offers. Companies that fit this minimal criterion are not under pressure to use other means to conform.

In the IPO context, a firm from a country with similar regulative institutions to the U.S. may gain a first-order, "minimal" legitimacy and thus have "the capacity to constitute itself by choosing its identities and commitments from the menu of choices presented by its would-be constituencies" (Kraatz & Block, 2008: 255). This menu may be related to different monitoring and incentive-based governance practices that lead to the second-order, cognitive legitimacy. The nested legitimacy framework implies that the marginal effect of additional governance practices on investor perceptions may be declining in foreign IPOs which are over the regulatory legitimacy threshold. Bitektine (2011), for example, indicates that the legitimation process develops in the environment of "cognitive economy," and evaluators may be tempted to use "cognitive shortcuts." Pollock et al. (2010) provide analysis of the potential redundancies of value signals associated with multiple certifying affiliates of IPO firms, such as VCs and underwriters. They discuss social mechanisms behind diminishing marginal legitimacy associated with these affiliates and suggest that there may be a finite amount of uncertainty that their certification can reduce. As endorsements accumulate, each subsequent signal will have less impact than prior signals. To put this argument in our context, because they are required to adhere to regulatory standards in their home country, foreign IPOs from countries with strong investor protection may carry less uncertainty from the U.S. investors' point of view. As a result, they may need less governance.

We build on these arguments and suggest:

Hypothesis 1: The effect of the foreign IPO's governance mechanisms on investor value perceptions is contingent on the legitimacy of its home country regulatory institutions, and the value of adopting multiple mechanisms does not accumulate for foreign IPOs originating from countries with strong protection for minority investors.

Given the importance of meeting the minimum threshold of regulatory legitimacy, the question facing foreign IPO firms from countries with less legitimate regulatory institutions such as those associated with weak protection of minority investors is this: What combinations of governance mechanisms are likely to enable firms from countries with weak regulatory institutions (e.g., China, Russia, or Brazil) to achieve comparable levels of valuation on U.S. exchanges as firms from countries with strong legal institutions (e.g., Canada, U.K.)?

The sociological perspective on financial markets offers three reasons why investors would likely demand that firms originating from less legitimate regulative institutional environments adopt more governance practices to achieve the same level of legitimacy as IPOs originating from countries with regulative institutions similar to the U.S. First, a regulatory void in the formal institutional environment in a foreign IPO's home represents a missing "minimal condition" within the stock market's "nested" social legitimacy framework. Following Zuckerman's (1999) arguments, firms coming from outside "accepted" countries are penalized not because they raise information costs for U.S. investors, but because the social boundaries that divide foreign IPOs from different countries limit their appeal to the investor community. Hence, to achieve the same level of investors' value perception, foreign IPOs may have to rely on a broader range of governance practices. Indeed, more firm-level governance would be required to compensate for the legitimacy loss associated with not surpassing a "minimal threshold" of home regulatory institutions.

Second, Kraatz and Block (2008) argue that when organizations are situated in a pluralistic institutional context their audiences may become suspicious about their priorities and commitment to the rules. In addition, as Edelman, Uggen, and Erlanger emphasize, "Legal rules are not self-enforcing… those subject to [them] must determine what constitute compliance and what actions they will take to demonstrate compliance" (1999: 409). Therefore, in the context of a foreign IPO with heightened institutional duality, investors are likely to rely on what Kraatz and Block call "second-order evaluative criteria in assessing its legitimacy" (2008: 249), and to achieve the high levels of legitimation and consequently valuation, the firm must deploy a wider range of governance practices to re-assure U.S. investors that their interests are well-protected.

Finally, a related argument is that foreign IPOs from countries with non-legitimate regulatory institutions are often exposed to divergent and conflicting institutional logics in their home and host markets. The multiplicity of attention associated with institutional duality may result in conflicting demands and lack of consensus (Dunn & Jones, 2010), a result which increases the level of complexity and uncertainty surrounding these firms (Greenwood et al., 2010). When IPO firms are facing increasing uncertainty, the scope for redundancies in legitimacy signals diminishes (Pollock et al., 2010), and investors become more likely to follow a wider range of standard or institutionalized rules (Pollock et al., 2009). Together, these arguments suggest that positive U.S. investor perceptions may still be associated with foreign IPO firms that do not originate from countries that provide strong legal protections to minority investors, but only if these firms adopt a broader range of monitoring and incentive related mechanisms in their governance bundle.

In sum, while we do not claim that there is only a single path for IPOs from countries with weak investor protection to achieve favorable investors' perceptions when going public on a U.S. exchange, we argue that the benefits of adhering to multiple governance mechanisms are likely to be more valuable to these firms in order to overcome perceived legitimacy concerns. Hence:

> *Hypothesis 2: To achieve high investor value perceptions, foreign IPOs from countries with weak protection for minority investors must employ a larger number of mechanisms in their governance bundle compared to IPOs from countries with strong protection for minority investors.*

SAMPLE AND METHODOLOGY

To construct our sample, we utilized the Security Data Corporation (SDC) New Issues database to identify all foreign firms that made first time firm commitment IPOs in the U.S between 1996 and 2006. The SDC database defines “foreign” firms as those companies incorporated and whose primary executive offices are located outside of the U.S. Consistent with prior IPO research, we excluded from our sample those stock listings resulting from mergers or acquisitions, as well as from spin-offs of publicly-listed firms. We also eliminated from our analysis unit trusts, warrants, and rights offerings. We then followed the selection procedures outlined by Bruner, Chaplinsky, and Ramchand (2006) and removed all utility firms from consideration and all firms incorporated in Bermuda, Bahamas and Cayman Islands[1]. We then acquired each firm's initial S-1 registration filing and final prospectus from the SEC.

