

CHAPTER 7

CORPORATE GOVERNANCE AND CONFIGURATION RESEARCH: THE CASE OF FOREIGN IPOs LISTING IN LONDON

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ABSTRACT

Corporate governance research based on agency theory has been criticized for being “under-contextualized,” and for evaluating various governance practices independently. To address both criticisms, we take a configurational approach and show how firm-level governance practices interact with informational asymmetries associated with a firm’s industry. By examining foreign Initial Public Offerings (IPOs) that have chosen to list on London stock exchanges, we demonstrate that an assessment of the firm-level corporate governance configurations is incomplete without taking into account the firm’s industry affiliation. Our use of fs/QCA underscores the possibilities configurational approaches have in advancing theories of corporate governance.

Keywords: Comparative Corporate Governance; Foreign IPO; Fuzzy-set methods

INTRODUCTION

Corporate governance refers to the “structure of rights and responsibilities among the parties with a stake in the firm” (Aoki, 2001). Firms have some degree of freedom regarding the governance practices they decide to adopt, and the analysis of why and what effects these choices will generate is central to corporate governance research (Aguilera & Jackson, 2003). Consequently, a rigorous conceptualization of the context in which organizations operate in is critical since the mechanisms linking the adoption of corporate governance practices and their outcomes (e.g., performance) will depend heavily on the context in which organizations are embedded in (Globerman, Peng, & Shapiro, 2011). Governance theorists, however, have only just begun integrating different strands of organizational theory with economics and finance perspectives on corporate governance. Our understanding of how firm-level governance practices (e.g., board monitoring, executive incentives, share ownership structure) interact with different contexts is relatively limited.

The limitations of the mainstream corporate governance research, based largely on agency theory, are related to two inherent shortcomings underpinning the economics and finance perspectives. First, agency-driven research is characterized by its “under-contextualized” nature and inattention to various organizational environments (see Aguilera, Filatotchev, Gospel, & Jackson, 2008). By assuming that the dynamics between principals and agents are universal or axiomatic, the majority of extant research has tended to relegate the patterned variation of organizational forms under different settings as mere distortions or deviations rather than a phenomenon that merits rigorous analysis. But this is a severely limited way of analyzing corporate governance as, for example, evaluations of how the governance practices of firms competing in technology industries differs from more traditional and mature sectors. In addition, although researchers discuss the effectiveness and efficiency of corporate governance as a firm-level mechanism, the most studies look at various governance factors in isolation. Governance factors, however, are linked together in conjunction; therefore, the causal mechanisms linking governance factors with organizational outcomes are conjunctural.

Such limitations also stem from a methodological bias in corporate governance research which is dominated by regression analyses. An overwhelming majority of corporate governance research applies various regression techniques to model the association between governance practices (e.g., board independence, executive share options, ownership patterns) with

a range of organizational outcomes (e.g., performance). By its very design, researchers assume that firms can use governance at no costs, and the practical implications are often that adding more or less governance practices should lead to better (or worse) organizational outcomes. However, there is a growing understanding that changes in a firm's strategic positioning and its industry affiliation may be associated with re-balancing between the wealth-protection and wealth-creation functions of governance (Filatotchev, Wright & Toms, 2006), and that the same organizational outcomes may be achieved by different constellations of governance factors. Unfortunately, traditional multivariate econometric techniques are not able to fully address these theoretical assumptions. New methodological approaches are needed to investigate patterned variations of corporate governance mechanisms as well as infuse more existential realism to the analysis.

In this chapter, we discuss the advantages of a configurational approach to corporate governance research and explain how this approach can fill the caveats left by extant research dominated by agency theory and regression-based analysis. We begin by developing theoretical arguments and assumptions justifying the configurational approach. Afterwards, we demonstrate an application of the said approach through an analysis of the bundles of corporate governance practices necessary to achieve a successful foreign Initial Public Offerings (IPOs) – firms that bypass their home country stock exchanges to make their first public equity offers on foreign capital markets. The context of our research is the London stock exchange where non-British companies raised \$22.7 billion through initial public offers on London's Main Market and Alternative Investment Market (AIM) exchanges in 2007. We conclude the chapter with a discussion of how investigations of governance practices as bundles or configurations could advance governance research and suggest a number of future research possibilities.

