

## FOREIGN IPO CAPITAL MARKET CHOICE: UNDERSTANDING THE INSTITUTIONAL FIT OF CORPORATE GOVERNANCE

CURT B. MOORE,<sup>1</sup> R. GREG BELL,<sup>2</sup> IGOR FILATOTCHEV,<sup>3\*</sup>  
and ABDUL A. RASHEED<sup>4</sup>

<sup>1</sup> Rawls College of Business, Texas Tech University, Lubbock, Texas, U.S.A.

<sup>2</sup> Graduate School of Management, University of Dallas, Irving, Texas, U.S.A.

<sup>3</sup> Sir John Cass Business School, City University London, London, U.K. and Vienna University of Economics and Business, Vienna, Austria

<sup>4</sup> University of Texas at Arlington, Arlington, Texas, U.S.A.

*While product market choices have been central to strategy formulation for firms in the past, the integration of financial markets makes the choice of capital markets an equally important strategic decision. We advance a comparative institutional perspective to explain capital market choice by firms making an IPO in a foreign market. We find that internal governance characteristics (founder-CEO, executive incentives, and board independence) and external network characteristics (prestigious underwriters, degree of venture capitalist syndication, and board interlocks) are significant predictors of foreign capital market choice by foreign IPO firms. Our results suggest foreign IPO firms select a host market where the firms' governance characteristics and third party affiliations fit the host market's institutional environment. Copyright © 2012 John Wiley & Sons, Ltd.*

### INTRODUCTION

Strategic decisions essentially relate to issues of domain selection and domain navigation (Bourgeois, 1980). Therefore, not surprisingly, much of the research in the strategic management area surrounds the product market choices made by firms. Certainly, the initial choice of the product market domain is one of the most important decisions that a firm will make. However, firms often need external financial resources in order to capitalize on growth opportunities provided by their

chosen product markets. Hence, a firm's initial choice of a capital market in which to make its first public equity offer is an equally important domain choice decision for a variety of reasons. An initial public offering (IPO) of equity represents a critical stage of development, which is often referred to as 'the "re-birth" or "re-start" of organizations' (Finkle, 1998: 6). Organization theorists emphasize the importance of the IPO threshold and the infusion of funds from the sale of equity because it represents a significant shift in the strategic choices open to the firm (Certo *et al.*, 2001). As Fama and French (2004: 229) explain: 'It is the point of entry that gives firms expanded access to equity capital, allowing them to emerge and grow.' Finally, Deeds, Mang, and Frandsen (2004) stress the importance of legitimacy to

Keywords: foreign; IPO; governance; market; choice

\*Correspondence to: Igor Filatotchev, Sir John Cass Business School, City University London, 106 Bunhill Row, London EC1Y 8TZ, U.K. E-mail: Igor.Filatotchev@city.ac.uk

IPO performance. Hence, a greater fit with the institutional environment should lead to higher levels of legitimacy for a foreign IPO firm and ultimately result in higher levels of performance. Therefore, an analysis of factors that affect a firm's choice of capital markets is of crucial importance for better understanding of the strategic dynamics of firms.

Historically, firms opting to 'go public' were mostly confined by legal reasons to offer their shares only on the exchanges in their country of origin. However, globalization and integration of international capital markets have greatly expanded the choices available to firms seeking equity capital. For example, in recent years, many firms that are already publicly listed on their home exchanges, have 'cross-listed' in order to offer their shares in foreign capital markets. In addition, there is an emerging class of firms that choose to forego their domestic stock market entirely and make their IPO in a foreign market. There has been very little prior research on why these firms choose to forego their domestic capital markets or how they choose among foreign capital markets. In recent years, scholars have explored the decision IPO firms face when choosing between domestic stock exchanges (Bruton and Prasad, 1997), and the choice between a domestic or a foreign public offering (Ding, Nowak, and Zhang, 2010; Blass and Yafeh, 2001). Although these studies emphasized the importance of the strategic choices firms make when considering equity finance, they did not explore contextual factors that may affect these choices. Given that firms undertaking an IPO can select among multiple foreign capital markets, what is conspicuously missing is an investigation of the institutional and firm-level factors that influence such a choice. The focus of this paper is to fill these theoretical and empirical gaps in strategy scholars' understanding of a firm's strategic choice.