Tables 1 and 2 provide summary statistics of our final sample that is comprised of 198 firms from 36 countries. Despite the slowdown in foreign listings after 2001, recent yearly totals suggest that the popularity of U.S. exchanges is gaining strength. Table 2 shows that most of the foreign firms that choose to list on U.S. exchanges originate from either Europe or from the Asia/Pacific regions.

Insert Tables 1 & 2 about here

To test our hypotheses, we utilized Fuzzy Set/Qualitative Comparative Analysis (Fs/QCA), which is based on set-theory, and causal claims are developed by means of supersets and sub-sets (Ragin, 2008). Fs/QCA is quite effective in evaluating both the number and

[1] While these firms technically conform to the “foreign” status, IPOs from these countries are most often U.S. or London financial services firms who have chosen to incorporate in these countries to reduce their domestic tax burdens.

complexity of alternative paths leading to a desired outcome (Fiss, 2011; Greckhamer, Misangyi, Elms, & Lacey, 2008; Ragin, 2008). Given that our hypotheses are built on the premise that high levels of investors' perception of foreign IPO value can be achieved through multiple combinations of governance features, the fs/QCA approach is particularly useful.

In the following section, we identify our variables and then calibrate them into crisp sets and fuzzy sets. Crisp sets define membership as either "fully in" or "fully out" status of a given set. In contrast, fuzzy sets allow researchers to account for the varying degrees of membership of cases to a set by using the anchor of 1 to designate "fully in" a particular set, and the anchor 0 for non-membership, and .5 as the point of maximum ambiguity to mean neither in, nor out, of a particular set. Ragin (2008) advises that both substantive and theoretical knowledge be used when calibrating measures and translating them into set membership scores.

Outcome Condition: Price Premium

Price premium is a useful measure of investor IPO valuations because it represents the potential value that the market perceives in the IPO firm above the book value of the issuing firm's shares (Rasheed, Datta, & Chinta, 1997; Welbourne & Andrews, 1996). We chose this measure to assess investor valuations because traditional IPO valuation measures that are based on determining the issue price relative to the prevailing market price suffer three key limitations (Rasheed et al., 1997). First, only after trading has begun can the firm's initial owners and underwriters determine whether the new issue is over or underpriced, and the extent of the over- or underpricing often varies depending on the time period. Second, initial increases in prices may be the result of overvaluation, market fads, or intentional underwriter price support. Finally, valuation assessments based on an initial return measure may overestimate the return available to the investor and the underpricing costs to the issuer. Assessing the firm's stock price beyond the book value allows us to control for assets, and thus, enables us to provide a robust estimate of investors´ *perceived* future value. Empirically, IPO premium reflects the investors' intention of participation and offers a sense of the market's perceptions of the firm's competitiveness because underwriters set the offer price after ascertaining the views of investors through the book building process.

Following previous research, we calculate price premium as [(offer price - book value)/offer price]. We then undertake two steps to arrive at our breakpoints to define membership in the set of high valued foreign IPOs. First, we reviewed prior studies from leading management and entrepreneurship journals that incorporate price premium as the IPO valuation measure[2]. Results of these studies show that on average IPO firms receive premiums of 66%. Following Fiss (2011), we use this information and code firms '0', or fully out of the set of high valued foreign IPOs, if the issuing firm did not receive a price premium of at least 66%.

Our second step involves defining the upper threshold of our set of high price premium foreign IPOs. Since no prior literature has conceptualized what threshold price premium constitutes high investor valuations, we turn to similar measures that scholars have relied upon to help define our breakpoint for full inclusion in the set. Similar to the price premium measure, numerous studies in finance and management also rely upon the pre-IPO book value to obtain similar proxies that researchers consider to capture investor perceptions of new issues. For example, the firm's offer-to-book ratio can be seen as an indication of an IPO's growth opportunities where the larger the offer-to-book ratio, the higher the market's perception of the firm's growth opportunity. Others have used Tobin's Q (market price/book value per share) as a

[2] See: Chahine & Goergen (2011), Bruton, Filatotchev, Chahine, & Wright (2010), Lester et al. (2006), Daily, Certo, & Dalton (2005), Certo et al. (2003), Nelson (2003), Rasheed,Datta & Chinta (1997), Welbourne & Andrews (1996).

measure of perceived market potential for an IPO (Welbourne & Andrews, 1996). Here, the higher the ratio, the more the firm's value because it means that investors are more willing to "gamble" on the firm's intangible assets. Fama and French (2002), among others, have also utilized book to market values to gauge investor perceptions and define high investor valuations to be those in the upper quartile or even the highest decile of their respective samples. Following Fama and French (2002) we define high investor valuations to include those firms in the highest decile of our study sample, which in our case is 95% price premium. This level agrees with research suggesting that investors are willing to pay a high premium that far exceeds the issuing firm's book value when they perceive the issuing firm will capture the growth opportunities available to them (Chung, Li, & Yu, 2005). We code those firms that have achieved 95% price premiums as '1', or fully in, the set of high valued foreign IPO firms. Following Fiss (2011), we define the midpoint to be the average between these two breakpoints[3].