CONFIGURATIONAL RESEARCH OF CORPORATE GOVERNANCE

Effective corporate governance implies mechanisms to ensure executives respect the rights and interests of company stakeholders, as well as guarantee that stakeholders act responsibly with regard to the generation, protection, and distribution of wealth invested in the firm (Aguilera et al., 2008). The empirical literature on corporate governance has been mostly rooted in

agency theory, assuming that by managing the principal-agency problem between shareholders and managers, firms will operate more efficiently and perform better. This stream of research identifies situations in which shareholders' and managers' interests are likely to diverge and proposes mechanisms that can mitigate managers' self-serving behavior (Shleifer & Vishny, 1997), such as the board of directors, shareholder involvement, information disclosure, auditing, the market for corporate control, executive pay, and stakeholder involvement (Filatotchev et al., 2006).

Despite the large body of research, the empirical findings on the link between governance practices and firm outcomes (e.g., firm performance) are mixed and inconclusive. As a reaction to these mixed findings from the agency theory, configurational research has been proposed as an alternative theoretical framework capable of introducing some flexibility in the firm governance–outcome relationships as well as accounting for the broader environmental-firm contingencies. Specifically, the configurational perspective takes into account four main premises (Aguilera & Jackson, 2010; Aguilera, Desdender, & Kabbach de Castro, 2012). First, firms are embedded in different industry settings that either enable or constrain their strategic choices. Second, firms in different settings have some degree of freedom to decide which practices to adopt as well as the extent to which the choices are implemented. Third, governance practices do not act in isolation from each other and must be considered as an interdependent whole. Finally, there is no “one best fit all” set of governance practices leading to effective corporate governance. In fact, multiple combinations or constellation of governance practices may produce the same outcome; conversely, the same combinations may generate different outcomes due to differences in contextual factors. We discuss each of these in turn.

The first premise is fairly well-established in the comparative corporate governance literature and claims that governance practices are embedded in the firm's environment, with the disclaimer that structural forces are neither all-powerful nor completely intractable. For example, Filatotchev et al. (2006) attribute the mixed empirical results concerning the effectiveness of various governance mechanisms to the extant literature's failure to incorporate the patterned variations in corporate governance contingent to the organizational environments. Similarly, Aguilera and Jackson (2003) claim that the “under-contextualized” approach of agency theory restricts the analysis of corporate governance to agents and principles, abstracting away other aspects of the organizational context such as diverse task environments, the life-cycle of organizations, or legal constraints which influence governance patterns.

Second premise concerns the interpretation of agency. Emirbayer and Mische (1998) define organizational agency as “the temporally constructed engagement by actors of different structural environments – the temporal-relational contexts of action – which, through the interplay of habit, imagination, and judgment, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations” (p. 970). Actors within firms not only reproduce existing practices but also respond by developing new strategies to influence the environment, as delineated in Oliver’s (1991, 1992) pioneering research. Firms, therefore, have significant degrees of freedom to configure their corporate governance practices, that is, firms often elect to either fully endorse a particular practice or simply seek to comply with the minimum requirements without truly internalizing the governance practice. An illustrative example would be the considerable variation that exists in terms of how different firms define director independence or disclose compensation systems.

Third, a growing number of corporate finance scholars and organizational theorists argue that corporate governance practices should not be considered in isolation from each other but rather as “bundles” of corporate governance practices that are aligned with one another and mutually enhance the ability of those practices to achieve efficiency outcomes (Rediker & Seth, 1995). A key dimension of the configurative approach focuses on identifying complementarities and substitutive effects among governance practices (Aguilera et al., 2008). For example, empirical research demonstrates that the simultaneous operation of multiple corporate governance practices is important in limiting managerial opportunism (Rediker & Seth, 1995). Furthermore, Desdender et al. (2011) illustrate that ownership concentration and board monitoring become substitutes when it comes to monitoring management. Specifically, the results show that while the board of directors complements its monitoring role through the higher use of external audit services when ownership is dispersed, this is not the case when ownership is concentrated.

In the following section, we apply the configurational approach on an exploratory study of foreign IPOs. Our example is built from a sample of firm undergoing an IPO on U.K. stock exchanges. Foreign IPOs represent a unique laboratory for theory building related to this complex interplay between industry factors and firm-level governance since these firms originate in countries with different governance regulations and different degrees of protection of minority public market investors long before they come for a listing in the United States. As a result, they may suffer from significant information asymmetries between insiders and overseas public

market investors that make corporate governance factors particularly salient. Yet there is little research examining the relationships between foreign IPO's governance parameters and their performance outcomes.