A number of studies indicate that corporate governance characteristics may play a critical strategic role in improving stakeholder perceptions of foreign firms and, thus, improve their stock market performance (Bell, Moore, and Al-Shammari, 2008). For example, Coffee (2002) suggests that by adhering to high governance standards, foreign firms may 'bond' with investors and improve their stock market valuations. Although this research does extend further the linkage between a foreign

IPO firm's performance and its governance characteristics, it does not explain the characteristics of the firm that drive its choice of a particular listing market in the first place. More specifically, why would foreign firms with similar characteristics such as size, age, industry affiliation, country of origin, and so on make very different choices regarding whether to undertake their IPO in the United States or the United Kingdom? Although research in finance (e.g., Blass and Yafeh, 2001; Pagano, Roell, and Zechner, 2002) suggests that market choice may have important implications in terms of visibility, media recognition, and the ability to raise additional equity or debt and management of investor expectations, yet it still does not explain how firms decide between markets that generate similar benefits.

Today, the vast majority of firms that decide to make their IPO outside their home country do so by listing their stocks in either the United States (i.e., New York Stock Exchange [NYSE] or NASDAQ located in New York) or the United Kingdom (i.e., London Stock Exchange [LSE] or Alternative Investment Market [AIM] located in London [London Stock Exchange, 2009]). Our objective in this paper is to develop understanding about how firms make the strategic choice of where to list their shares on a foreign market exchange. More specifically, we seek to answer the question: 'can the firm's governance characteristics predict whether it would choose U.S. or U.K. exchanges for its IPO, *ceteris paribus*?' We address this question by postulating that the firm's choice among foreign capital markets is mainly driven by the extent to which its organizational characteristics conform to the institutional environment of a particular market. New firms offering shares to investors in a foreign capital market clearly have to contend with issues including liability of foreignness (Hybels, 1995; Zaheer, 1995; Zaheer and Mosakowski, 1997) and liability of newness (Certo, 2003; Singh, Tucker, and House, 1986). In order to be successful in its share offering, firms have to overcome these liabilities by attaining legitimacy in the foreign institutional context by conforming to the norms and expectations prevailing in that market (cf. Deephouse, 1996).

We make a number of contributions to the strategic management literature. First, by focusing on capital market choices by firms, we advance the research on domain selection, which was previously treated exclusively as product-market

choices. Prior research has failed to recognize that a firm's initial choice of a capital market in which to make its first public equity offering is an equally important domain choice decision. Second, our study provides theoretical and empirical insights into the impact of corporate governance characteristics and third party certifying agents on the foreign IPO's choice of listing in one of two capital markets destinations with different institutional settings. Specifically, we examine the contrasting contexts of the U.K. and the U.S. settings. Although both countries are associated with the 'common law' family of corporate governance, they differ in important ways that lead us to expect differences in the salience of the IPO firms' characteristics and their external networks. This is an important contribution as IPO research has so far tended to imply that governance factors and third party certifying agents have a universal impact that applies in the same way in different institutional settings (see Daily *et al.*, 2003; Sanders and Boivie, 2004; Certo, Daily, and Dalton, 2001). We remove this restrictive assumption by following studies that attempted to incorporate concepts from economic sociology into understanding strategic decisions (Zajac and Westphal, 2004b).

We integrate corporate governance research with institutional theory to develop and test a comprehensive explanation of capital market choice by firms that decide to forego domestic markets in making their IPOs and therefore contribute to the research on foreign IPOs. We focus on the firm's corporate governance characteristics—such as the extent of its professionalization, internal monitoring, and managerial incentives—and consider the degree to which they are isomorphic within different institutional contexts. We argue that factors affecting the firm's conformity with formal national institutions, such as those that create corporate governance regulation, will affect the firm's choice between various stock exchanges. Given that economic action is shaped by the structure of social relationships, the specific networks in which a firm is embedded might also influence its choice of exchange. We extend previous research by investigating institutional embeddedness of the firm's external board interlocks and its association with third party certifying agents, such as venture capitalists (VCs) and bank-underwriters. We argue that board interlocks and third party networks help a foreign IPO increase its embeddedness with informal institutions, and influence

its choice of foreign market. Finally, we test our research hypotheses using a unique, hand collected sample of foreign IPOs that listed in the United States and the United Kingdom during the 2002–2006 period.