Predictor Conditions

In our analysis of governance bundles we first focused on the three most important governance mechanisms used in previous IPO research: board independence, executive share options, and venture capital backing (Arthurs et al., 2008; Beatty & Zajac, 1994; Certo et al., 2001). We have also added a proxy for the strength of foreign IPO home country investor protection. The following section explains how we constructed these key variables.

Board Independence. We approximated the extent of internal monitoring by board independence. We classify independent (non-management) directors as only those with no prior

[3] Certo et al. (2003) suggest substituting the firm's offer price with the closing price on the first day the firm's shares go public as a means to account for the premium that is determined by all investors, and not just the premium that is determined by initial investors. Hence, in addition to the price premium measure derived with the offer price, we also evaluated governance configurations using the following percentage price premium measure [(first day closing price - book value)/ first day closing price] as it controls for underpricing (Certo et al., 2003). Using this measure does not change our results.

professional or personal ties to the company or to management based on the information provided in the firms' prospectuses (Certo et al., 2001). We do not include VC-related board members as independent directors. Results of the *2010 Spencer Stuart Board Index* report indicate that the boards of the largest and most well established U.S. firms had on average 70% independent members during our sample timeframe (Spencer Stuart Board Services, 2010). Using this information, we code firms with 1, or 'fully in' this set if their boards are comprised of at least 70% board independence. Surveys also show that the levels of board independence among U.S. firms range as low as 20-30% (Davis, Polk, & Wardwell, 2009). Using this information, we code 0, or 'fully out' of the set, boards that maintained 30% independent members. The crossover point of 50% board independence is the average of the full inclusion and full exclusion values.

Venture Capital Backing. Researchers have identified private equity investors, such as VCs, as important external monitors in IPO firms (Bruton et al., 2010). Previous studies generally use a dichotomous variable to indicate the importance of VCs to IPOs (Certo et al., 2003). Thus, we generate a crisp-set to indicate the presence of VCs amongst the firm's principal pre-IPO shareholders. Foreign IPOs backed by VCs prior to the date the firm went public are considered 'fully in' the set whereas those firms who were not backed by VCs are coded out of the set.

CEO Stock. Stock options are used as a proxy for executive incentives, since they have become an important element of CEOs' compensation packages due to the widespread belief that they are effective in aligning executive and shareholder interests. Drawing on previous IPO research (Beatty & Zajac, 1994; Certo et al., 2003), we build the executive incentive set as a crisp-set by accounting for those firms that offered stock options to their CEO. Using this information we code 1, or ‘fully in’ this set, if stock options were offered to the issuing firm’s CEO prior to IPO and 0 otherwise.

Strong Home Country Investor Protection. Our next step involves an evaluation of the extent to which home country institutional factors impact the combinations of governance conditions that lead to high premiums for foreign IPOs. We rely upon two widely recognized indices to help categorize our firms based upon the degree of their home country’s protection of the interests of minority investors. First, we utilize the La Porta et al.'s (1998) anti-director index as revised by Djankov, La Porta, Lopez-de-Silanes and Shleifer (2008). This index consists of six sub-indices capturing the possibility of voting by mail and of depositing shares, aspects of cumulative voting, oppressed minority, preemptive rights, and the percentage of share capital to call a meeting. This index covers aspects of *de-jure* regulation since it does not control for the level of regulatory enforcement. Therefore, we also rely upon the International Country Risk Guide (ICRG) Law and Order index as it assesses both the legal system and the *de-facto* law and order tradition of a country. After standardizing these indices to a scale from 0 to 1, we multiply the La Porta et al. (1998) revised anti-director index and the ICRG Law and Order index so as to combine *de-jure* and *de-facto* aspects of investor protection (Bruno & Claessens, 2007; Durnev & Kim, 2005). Consistent with earlier studies that have used these indices (e.g., Leuz et al., 2009, among others), we classify countries above the sample median as ‘fully in’ the set of high minority investor protection countries whereas those below the median are classified as out of the set. After performing these steps, our final sample is comprised of 97 firms from countries that provide weak investor protection to minority investors, and 101 firms originating in countries that provide strong investor protections. A pool of countries represented in the weak investor protection sample includes Argentina, Brazil, China, France, Greece, Mexico, Russia, and Venezuela. Countries represented in the strong investor protection sample include Australia, Canada, Hong Kong, Ireland, Israel, Japan, New Zealand, Singapore, Spain, Taiwan, and the United Kingdom.

Contextual Conditions

While the focus of our study is on the importance of corporate governance to foreign IPO perceived values, we are acutely aware that contextual factors beyond governance can impact IPO valuations. However, including too many contextual factors beyond those most salient to IPO valuation assessments would add exponentially to the number of configurations and cause limited diversity[4]. Therefore, we construct fuzzy and crisp sets on four contextual factors which are likely the most salient to investors evaluating foreign IPOs.

Prestigious Underwriter. The Carter and Manaster (1990) index is the most widely recognized index that captures the prestige of underwriters based upon their position on “tombstone” announcements. The final index has a range of 0–9, where 0 represents the lowest, and 9 represents the highest rating. Studies in leading strategy, entrepreneurship, and finance journals generally agree that underwriters with rankings of 8, based upon the index developed by Carter and Manaster (1990), or higher are considered prestigious (Heely, Matusik & Jain, 2007; Loughran & Ritter, 2004; Pollock et al., 2010). Therefore, we code firms backed by underwriters with rankings of 8 or higher to be ‘fully in’ the set of prestigious underwriters. Secondly, Loughran and Ritter (2004) consider underwriters with rankings between 5.0 to 7.9 to be ‘quality regional’ or ‘niche underwriters,’ and underwriters lower than 5 to be ‘lower quality’ and most frequently associated with penny stocks. Based on these guidelines, we establish the breakpoint for ‘fully out’ of the set of prestigious underwriters to be those foreign IPOs with underwriters

[4] Limited diversity is due to large numbers of logical remainders, i.e. potential combinations of causal conditions, which are logically possible, but for which no empirical manifestations are present in the dataset (Ragin 2008).

ranked lower than 5, and used the midpoint between these breakpoints to establish the mid-point in the set[5].