The specific implications we derive from the study are as follows: first, we suggest that strategic choices and their effects on performance are a function of the interaction between organizations and their industry environment (Aguilera et al., 2008). That is, foreign IPO firms may substitute one governance practice for another to achieve similar performance outcomes but the extent of governance "substitutability" is contingent on the characteristics of the foreign IPO firm's industry. Second, we introduce the idea of equifinality and show that this concept better explains the outcomes of foreign IPOs. Specifically, if corporate governance is contingent on the alignment of interdependent organizational and environmental characteristics, then it logically follows that there no universal "one best way" of corporate governance. Rather, particular practices will be effective only under certain combinations and may result in different patterns of corporate governance under different contexts (Aguilera et al., 2008). Lastly, we make a methodological contribution through our study by applying a relatively novel methodology called fs/QCA. While the idea behind configurational approach is simple and powerful, realizing it through empirical research is challenging due to methodological constraint. Because the goal of it is to account for as many interdependencies as possible, it is important that researchers use research designs and methodological techniques that enable them to (1) capture interrelationships among multiple explanatory factors – which are nearly impossible to incorporate into linear logic, and (2) can also incorporate equifinal solutions. We solve this issue through use of one such configurational tool, fs/QCA, and demonstrate its merits through the current study. By providing this example, we hope to not merely demonstrate the usefulness of this methodological tool, but to underscore the possibilities configurational approaches have in advancing our collective understanding and theories of corporate governance.

EXPLORING GOVERNANCE CONFIGURATIONS WITH FOREIGN INITIAL PUBLIC OFFERINGS

Corporate Governance and Initial Public Offers

IPOs have received increasing attention among scholars in a range of business disciplines from strategy (Carpenter, Pollock, & Leary, 2003;

Higgins & Gulati, 2003), entrepreneurship (Florin, 2005; Mudambi & Treichel, 2005) and finance (Brau & Fawcett, 2006) as well as practitioners from many countries. Much of the interest is due to the fact that IPO represents a pivotal event in the history of firms in that it firms gain access to large sums of equity capital that can in turn enhance their survival chances. By undertaking an IPO, firms can accelerate their growth, launch new products, enter new markets, and attract employees.

Signaling research argues that public market investors pay particular attention to governance characteristics of IPO firms because they capture the firms' ability to deal with information asymmetries and associated agency costs (Certo, Daily, & Dalton, 2001; Filatotchev & Bishop, 2002; Sanders & Boivie, 2004). A number of IPO studies focuses on the governance roles of board characteristics and ownership patterns as internal governance solutions to the agency problem (Filatotchev & Bishop, 2002). Others show that the firm's "professionalization" process manifested in significant governance changes (e.g., a low percentage of founders on board, separation of CEO and Chairman, etc.) can be important determinants of the success of firms in capital markets (Sanders & Boivie, 2004).

Researchers often focus on the benefits of "good" governance and overlook potential negative side-effects. Indeed, despite the value IPO investors place in strong governance, neither internal nor external governance exist without costs or friction (Aguilera et al., 2008). For example, in their research on signaling through governance, Sanders and Boivie (2004) emphasize that the same governance factors that reduce investor uncertainty may also impose monitoring costs on firms which may more than offset the marginal benefits. Governance creates a trade-off between the benefit of reducing information asymmetry, and the costs associated with introducing incentives and monitoring. As a result, an IPO firm undergoes a complex process of evaluating costs and benefits of various signaling mechanisms in search of an optimal combination that minimizes both information asymmetry and costs of signaling. The costs related to each governance practice and the substitution effects between them suggest that governance practices do not operate independently (i.e., their effects are not additive). Consequently, IPO firms try to find optimal configurations that minimize costs while simultaneously maximize investor sentiments. Not surprisingly, both academics and managers contemplating an IPO are interested in understanding the make-up and number of optimal governance bundles available to IPO firms.

Since the late 1990s, there have been a growing number of foreign IPOs choosing to bypass their local stock exchanges in favor of making their

capital market debut on developed country stock exchanges (Bell, Moore, & Filatotchev, 2012; Bell, Moore, & Al-Shammari, 2008). These firms usually seek financial resources in capital markets outside their home country in order to fulfill their high growth potential. However, foreign IPO firms represent untested management, and it is quite likely that investors will have concerns about protecting their investment. In addition to “liabilities of newness,” these firms are exposed to “liability of foreignness” because of information asymmetries and potential agency costs (Bell, Filatotchev, & Rasheed, 2012). To date there has been very little attention paid to the study of foreign IPOs and the factors which impact the benefits of international listings.