## INSTITUTIONAL DIFFERENCES BETWEEN U.S. AND U.K. CAPITAL MARKETS

Institutional theory provides an alternative explanation to firm behavior proffered by neoclassical economics, arguing that firm behavior can be understood in terms of 'preconscious understandings that organizational actors share, independent of their interests' (DiMaggio, 1988: 3). Rather than making predictions based on utilitarian (i.e., economic) bases, institutional theory identifies social mechanisms that explain organizational behaviors. Consequently, strategic decisions that fail to make rational, economic sense can be understood from a more socialized perspective by examining those decisions vis-à-vis key stakeholders. So, in addition to instrumental, economic considerations, the formulation of strategy involves the need to provide justifications for strategic decisions and behaviors that are considered legitimate by organizational stakeholders (Neilsen and Rao, 1987). As a result, the field of economic sociology has emerged and grown as an area of study to investigate economic phenomena from a sociological perspective (Zajac and Westphal, 2004a, 2004b). In fact, the institution-based view of the firm argues that strategy emerges from the effect of institutions, in addition to industry and firm-level considerations (Peng, Wang, and Yi, 2008). Institutions constrain firm behavior by communicating the 'rules of the game' and what is considered legitimate (Meyer and Rowen, 1977; DiMaggio and Powell, 1983). Suchman (1995: 574) argues that 'legitimacy is possessed objectively, yet created subjectively,' suggesting that legitimacy is a socially conferred status resulting from evaluations by other stakeholder groups. Thus, a firm's legitimacy is based on the shared beliefs of a referent social group and socially constructed through the interaction of the firm and its environment.

Because organizations compete in dynamic environments, they often tend to imitate those firms that are perceived to be successful organizations and, as a result, adopt such firms' successful

practices, based on salient properties perceived through market interactions and considered legitimate by the institutional environment (Zajac and Westphal, 2004b). When firms mimic successful firms in their competitive environments, organizations become identified as socially legitimated (Deephouse, 1996, 2000; Deephouse and Carter, 2005). The institutional understanding of legitimacy views instrumental reward as peripheral to the social construction of belief systems that create audience reactions and managerial decisions (Suchman, 1995). Consequently, social reasons, coupled with economic considerations, factor into the market choice decisions made by firms.

Institutional environments present especially important social referents to a foreign firm considering the strategic decision of where to make initial equity offers. As a result, we expect the institutional differences between the U.S. and U.K. capital markets to be predictive of market choice decisions made by foreign IPOs. North (1990) specifies that formal institutions consist of laws and regulations, political and economic rules and procedures, and other explicit constraints on firm behavior. Alternatively, informal institutions consist of those unwritten, yet quite influential, societal norms, conventions, and values (North, 1990).

First, while the United States emphasizes *formal* regulation, in the United Kingdom the preference has been for *informal* voluntary codes. Second, the U.S. environment relies primarily on arm's-length *market transactions* due to its faith in the efficiency of markets, while in the United Kingdom transactions are facilitated and shaped by dense *social networks* wherein reputation of the actors plays a central role. Finally, the U.S. approach to resolving the problem of divergence between the interests of shareholders and managers has primarily relied on *incentive alignment*, while in the United Kingdom, greater emphasis has traditionally been placed on *monitoring*. An understanding of these fundamental institutional differences helps to provide general perceptions of what constitutes 'good governance,' identify powerful stakeholders in these two markets, and explain the exchange listing decisions of foreign IPOs. This institutional argument suggests that firm-level characteristics interact with institutional environments to jointly affect the strategic choices of firms (Deephouse and Carter, 2005).