Mature IPO. Firm age is a frequently used control variable in IPO research (Beatty & Zajac, 1994) and is one factor that investors use to gauge the growth prospects of a firm, both negatively and positively. Megginson and Weiss (1991) show that the older a firm is upon listing, the lower the firm's growth prospects. This is because the older the firm, the more firm-specific information might be available to the public. However, others suggest that investors tend to perceive older firms to be already tested in the industry and have established networks and routines that are vital for survival (e.g., Stinchcombe, 1968). Some foreign IPOs choose to go public early in their life-cycle, whereas others choose a U.S. listing after spending considerable time as a private firm in a foreign market. Hence, age may be particularly salient to investors evaluating foreign IPOs. We account for the age of firms at IPO by taking the difference in years between the IPO firm's founding date and the date of the IPO. Firms are coded 1 or "fully in" the set of mature IPOs if they had been in existence for at least 20 years since their founding date. Firms are considered "fully out" if they had been in existence for one year or less. We considered 5 year old foreign IPO firms to be at the crossover point. This is similar to Loughran and Ritter (2004) who show that IPO age can average as low as two years, and others who have shown that foreign firms listing in the U.S. can exceed 20 years of age (Ejara & Ghosh, 2004).

Hi-Tech Industry. Researchers very often control for industry effects when evaluating investor perceptions of IPOs. Industry is a particularly salient control factor for foreign IPOs in light of the growing literature that has shown that industry does influence foreign listing decisions, and more importantly, an IPO market's receptivity and understanding of a new issue

[5] A complete list of IPO underwriter reputation rankings is available on Jay Ritter's website: (http://bear.cba.ufl.edu/ritter/ipodata.htm).

can be contingent on the industry the firm competes within. One of the most common ways is to isolate whether the IPO operates in a high-tech industry or not, since technological orientation of the firm may also be a proxy of the investors' perceptions of its "riskiness" (Daily, Certo, & Dalton, 2005; Loughran & Ritter, 2004; Lowry & Murphy, 2007). We categorize all internet-related, electronics, and software firms as fully in the set of "high-tech" foreign IPO firms.

Table 3 provides summary statistics of the governance and contextual conditions in our analysis.

Insert Table 3 about here

We then use fs/QCA's truth table function to generate a list of different combinations of our governance and contextual conditions that are sufficient for a particular outcome to occur (Ragin, 2008). Fs/QCA's truth table algorithm enables researchers to deal with the issue of limited diversity by distinguishing between parsimonious and intermediate solutions based on both easy and difficult counterfactuals (Ragin, 2008)[6]. Truth table reduction requires evaluating the consistency levels across the configurations and establishing a frequency threshold that will be applied to the data listed. In this study, we adopt a consistency cut-off value of .80 (Rihoux & Ragin, 2009). In addition, Ragin (2008) suggests that when establishing a frequency threshold, "the issue is not which combinations have instances, but which combinations have enough instances to warrant conducting as assessment of the subset relationship" (p.133). In general, the

[6] Fiss (2011) points out that easy counterfactuals are those situations where a redundant causal condition is added to a set of causal conditions that by themselves already lead to the outcome in question. Difficult counterfactuals occur when a condition is removed from a set of causal conditions leading to the outcome on the assumption that this condition is redundant. Fs/QCA's parsimonious solution includes all simplifying assumptions regardless of whether they are based on easy or difficult counterfactuals. Alternatively, intermediate solutions restrict logical remainders to only those that are the most plausible.

frequency thresholds should be based on the number of cases included in the analysis, the knowledge of cases by researchers, the precision of calibration of fuzzy sets and they capture at least 75-80% of the cases (Ragin, 2008). We adopt a threshold of three as it allowed us to include 82% of the cases in the analysis. Tables 4, 5, and 6 (which we describe below) follow the format used by Fiss (2011), Crilly (2011), Greckhamer (2011) and Ragin and Fiss (2008) in that they account for fs/QCA's parsimonious and intermediate solutions. Overall solution coverage refers to the joint importance of all causal paths (Schneider et al., 2010). Unique coverage is useful because it illustrates the relative weight of each path in leading to high foreign IPO perceived values by measuring the degree of empirical relevance of a certain cause or causal combination to explain the outcome (Fiss, 2011; Ragin, 2008)[7].

Results: Sufficient Conditions for High Foreign IPO Price Premiums

Table 4 shows that there are six solution configurations with acceptable consistency levels (Consistency $\geq$ .80). The unique coverages for each solution configuration confirm that each of these six combinations offers a unique contribution to the explanation of high foreign IPO perceived value. The combined solution configurations in Table 4 account for about 39% of membership in the outcome, high foreign IPO price premiums[8].

Solutions 1-3 apply to firms originating from countries with strong legal protection of investors. A comparison across solution configurations 1-3 reveals that these foreign IPOs can achieve high price premiums with only one governance mechanism. Solution 1 shows that the presence of incentive alignment and the absence of an independent board lead to high perceived

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[7] The notation for the presence and absence of conditions can be downloaded from Peer Fiss's website.