Foreign IPOs present a unique context in which to examine how different combinations of governance practices support the ability of firms to reduce informational asymmetries and to achieve high levels of performance at IPO. For example, these firms are not only making their capital market debut but also doing so in foreign markets where they are usually unknown to investors. Some foreign IPO firms come from traditional industries, such as retailing or banking, whereas others represent a population of high-growth/high-risk technology firms without long trading histories or stable cash flows. Our main argument is that foreign IPOs coming from hi-tech industrial sectors, such as IT, biotechnology, and Internet, may particularly suffer from information asymmetries between insiders and public market investors. Such asymmetries, in turn, will have a negative effect on the firms’ stock-market performance. As a result, they should be limited in the extent of substitution between their governance factors and may be forced to rely more extensively on governance “bundles” to achieve the same level of performance as IPOs coming from more traditional industrial sectors. At present, we know little on how the industry context shapes the optimal bundles, or combinations, of governance practices that determine investors’ evaluation of the foreign IPO’s quality. In the following sections we explore these possibilities with the fs/QCA method.

Fs/QCA and Foreign IPOs

Fs/QCA is unique in that it allows researchers to explore the multiple alternate internal and external governance combinations leading to high IPO performance, and how features associated with their country of origin impact corporate governance decisions. Fs/QCA is based in set-theory and causal claims are developed by means of superset and subsets (Ragin, 2008)

and is useful when researchers argue that a combination, or bundle, of factors work in concert with one another to be a sufficient cause for an outcome (Mahoney & Goertz, 2006). The number of scholars investigating economic and organizational phenomena with set-theoretic methods has risen considerably in the last few years (Fiss, 2011, 2007; Grandori & Furnari, 2008; Greckhamer, Misangyi, Elms, & Lacey, 2008; Jackson, 2005; Kogut, MacDuffie, & Ragin, 2004; Pajunen, 2008; Schneider, Schulze-Bentrop, & Paunescu, 2010).

Fs/QCA offers a number of advantages over regression analysis, a method often used to evaluate IPO performance. For example, assessing how three or more factors interact to produce an outcome can be quite challenging with regression given that if a factor does influence the outcome in only a handful of cases the effects can become masked or invisible. Fs/QCA helps overcome this caveat by ignoring variation and distribution in variables, and by not isolating the net independent effect of each variable on an outcome. Furthermore, fs/QCA is not centered upon variable distributions and the search for patterns of covariation, difference, or frequency clustering. Rather, the technique is effective in evaluating both the number and complexity of alternative paths leading to a desired outcome (Ragin, 2008).

Fs/QCA's approach to causality, referred to as "multiple conjunctural causation," has three important implications. First, an outcome can be produced by multiple conditions. Second, there can be more than one combination of conditions leading to the outcome under investigation, a condition known as equifinality. Third, fs/QCA allows for outcomes to occur as a result of the presence (e.g., high levels of monitoring) or absence of a condition (e.g., absence of incentive alignment). Hence, the configurational approach relaxes some of the assumptions normally associated with many quantitative techniques, such as permanent causality, additivity, and causal symmetry. We use fs/QCA in an exploratory manner in the following sections to identify how governance mechanisms combine in unique and multiple ways to bring about high levels of foreign IPO performance for firms choosing to list on U.K. stock exchanges.

Sample and Initial Steps

Our evaluation of governance configurations focuses exclusively on foreign issuers which are not listed on any exchange prior to their U.K. initial public offer. We used Thomson Financial's Security Data Corporation (SDC) New Issues database to identify all foreign firms that made IPOs on U.K.

stock exchanges, both the London Stock Exchange and the AIM, between 2002 and 2006. Other studies of foreign IPOs have also relied upon SDC to identify samples of these unique firms (Bell et al., 2008; Bruner, Chaplinsky, & Ramchand, 2006). We classify “foreign” to be those firms incorporated and whose primary executive offices are located outside the U.K. Firms whose public offers were the result of mergers or acquisitions, spin-offs of publicly listed firms, and units, warrants, and rights offerings were eliminated from the sample. Following Bruner et al. (2006), we removed all new issues of foreign utility firms from consideration and financial service firms incorporated in tax havens because these firms often choose to incorporate in these countries for tax purposes alone. After identifying the sample of U.K. listed foreign IPOs, we referred to each offering firm’s prospectus to acquire the information needed to build the governance conditions. Our final sample includes 99 foreign IPOs listing on London’s Main Market and AIM exchanges from 2002 to 2006.