The institutional environment of the United Kingdom is perhaps best described by Cain and

Hopkins (1980, 1986), who characterized the nature of the intermingled economic, social, and political power centered in the City of London as 'gentlemanly capitalism.' Gentlemanly capitalism is based on a preference for voluntary action over law and is related to a preference for collective individualism (Currie, 1979), where free agents acting collectively may seek to regulate affairs and develop norms and codes of practice through strong ties between networks of influential individuals and organizations. Gentlemanly capitalism is legitimated through the notion that voluntary rules and regulations should be obeyed, rather than legislatively mandated. Gentlemanly behavior formed part of the habitus of key elite groups spanning the city and government, and were supported by a dense network of social ties built upon the importance of trust and reputation. Indeed, the informal institutional environment of the United Kingdom is such that dense social networks and patterns of interaction lead actors to know one another, and reputations and social networks are particularly effective at governing firm behavior (Cassis, 1994; Collins, 1991; Kynaston, 1994, 1995, 1999, 2001). Furthermore, key actors are concentrated in a geographically small area, which reinforces the dense social structure of strong ties (Coleman, 1990).

The 'gentlemanly capitalism' framework helps explain why the United Kingdom has long tended to rely on a strong tradition of voluntary self-regulation in areas related to listing, takeovers, and accounting (Cain and Hopkins, 1986). In recent years, this tradition has gained further importance through the development of a set of codes for corporate governance, which have culminated in the U.K. Corporate Governance Code (formerly the Combined Code); general oversight of the firms' implementation and compliance with the Code is charged to the Financial Reporting Council (Financial Reporting Council, 2010). The U.K. Companies Act of 2006 (Financial Reporting Council, 2006a), the major legislative framework that regulates public and private companies in the United Kingdom, does not specify rules that should define the firm's corporate governance mechanism; instead it is focused on the legal responsibilities of directors to the company. Companies are guided on governance matters by the U.K. Corporate Governance Code (Financial Reporting Council, 2010) and listing requirements monitored by the U.K. Listing Authority. A number of more

recent, government-commissioned corporate governance reviews in the United Kingdom, such as *Higgs Review* and *Walker Report*, have reinforced self-regulation principles underpinning the Corporate Governance Code used by the U.K. Listing Authority to guide IPO firms in terms of their governance arrangements. The Financial Reporting Council provides the following summary of the U.K. approach to corporate governance: 'The more ingrained the system of corporate governance in a business community, the less is the need for detailed regulation to ensure effective compliance with good standards of business behaviour' (Financial Reporting Council, 2006b: 1).

Interestingly, despite the prominence of the 2010 U.K. Corporate Governance Code, compliance with the U.K. 'Code of Best Practice' is not mandatory.<sup>1</sup> Firms are free to not comply as long as an explanation is provided for any deviation. Supporters of comply-or-explain systems contend they are built upon the concept of principles, rather than strict regulation (Hubbard and Thornton, 2006), which allows firms the ability to modify and adapt their corporate governance policies to their particular needs.

The voluntary regulative approach found in the United Kingdom stands in contrast to the more formal regulative traditions found in the United States. The United States developed an extensive body of securities and corporate law (i.e., 'hard law') at both the federal and state levels. The most recent manifestation of the hard law approach in the United States was the passage of the Sarbanes-Oxley Act (SOX) in 2002, in which the U.S. Congress mandated new and more stringent governance regulations and increased the costs of noncompliance to all public firms, both foreign and domestic. Through legislative action, SOX required firms to put in place a number of measures intended to reduce conflicts and enhance the role of independent directors. While SOX is just one legislative effort that mandated governance and heightened transparency of public firms in the United States, it is indicative of the coercive regulative environment found in the United States.

<sup>1</sup> Similar codes of governance have been adopted in Australia, Austria, Belgium, Canada, China, Germany, Hong Kong, Indonesia, Ireland, Italy, Korea, Malaysia, Mexico, Poland, Portugal, Singapore, Spain, and Sweden (Hubbard and Thornton, 2006).