[8] We followed Helwege and Liang (2004) in defining the IPO time period as 'hot IPO market' and use three-month centered moving averages of the number of IPOs for each month in the sample. These monthly averages are then used to define the breakpoints for our target set 'hot market'. Our analysis indicated that a hot IPO market was a necessary condition for high foreign IPO perceived value. Following Ragin (2008) we drop this condition from our final table yet highlight this finding in the Discussion.

value for older firms competing in technology related industries. Prestigious underwriters are not relevant to the bundle of governance and contextual factors leading to high perceived value in Solution 1. Solution 2 provides similar evidence in that younger technology based IPOs from strong investor protection countries can achieve high perceived values with just the external monitoring of venture capital. Finally, Solution 3 demonstrates that IPOs competing in non-technology related industries can achieve high price premiums with just the backing of an independent board. This is in line with our first hypothesis, which suggests that similar levels of perceived IPO stock-market evaluation may be achieved by different and limited combinations of governance practices when the firm comes with a certain level of the regulatory legitimacy.

Solutions 4-6 in Table 4 apply to firms that do not originate from countries that offer strong legal protection to investors and show that these firms need to adopt multiple governance mechanisms in order to achieve high perceived value at IPO. Indeed, the combination of incentive alignment and external monitoring via venture backing (Solution 4), the combination of incentive alignment and internal monitoring via an independent board (Solution 5), and a combination of all three of these governance mechanisms (Solution 6) enable these firms to reach high premiums at IPO. A comparison of Solutions 1-3 and Solutions 4-6 provides support to our second hypothesis by demonstrating that in order to attain comparably high perceived values, IPOs from countries that do not grant regulatory legitimation must adopt more governance mechanisms than IPOs from countries with strong investor protection.

Our results also reveal that the process of firm legitimation among stock market investors depends not only on the interplay between the firm's institutional context and governance mechanisms, but also on a number of important organizational contingencies, such the firm's age, technological orientation and presence of prestigious underwriters. Our hypotheses , therefore, may reflect only a partial picture of a broader model of “nested” legitimacy. It appears that, under the conditions of “cognitive economy” (Bitektine, 2011), investors may be equally satisfied with either strong external monitoring by VCs in young technology IPOs (solution 2) or with incentive alignment in mature (hence, less uncertain) technology listings (solution 1), as long as these firms originate from countries with investor-friendly, legitimized regulatory regimes. At the same time, mature non-technology firms need to have independent boards in place if they want to achieve a similar level of legitimacy compared to technology firms (solution 3). Yet, to achieve the same level of investor valuations as mature technology firms (solution 1), both non-technology companies and younger technology firms need to secure the presence of a prestigious underwriter, even when they are coming from countries with high investor protection (solutions 2 and 3). Likewise, non-technology firms from countries with weak investor protection, in addition to equipping themselves with more governance, also need to secure a prestigious underwriter compared to technology firms (solutions 5 and 6). Therefore, a closer analysis of our results suggests that governance “bundles” should be considered in conjunction with other organizational factors, and we will come back to this in the Discussion.

Insert Table 4 about here

We performed two additional analyses to test the robustness of our results. First, we evaluated the configurations of governance and contextual conditions that lead to low price premiums. Causal asymmetry (Ragin, 2008) suggests that the conditions that lead to presence of high foreign IPO perceived value may be different from those conditions that lead to the absence of high perceived value. The results in Table 5 are based on a consistency cut-off value of .80

and reducing the truth table with a frequency threshold of two which captured 80% of the cases. Solution 1 in Table 5 complements our results found in Solutions 1-3 in Table 4 in that IPOs from countries with strong protection of investors suffer low perceived value when they adopt multiple governance mechanisms. Similarly, Solutions 2 and 3 in Table 5 complement Solutions 4-6 in Table 4 by demonstrating IPOs from countries that do not offer strong legal protections to minority investors experience poor perceived value when they adopt very few governance mechanisms. Again, in terms of the contextual factors, the negative impact of "too many governance practices" is particularly prominent in technology IPOs coming from countries with strong investor protection.

Our second robustness test includes a number of other governance and contextual factors that previous studies have also identified as drivers of investors' perceptions of IPO value (see Sanders & Boivie, 2004, for a review). We follow Zajac and Westphal (1995) and include both CEO stock options and retained ownership of company insiders to better capture the range of incentive alignment practices available to foreign IPO managers. We built a fuzzy set to capture the ownership of insiders and define low equity as 5 percent holdings, moderate equity as 25 percent and high insider equity as 50 percent (Certo et al., 2003). For internal monitoring, along with board independence, we evaluate whether the foreign IPO's CEO and Chairman of the board are separate individuals. Firms that did separate these two roles would convey to potential investors that the activities of the top manager would be better monitored than if these two roles were contained within the same person (Zajac & Westphal, 1995). We created a crisp set and denoted Separated Board Chairs and CEOs as fully in the set. Also, research has shown that large international accounting firms play an important role in reducing IPO investor uncertainties. We followed Beatty (1989) and built a crisp set with firms backed by Big Five accountancy firms coded fully in the set. Finally, Nelson (2003) found that firms managed by founder CEOs are likely to receive a higher percentage price premium at IPO. Yet, it is unclear whether this finding applies to firm's seeking equity resources outside their home country's institutional context. Hence, we took into consideration whether the presence of a Founder-CEO influenced our results and could be considered a strong governance signal. Table 6 illustrates the results of our analysis which is derived using a consistency cut-off value of .80 and reducing the truth table with a frequency threshold of three which captured 81% of the cases.