We begin our analysis by identifying the various factors that influence foreign IPO performance and then we proceed to calibrate our raw data into crisp sets and fuzzy sets based on the identified factors (Ragin, 2008). To clarify the methodological procedure, a couple of definitions need to be put in place: first, calibration refers to the process of assigning the degree of membership into a given set (membership to a defined group). This process is used extensively in chemistry, astronomy, and physics (Ragin, 2008), but has yet found widespread use social sciences despite its usefulness. The transformation into sets is driven by theoretical grounds. Next, crisp sets are the simpler type of sets and a given case can either belong or not belong to the set. Fuzzy sets offer important qualitative content to the analysis in that researchers can, based on theoretical reasoning, decide whether a given case belongs “fully” into the membership set in which case the case receives the value of 1 or, when a given case has no membership into a set, a 0. In addition, researchers can identify a turning point or point of maximum ambiguity of 0.5 in which the case is in the intermediate stage between full and no membership, the point of inflexion.

It is important to note that without careful consideration of the extant theoretical knowledge and empirical works, the assigned calibrations and transformation into set membership scores maybe critically flawed and could ultimately undermine the validity of the interpretation derived from the results. Therefore, in the following section, we describe how we captured each of the variables of interest in our study, and how we arrived at the breakpoints for set membership.

Outcome Condition

Our outcome condition, “high foreign IPO performance,” is based upon the IPO’s first day underpricing level (e.g., difference between offer and first day of trading prices). To specify what constitutes low underpricing (our measure for high foreign IPO performance), we consider [Brau and Fawcett’s \(2006\)](#) comprehensive survey that revealed that industry executives generally expect IPO underpricing to average approximately 10%. We then conducted separate interviews with two investment bankers, both knowledgeable in the international IPO process, at Citigroup and Morgan Stanley. Both representatives suggested that IPO underpricing levels have historically averaged between 10% and 13%. With these information in hand, we established our baseline, or floor level, of membership in the set of “high foreign IPO performance” to be those firms that achieved average (20% underpricing) or below average performance. In other words, firms that experienced underpricing levels above 20% were considered “fully out” of the set of high performing firms. We then considered firms to be “fully in” the set of high performing firms to be those that experienced 10% underpricing or less. We defined the crossover point to be approximate the midpoint of about 15% underpricing.

Predictor Conditions

Top Management Team Incentive

Equity-based compensation is often used as a proxy for managerial incentives as it has become an important element of the compensation packages paid to top managers. The pay-scheme is a useful tool to align the interests of top managers and that of the shareholders. Following previous IPO research ([Beatty & Zajac, 1994](#); [Certo, Daily, Cannella, & Dalton, 2003](#)) we built the Top Management Team Incentives set as a crisp-set by accounting for those firms whose entire top management team owned stock options. United Kingdom listed foreign IPO firms were coded fully in this set if stock options were owned by all of the top management team, and 0 otherwise.

High external links among board member

Previous IPO studies suggest that external affiliations of the firm’s board directors may play critical resource and strategy roles and improve performance ([Filatotchev & Bishop, 2002](#)). Following [Higgins and Gulati](#)

(2003), we assessed board interests by summing the employment and board membership affiliations of board insiders and independent members listed in the firms' final prospectuses. We classified boards that had over fifteen external board affiliations per member, or the 90th percentile of our study sample, to be fully in the set of high external linkages. Those boards whose members averaged 8 external board affiliations, or the 50th percentile, are considered to be fully out of the set. The cross-over point was the midpoint between these two extremes.

Separated CEO and Board Chair

Researchers consider CEO duality to be a conflict of interest in corporate governance, (Coles & Hesterly, 2000; Daily & Dalton, 1994; Finkelstein & Hambrick, 1996). Board members may be less effective in governing firms when power is consolidated in the hands of a single person. Indeed, CEOs who serve as board chairs gain influence over board member nominations, board agendas, and compensation setting. Hence, foreign IPOs whose CEO and Board Chair are different individuals are likely to send positive signals to U.K. investors. We built a crisp set and defined firms who had Separated CEO-Board Chairs to be fully in the set, and those who did not (i.e., duality) to be fully out of the set.

High retained ownership of blockholder

Blockholders who sell a large percentage of their ownership at the time a firm goes public may be a sign of a firm with a short term orientation and limited growth prospects (Pound, 1988; Stiglitz, 1985). Hence, blockholders who retain a high percentage of the firm at IPO are likely to be a positive signal to external investors. We defined firms whose blockholders retained 70% of the firm to be fully in the set of high blockholder retained ownership, and those owned less than 50% of the firm to be fully out of the set.