Insert Tables 5 and 6 about here

Solutions 1 and 2 in Table 6 apply to firms originating from countries with strong investor protection, whereas solutions 3-6 apply to firms from countries that do not provide strong protection to investors. Solutions 1 and 2 show that firms that are over the regulatory legitimacy threshold need only one governance factor (e.g., CEO share options or high retained ownership of insiders) to achieve the same high level of valuations, in line with our first hypothesis. Additional support for our second hypothesis comes from comparing solutions 1-2 against solutions 3-6. It demonstrates that firms from countries that do not provide strong investor protection must adopt more governance mechanisms than firms that originate from countries with provide strong investor protection to achieve comparably high perceived values. Yet again our results show that specific governance configurations also depend on whether the foreign IPO is a hi-tech firm or not. In addition, the separation of the CEO and chairperson role and the retained ownership of company insiders appear to be more important for firms originating from countries which do not provide strong investor protection. Finally, these results demonstrate that the presence of an international auditor may have become yet another potent legitimation driver in that it is present across all solution configurations leading to high foreign IPO perceived value. In sum, these results involving a broader range of governance factors are in line with our theoretical expectations and demonstrate that foreign IPOs that originate in countries that do not provide strong investor protection must adopt more incentive alignment and monitoring practices than IPOs from strong protection countries to achieve legitimacy with US investors.

DISCUSSION

Much of corporate governance research, both in general and IPO studies in particular, are built upon the agency-grounded assumption that governance mechanisms act independent from one another and in a cumulative fashion. The inconsistency of evidence across the spectrum of studies suggests that the valuation implications of a range of firm-level governance mechanisms associated with firms leading up to their first equity offers is a significantly more complex phenomenon than previously understood. We challenge these basic assumptions of previous research grounded within the agency perspective both by focusing on “the workings of legitimacy at multiple levels of analysis” (Deephouse & Suchman, 2008: 67) and by proposing two important extensions building on research within the field of sociology of financial markets. First, we argue that the process of investors’ perceptions of the foreign IPO’s value may be based on its compliance with governance-related best practices as part of a more general framework of nested legitimation. We suggest that the same levels of IPO stock-market evaluation may be achieved by different combinations of governance mechanisms. Second, we sustain that the impact of governance practices on investor perceptions is contingent on the strength of firms’ home country regulative, governance-related institutions, and that these institutions shape the size and composition of governance ‘bundles’ among firms seeking equity in foreign capital markets.

Our study advances both corporate governance research in general and IPO research in particular in a number of important ways. First, we show that there is no universal governance bundle leading to high levels of investors’ value perceptions. In fact, our findings clearly indicate that board independence does not seem to play a central role in affecting investor perceptions compared to executive incentives and VC monitoring, especially in countries with strong investor protection. This is in line with previous empirical IPO studies that question the signaling role of IPO boards (Arthurs et al., 2008; Filatotchev & Bishop, 2002). Second, our results demonstrate that institutional factors have a critical impact on the composition of firm-level governance bundles that lead to the same level of investor valuations. Specifically, we uncover that IPO firms that originate from a country with strong investor protection can substitute monitoring and incentive-related governance practices to achieve the same high levels of stock-market investor value perceptions. However, as our first robustness test clearly shows, having too many governance practices may actually undermine IPO valuations. This finding is in line with research on “costs of over-governance” in finance and management fields (Aguilera et al., 2008; Bruno & Claessens, 2007). In contrast, foreign IPOs originating from countries with weak investor protection must deploy both monitoring and incentive-related governance to bolster U.S. investor confidence of their governance quality and their potential to achieve high levels of valuations.

By using Fuzzy Set Qualitative Comparative Analysis (fs/QCA), we also make a methodological contribution which, in turn, helps our theoretical understanding of the legitimation process associated with firm-level governance in general, and IPO valuation in particular. We utilize fs/QCA because its intent is not to isolate the net, independent effects of single factors on a particular outcome, but to identify the combinations of factors that bring about the particular outcome in question (Ragin, 2008). By leveraging fs/QCA's configurational approach, we relax some of the assumptions typically associated with the quantitative techniques inherent to most IPO research, such as permanent causality, additivity, and causal symmetry, and make three important methodological contributions. First, we demonstrate that investors evaluate institutional, governance mechanisms and contextual factors simultaneously as a collective bundle when evaluating IPO firms. Second, there can be more than one bundle of governance practices leading to high investor perceptions. Finally, we provide evidence that high investor perceptions can occur as a result of the presence of a condition (e.g., high levels of monitoring), or because of the absence of a condition (e.g., absence of incentive alignment).

More importantly, fs/QCA enables us to explore the nature of equifinality (Fiss, 2011; Ragin, 2008) in terms of the impact of different configurations of firm-level characteristics and mechanisms jointly with institutional factors on the overall process of legitimation. In our context, "equifinality" means that the process of legitimation of foreign IPOs may be based on different constellations of governance mechanisms and other organizational contingencies, such as the firm's technological orientation, age and presence of prestigious third parties. For example, finance researchers indicate that technology intensive firms prefer to go public in developed western capital markets over their home markets because the prevalence of knowledgeable analysts and investors offers a more efficient flow of information and a deeper understanding of the nuances of the technology and innovation (Blass & Yafeh, 2001; Hursti & Maula, 2007). Our results suggest that being a hi-tech firm might be another legitimation driver for a foreign IPO in the U.S. that may work in conjunction with governance mechanisms when affecting investor perceptions.