Low percentage of founders on board

Foreign IPOs that have a high percentage of founding members on their board will likely experience considerable difficulties adjusting to the short-term performance expectations of public market investors, while simultaneously adhering to the heightened transparency requirements imposed on public firms. Indeed, once foreign IPOs becomes public in the United Kingdom, they must confront different laws, regulations, and press scrutiny than what they are accustomed to in their home market. Foreign IPOs with a high percentage of founders may be burdened by their lack of experience

and understanding of the U.K. governance processes and performance expectations of U.K. investors. As a result, U.K. investors may perceive that the governance oversight of the board may suffer, especially during the critical early periods when the firm is transitioning to public company status. Indeed, investors will likely prefer firms with boards are not composed of founding members. To capture the effects of board composition, we built a fuzzy set in which firms that have less than one tenth of its board members composed of founders are classified as fully in the set whereas those with more than one third of its board members composed of founders as fully out of the set. The breakpoint is the midpoint between these two extremes.

Technology industry

One of the most common ways to differentiate between firms in traditional and fast-growing sectors is to isolate whether the IPO operates in a high-tech industry or not (Daily, Certo, & Dalton, 2005; Loughran & Ritter, 2004). We categorized all internet-related, electronics, and software firms as fully in the set of “Technology” foreign IPO firms.

Necessary Conditions

The next step in operationalizing fs/QCA is to test whether any predictor or contextual condition is necessary for the high foreign IPO performance outcome. An argument for causal necessity can be supported when it can be demonstrated that instances of an outcome (dependent variable) constitute a subset of instances of a causal condition (independent variable). A consistency score of 1 indicates that the combination of causal conditions fulfills the criterion across all the cases. The more cases fail to meet the consistency criterion and the larger the distance from meeting the criterion, the further the consistency score will fall below 1. Conventionally, a fuzzy set variable, or crisp set variable, or a combination of two or more of these variables, is called “necessary” or “almost always necessary” if the consistency score meets or exceeds the threshold of 0.90 (Ragin, 2006). The measure to evaluate the relevance of a necessary condition is the coverage rate. Trivially necessary conditions would yield a coverage rate near 0 (Ragin, 2006).

Table 1 reports the results pertaining to whether the variables we chose meet the standard for necessity upon the presence of our conditions (capitalized) and their negation (not capitalized). None of our conditions exceeds the 0.90 threshold for the high foreign IPO performance outcome

Table 1. Analysis of Necessary Conditions.

Condition	Consistency	Coverage
<i>Contextual condition</i>		
TECHNOLOGY INDUSTRY	0.37	0.68
technology industry	0.62	0.59
<i>Corporate governance conditions</i>		
TOP MANAGEMENT TEAM INCENTIVES	0.68	0.61
top management team incentives	0.31	0.64
HIGH EXTERNAL LINKAGES AMONG BOARD MEMBERS	0.34	0.7
high external linkages among board members	0.69	0.62
SEPARATED CEO AND BOARD CHAIR	0.78	0.63
separated CEO and board Chair	0.21	0.59
HIGH RETAINED OWNERSHIP OF BLOCKHOLDERS	0.32	0.67
high retained ownership of blockholders	0.72	0.64
LOW PERCENTAGE OF FOUNDERS ON BOARD	0.28	0.69
low percentage of founders on board	0.75	0.63

Capitalized conditions indicate the presence of a condition.

Lower case conditions indicate the negation of a condition.

Calculations based on fsQCA2.0 software (www.fsqca.com).

condition. These outcomes indicate that no single condition can be regarded as necessary for high foreign IPO performance to occur. Among the conditions, separated CEO and Board Chairs assume the highest consistency value of 0.78. The absence of a high retained ownership of blockholders, and the absence of a low percentage of founders on board also assume high consistency values of 0.72 and 0.75, respectively.

Sufficient Conditions for High Foreign IPO Performance

The next step involves an evaluation of the extent to which industry factors impact the combinations of governance conditions that lead to high performance (i.e., low underpricing) for foreign IPOs listing in the United Kingdom. Sufficiency of causal combinations is assessed through the use of fs/QCA's Truth Table Algorithm. Fs/QCA's truth table function generates a list of different combinations of governance and contextual conditions that are sufficient for a particular outcome to occur (Ragin, 2008). Initially, our analysis involves the six governance and industry conditions. This results in

2^6 or 64 potential combinations of these causal conditions. Due to the size of the truth table, we do not reproduce it here but is available upon request. We observe 34 out of 64 logically possible governance and industry combinations are present for high performance to occur among foreign IPOs listing in the United Kingdom.