A configurational perspective can also explain why specific governance practices are part of some solutions and absent in others. For example, our analysis shows that CEO stock ownership adds value, but only in mature tech companies originating from strong investor protection countries. This may stem from the belief that incentive alignment is more efficient than monitoring-related governance mechanisms, especially in IPO firms competing globally in the technology sector (Carpenter, Pollock, & Leary, 2003). On the other hand, investors seem to consider monitoring by independent boards critical governance mechanisms for mature IPO firms competing outside the technology sector. These findings are consistent with previous research suggesting that incentive alignment may be a more potent governance mechanism when uncertainty surrounding the IPO firm is particularly high (Beatty & Zajac, 1994). Interestingly, young technology IPOs seem to be able to achieve high premiums with VC backing rather than with independent boards or incentive alignment mechanisms. It is likely that investors believe that VCs will deliver the appropriate balance in providing both the strategic guidance a young technology venture needs to flourish as a public firm (Hellman & Puri, 2002) as well as serving as an effective, highly engaged external monitor (Barry et al., 1990). Finally, young, non-technology IPOs from countries with weak investor protection need *all* governance mechanisms as well as support of prestigious underwriters to obtain a high level of legitimacy. Our findings, therefore, echo a number of studies that advocate viewing corporate governance as part of a broader system of inter-related elements, when firm-level governance interacts with other organizational contingencies and country-level institutions in determining organizational outcomes (Aguilera et al., 2008; Milgrom & Roberts, 1995).

Scholars suggest that normative legitimacy is a higher level of legitimacy and is derived when the values and norms of the new venture are congruent with that of the wider society and industry (Scott, 1995). One important source of normative legitimacy is endorsement (Zimmerman & Zietz, 2002). Firms retain the support of prestigious underwriters in order to generate market visibility and interest in their offering. Interestingly, our results demonstrate prestigious underwriters may not be as important for mature foreign technology IPOs. This is perhaps due to analyst coverage being generally high for technology firms listing in the US (Francis, Hasan, & Zhou, 2005). Indeed, our results build upon the growing body of research demonstrating how reputable underwriters do not necessarily equate to better IPO valuations (Pollock, 2004; Gulati & Higgins, 2003).

As other studies, our research suffers from a number of limitations. First, fs/QCA is constrained by the number of variables researchers can include into models, and our analysis does not utilize all possible controls typically used in IPO research. However, this apparent methodological constraint is not a theoretical limitation, since the governance mechanisms that we consider are the most salient ones in IPO governance research. Second, in our analysis of institutional effects, we draw on investor protection as a proxy for institutional differences between foreign IPOs' home countries. Institutional research differentiates between formal (e.g., laws, regulation) and informal (e.g., networks, trust relationships) institutions (North, 1990). U.S. investors may also take into account informal institutional characteristics of the IPO firm's home country when evaluating the effectiveness of the firm's governance "bundle," which are not captured by our operationalization. Third, the perceived value we are capturing through the Price Premium measure reflects the commingling of the value perceived by institutional investors as well as underwriters, since underwriters collect indications of interest as part of the pricing process. Thus, while we do not attempt to parse out how different groups of investors perceive foreign IPO quality, we recognize that underwriters, and in particular prestigious underwriters, offer a key point of reference for investors, which encompasses informal institutions.

Our discussion indicates that the bundle conceptualization is underutilized, and that it can be usefully applied in other research designs related to IPOs. For example, what bundles of factors attract prestigious underwriters and auditors, or ‘dedicated’ institutional investors (Higgins & Gulati, 2006)? In addition, our research found that a hot stock market to be a necessary condition for high foreign IPO perceived value. Future research should explore how other environmental factors can provide support or affect the salience of rationalized myths. Our conceptual framework could be valuable in an IPO survival study since the longer the foreign IPO survives, the more institutionally embedded and legitimate it may become in the eyes of investors. Further, the institutional environments of host capital markets are often significantly different to that of the U.S. (with the exception of U.K, and more recently H.K.). Hence, it would be logical to suggest that host-country institutions may also have an impact on legitimacy through firm-level governance. Finally, a growing number of firms opt to list on two or more national capital markets. Does this specific context of multiple listings change the process of legitimation through governance practices? When investors are concerned with institutional pluralism, what effect would this have on the menu of governance practices in this sub-sample of firms with international sources of equity finance (Kraatz & Block, 2008)?

Finally, our study points to opportunities to develop a broader model of “nested” legitimacy, including its formative and boundary conditions. This is in line with recent theoretical research on “legitimacy judgments” (e.g., Bitektine, 2011; Tosi, 2011). Indeed, in addition to cognitive and regulatory factors, normative and other institutional aspects of legitimation are also relevant, and "researchers might do well to attend more closely to the workings of various *sources* of legitimacy" (Deephouse & Suchman, 2008: 68, authors' emphasis).

CONCLUSION

Although considerable empirical attention has been paid to the study of domestic IPO firms, to date there has been little research on foreign IPOs and the factors which impact the benefits of international listings. We adopt a configurational perspective to consider the valuation outcomes associated with governance practices of foreign IPO firms going public on U.S. exchanges. Overall, our study provides a more complex picture of the governance-performance relationship than traditional agency-grounded research. We demonstrate that foreign IPO firms may achieve legitimacy with regard to the U.S. investors by utilizing different combinations of governance practices. However, this process of legitimation is nested within a broader institutional framework that takes into account the firm's home country institutional environment, contingent on firm characteristics.

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TABLE 1

Foreign IPO Yearly Statistics

Issue Year	IPO Volume	Avg. Age	Avg. Offer Price	Avg. Shares Offered (mil.)	Net Proceeds ($ mil)
2006	22	9.2	15.43	9.5	291.7
2005	23	5.78	14.19	7.9	150.5
2004	19	7.83	15.06	7.7	192.05
2003	3	2.33	15.95	5.6	460.5
2002	5	17.8	14.16	5.1	259.02
2001	6	19.67	12.4	19.54	50.65
2000	13	5.07	14.36	7.8	59.58
1999	7	5.42	14.51	10.65	55.98
1998	9	7.33	18.52	11.59	170.12
1997	42	10.09	14.63	10.27	85.77
1996	49	8.89	13.33	8.52	94.97
Total	198				

TABLE 2

Foreign IPO Home Markets

Region	IPOs
North America	24
South America	12
Europe	90
Asia/Pacific	72
BRIC countries	43

TABLE 3
Descriptive Statistics

Variables	Mean	S.D.
Industry	0.58	0.49
Age	8.71	12.71
Market	33.64	20.17
Executive Incentives	0.78	0.41
Venture Capital	0.51	0.5
Underwriter Prestige	8.06	1.91
Independent Boards	0.38	0.21
Price premium (w/pre-IPO book value)	0.79	0.27
Price premium (w/1st day closing price)	0.81	0.26

Table 4: Configurations for Achieving High Perceived Value for Foreign IPOs listing in the U.S. (1996-2007)

	Solution					
	1	**2**	**3**	**4**	**5**	**6**
Contextual Conditions						
High Tech Industry	⌖	⌖	❍	⌖		❍
Mature IPO firm	⌖	❍	⌖	❍	❍	
Prestigious Underwriter		⌖	⌖		⌖	⌖
Country of Origin Condition						
Strong Home Country Legal Protection	⌖	⌖	⌖	❍	❍	❍
Governance Conditions						
Board Independence	❍	❍	⌖	❍	⌖	⌖
CEO Stock	⌖		○	⌖	⌖	⌖
Venture Capital	○	⌖	○	⌖	○	⌖
Consistency	0.88	0.89	0.87	0.86	0.84	0.81
Raw Coverage	0.15	0.11	0.02	0.21	0.10	0.02
Unique Coverage	0.08	0.03	0.02	0.06	0.02	0.01
Overall Solution Consistency	**0.87**					
Overall Solution Coverage	**0.39**					

Outcome Condition: Price Premium. Full circles indicate the presence of a condition. Crossed out circles indicate the absence of a condition. Large circles indicate conditions that are part of both parsimonious and intermediate solutions. Small circles refer to conditions that only occur in intermediate solutions. Blank cells indicate that particular causal condition is not relevant within that solution configuration.

Table 5: Configurations for Achieving Low Perceived Value for Foreign IPOs listing in the U.S. (1996-2007)

	Solution		
	1	**2**	**3**
Contextual Conditions			
High Tech Industry	⨂	⨂	•
Mature IPO firm		•	⨂
Prest. Underwriter	⊗	⊗	●
Country of Origin Condition			
Strong Home Country Legal Protection	⨂	●	●
Governance Conditions			
Board Independence	●	●	●
CEO Stock	⨂	●	●
Venture Capital	⨂	⨂	●
Consistency	1.00	0.83	0.88
Raw Coverage	0.06	0.05	0.02
Unique Coverage	0.06	0.05	0.02
Overall Solution Consistency	**0.91**		
Overall Solution Coverage	**0.13**		

Outcome Condition: Price Premium. Full circles indicate the presence of a condition. Crossed out circles indicate the absence of a condition. Large circles indicate conditions that are part of both parsimonious and intermediate solutions. Small circles refer to conditions that only occur in intermediate solutions. Blank cells indicate that particular causal condition is not relevant within that solution configuration.

Table 6: Robust Configurations for Achieving High Perceived Value for Foreign IPOs listing in the U.S. (1996-2007)

	Solutions					
	1	**2**	**3**	**4**	**5**	**6**
<u>Country of Origin Condition</u>						
Strong Home Country Legal Protection	⊗	⊗	●	●	●	●
<u>Industry</u>						
High Tech firm		●	⊗	⊗	●	●
<u>Founder Status</u>						
CEO is not a Founder	⊗	⊗	⊗	•	•	⊗
<u>Third Party</u>						
Prestigious Auditor	⊗	⊗	⊗	⊗	⊗	⊗
<u>Governance Conditions</u>						
Separated Board Chair and CEO	●	●	⊗	⊗	•	⊗
High Retained Ownership of Insiders	●	⊗	⊗	⊗	⊗	⊗
Board Independence	●			●	⊗	•
CEO Stock	⊗	●	⊗	●	⊗	⊗
Venture Capital			●	⊗	⊗	⊗
Consistency	0.93	0.85	0.85	0.94	0.83	0.98
Raw Coverage	0.10	0.05	0.05	0.02	0.02	0.02
Unique Coverage	0.10	0.03	0.02	0.02	0.02	0.02
Overall Solution Consistency	**0.91**					
Overall Solution Coverage	**0.24**					

Outcome Condition: Price Premium. Full circles indicate the presence of a condition. Crossed out circles indicate the absence of a condition. Large circles indicate conditions that are part of both parsimonious and intermediate solutions. Small circles refer to conditions that only occur in intermediate solutions. Blank cells indicate that particular causal condition is not relevant within that solution configuration.