Reducing the truth tables requires an evaluation of both the consistency levels across the configurations and establishing a frequency threshold that will be applied to the data listed in the “number” column. [Rihoux and Ragin \(2009\)](#) advise that consistency levels be a minimum of 80%. 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 an assessment of the subset relationship” (p. 133). Using these guidelines, we adopt a consistency cut-off value of 80% and a minimum acceptable solution frequency of two cases to reduce the truth tables. [Ragin \(2008\)](#) advises that the selected configurations should capture at least 75–80% of the cases. Our adoption of a frequency threshold of two enables us to perform our analysis on 85% of the cases.

The next step is to reduce the truth table algorithm rows into more simplified combinations. It is at this point that researchers should address limited diversity and logical remainders. Limited diversity refers to instances where the configuration of conditions and outcome across the empirical cases is not very diverse and therefore leaves a large portion of combinations “blank” (without empirical referents). Logical remainders are those logical configurations of conditions which are not empirically present in the dataset in relation to the presence or absence of the outcome of interest. [Ragin \(2008\)](#) suggests the use of intermediate solutions because logical remainders can be restricted to those that are the most plausible. The intermediate solution makes it possible for the researcher to choose three different options: (i) the presence of the conditions, (ii) the absence of the conditions, and (iii) the inclusion of either presence or absence of conditions. Our discussion throughout our theory development section makes clear that the presence of governance conditions is relevant for high foreign IPO performance. Therefore, we have included every governance condition as present.

Reduction of the truth table reveals several useful statistics. The values reported in Table 2 as “solution consistency” and “solution coverage” offer a means of assessing the degree of fit of the solution with the fuzzy-set scores for each condition. Consistency indicates the degree to which the subset relationship holds for sufficiency. The overall coverage refers to the joint

Table 2. High Performance Configurations for Foreign IPOs listing on London stock exchanges (2002–2006).

	Solutions			
	1	2	3	4
<i>Industry</i>				
Technology Industry	●	●	⊗	⊗
<i>Strategic, Incentive, and Monitoring Governance Conditions</i>				
Top management team incentives	●	●	⊗	●
High external linkages among board members	⊗	●	⊗	⊗
CEO and Board Chair roles are separated	●	●	⊗	⊗
High retained ownership of blockholders		●	●	⊗
Low percentage of founders on board	●	⊗	●	●
Consistency	0.81	0.95	0.85	0.85
Raw Coverage	0.11	0.07	0.03	0.05
Unique Coverage	0.11	0.06	0.03	0.05
Overall Solution Consistency	0.85			
Overall Solution Coverage	0.27			

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 the parsimonious and intermediate solutions/
Small circles indicate conditions that are only part of the intermediate solutions.

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 performance by measuring the degree of empirical relevance of a certain cause or causal combination to explain the outcome. Unique coverage of causal conditions is similar to R-square calculations in regression analysis (Fiss, 2009).

The results in Table 2 show four combinations leading to high performance for foreign IPO firms listing in the United Kingdom. Full circles indicate the presence of a condition, while crossed-out circles indicate the absence of a condition. Large circles designate conditions that are part of both parsimonious and the intermediate solutions, whereas smaller circles only occur in intermediates solutions. The unique coverage ranges from 0.03 to 0.11. Therefore, each of these four combinations provides a unique contribution to the explanation of high foreign IPO performance.

The first two solutions in Table 2 are for foreign IPOs which compete in technology-related industries and solutions 3 and 4 refer to nontechnology related solutions. Solution 1 indicates that high-tech foreign IPOs achieve

high performance when all of the firm's top managers own stock options, along with a separated CEO and board chair, low presence of founders on their board of directors, and boards with few external director interlocks. The results show that combination of these factors lead to high IPO performance (i.e., low underpricing).

Blockholders are not relevant to solution 1 while solution 2 shows that technology foreign IPOs that have a relatively high percentage of founders on its board must also have a high percentage of retained ownership among block holders, a separated CEO and board chair, a high percentage of board affiliations among board members, and also all of the top managers with stock options. Indeed, solution 2 indicates that high-tech foreign IPOs listing in the United Kingdom must introduce considerable governance practices in order to achieve high IPO performance. Interestingly, a key difference between solutions 1 and 2 stems from the degree to which founders comprise a technology foreign IPO's board. Solution 1 confirms that high-tech firms that have a low percentage of founders on their boards are better able to achieve higher levels of performance. In addition, a comparison between solutions 1 and 2 indicates that in order for technology related foreign IPOs listing in the United Kingdom to achieve high IPO performance, they must issue stock options to all of the firm's top managers and have dual leadership.

Solutions 3 and 4 illustrate governance configurations that lead to high performance for foreign IPOs competing in nontechnology related industries. Interestingly, both of these configurations confirm that nontechnology foreign IPOs can achieve comparably high levels of performance (low underpricing) with fewer corporate governance practices in place than technology industry foreign IPOs (solutions 1 and 2). The comparison between solutions 3 and 4 in Table 2 shows that low percentage of founders on the board is necessary for nontechnology foreign IPOs to achieve success upon listing on U.K. exchanges. Also, duality does not appear to be an issue for nontechnology foreign IPOs to the extent it is for technology foreign IPOs. Finally, results show that blockholder retained ownership and stock option incentives paid to top managers could substitute for one another.

Modeling the Inverse of the Outcome

When examining the configurational logic, it is important to note that the reverse of a given configuration will not necessarily lead to the opposite outcome. Therefore, we explore what configurations might consistently lead

to the absence of high performance. The ability to conduct such an analysis is an important advantage of QCA, because it relates to causal asymmetry (Ragin, 2008), in that the factors that lead to the presence of an outcome in question may in fact be different from those conditions that lead to the absence of the outcome. We examined the absence of high foreign IPO performance and the presence of poor foreign IPO performance. This analysis identified only one configuration among high tech foreign IPOs which indicated that these firms would suffer poor performance (high underpricing) if they had only one governance mechanism, stock options owned by all of the firm's top managers. Similarly, nontechnology related foreign IPOs would suffer poor performance if they went public with four governance mechanisms, stock options to top managers, a board that was highly connected to other boards, and a CEO who also served as the board chairperson.

DISCUSSION AND CONCLUSION

In this chapter, our primary purpose was to demonstrate, first hand, some of the advantages in adopting the configurational logic when conducting corporate governance research. Configurational logic allows researchers to explore complex interdependencies between firm-level governance factors, industry parameters, and firm performance. Extant corporate governance research and IPO studies in particular assume that governance factors act independently with respect to their effects on performance. Indeed, variables related to monitoring and incentive alignment mechanisms are seen as separate causes of IPO success and that each governance practice independently influence the level of equity resources firms will receive. This is a rather simplistic and problematic notion as governance practices are interpreted as having linear and additive effects and will produce the same effect regardless of the level of adoption, presence other governance practices, or even the industry conditions surrounding the firm leading up to the IPO. The inconsistency of evidence across studies suggests that the performance implications of governance factors associated with firms leading up to their first equity offers is a significantly more complex phenomenon than previously understood.

The collective evidence of Table 2 demonstrates that foreign IPOs that list on London exchanges competing in hi-tech industries must implement a greater range of signals of "good" governance mechanisms to achieve

comparable levels of high performance than foreign IPOs competing in low tech industries. Our data show that there is an element of substitution between governance practices in this subsample of firms (e.g., firms may not need a high level of retained ownership by blockholders if they have a low percentage of founders on the board), but the extent of this substitution is rather limited compared to firms from mature industries. In contrast, firms from mature industries need to use rather limited governance bundles to achieve a high level of performance.

Interestingly, solution 2 in Table 2 suggests that firms from hi-tech sectors may benefit from high external linkages among board members, or so-called external “board interlocks.” The resource provision role of directors is generally based on the work by Pfeffer and Salancik (1978, p. 163), which states that “when an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern himself with its problems, will variably present it to others and will try to aid it.” In fulfilling their strategic role, scholars point not only to the resources, knowledge, and experiences that both board insiders and independent directors can bring to firms, but they also account for the external relationships that board members establish with constituent actors. Recent studies show that the external relationships that directors have outside of the board are important predictors of social influence (Stevenson & Radin, 2009). Indeed, the external ties of board members (i.e., social capital) are an important resource to the firm (Stevenson & Radin, 2009). Certainly, both scholars and practitioners alike consider affiliations of board insiders and independent directors to be a vital means in which to develop organizational legitimacy (Higgins & Gulati, 2006; Mizruchi, 1996; DiMaggio & Powell, 1983). Our research, however, indicates that board ties do play a critical but only in combination with other governance factors. More significantly, they seem to affect performance only in a specific industry context.

Taken together, our findings in this chapter indicate that the effectiveness and efficiency of governance practices are not context free, and they should be considered in conjunction with the firm’s external environment, such as its industry or economic sector. More generally, our efforts represent an important step in realizing the “contextualization” of corporate governance research (Aguilera et al., 2008) through the use of QCA, a powerful tool that helps explore the configurational logic underlying our approach. We believe that our findings from foreign IPOs listed in London can be generalized to other contexts where firms, investors and other stakeholders face different types of information asymmetries and associated costs. By applying configurational thinking to other contexts, researchers may discover new

patterned variations of corporate governance and suggest solutions to governance problems that affect companies around the world.

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