## HYPOTHESES DEVELOPMENT

At the very heart of the vast majority of IPO studies in finance and management literatures is the question of how an unknown, privately held company can convey its 'true' value to public market investors when it undergoes a stock market listing (Ritter and Welch, 2002). Within this framework exists a growing body of research focused on the signaling properties of corporate governance factors associated with an IPO firm. Previous studies have recognized the signaling properties of a wide variety of governance factors, such as non-founder ('professional') chief executive officers (CEOs), board independence, third party certifying agents (e.g., VCs and underwriters), and board 'interlocks' (Beatty and Zajac, 1994; Certo *et al.*, 2001; 2003; Daily, Certo, and Dalton, 2005; Filatotchev and Bishop, 2002). Despite differences in theoretical perspectives, these studies have one common element: they assume that an IPO firm can improve stock market performance by using 'good governance' signals that convey its high value to the public market investors (Bell *et al.*, 2008; Moore, Bell, and Filatotchev, 2010; Sanders and Boivie, 2004).

Although stock market participants in the United States and the United Kingdom share similar views on the factors that contribute to 'good corporate governance' (e.g., board independence, transparency, etc.), substantial variation exists between the two common law countries in terms of corporate governance regulatory traditions and the relative importance of business networks, as we have argued above. This leads to distinct isomorphic pressures in each institutional environment. Thus, the prevalence of voluntary codes in the United Kingdom, in contrast to the coercive regulative environment of the United States, prompt stock market participants within these markets to place different relative weights on the roles and functions of corporate governance and third party certifying agents. Similarly, network-related aspects, such as informal contracts, trust, and reputation may have particularly higher importance in the United Kingdom compared to the United States. As a result, these institutional differences play a significant role in the exchange listing decisions of foreign IPOs. When a foreign firm is choosing between a listing in the United States or the United Kingdom, it is more likely to choose the market where its characteristics are considered legitimate

(Sanders and Boivie, 2004). In other words, firms are more likely to choose the institutional context with which their governance characteristics have the most conformity.

In the following sections, we highlight how the network-based nature of the gentlemanly capitalism framework found in the United Kingdom emphasizes the network-related aspects of corporate governance. Conversely, the more coercive regulative nature of the U.S. market places greater weight on the governance characteristics most consistent with the professionalization of a foreign IPO firm's governance system. Accordingly, we discuss how various internal governance characteristics of the firm, as well as its external ties and resultant legitimacy, would affect its choice of capital markets.

### Internal governance characteristics

The role of governance characteristics in the context of IPOs has been the subject of considerable research in recent years (Filatotchev and Bishop, 2002; Nelson, 2003). Following previous research, we focus on three internal governance characteristics: the level of professionalization of the management team (e.g., presence of founder-CEOs), managerial incentives (e.g., executive stock options), and board monitoring (measured as board independence) that are likely to affect a firm's choice of capital markets.

#### Founder-CEOs

Previous studies often acknowledge that when transitioning to an IPO stage, founder-CEOs are likely to realize the limitations of their own knowledge and experiences, and delegate decision-making authority to externally hired executives and independent members of the company's board. Certo *et al.* (2001) suggest that the biases of the founders, their overoptimism with regard to the venture's success, and their managerial capabilities could be somewhat tempered by professional directors who provide additional high quality, firm-specific information. Thus, the prevailing view among scholars in the United States is that founder-CEOs who take their firms public represent untested management (Wat, 1983). The market's disapproval of founder-CEOs is further evidenced by the finding that founder-led firms are subject to greater underpricing (Certo *et al.*, 2001).

Consequently, the practice of replacing founder-CEOs with professional CEOs represents a legitimated institutional logic in U.S. capital markets. In contrast to the United States, however, founder-CEOs seem to be the legitimate norm in the United Kingdom (Filatotchev, 2006).

There are compelling institutional explanations for the divergence in preference regarding professional versus founder-CEOs between the United Kingdom and the United States. In the United States, making the transition to life as a publicly held corporation in a new institutional environment governed by regulatory institutions may be especially difficult for IPO firms without leadership accustomed to the new and diverse legal challenges of the capital market. U.S. investors perceive that founder-CEOs of foreign IPOs will experience considerable difficulties adjusting to the short-term performance expectations of U.S. investors, while simultaneously adhering to the ongoing heightened transparency requirements imposed on U.S. public firms. Once a foreign IPO becomes public in the United States, it is confronted by different laws, regulations, and press scrutiny. Indeed, founder-CEOs may have been quite successful in understanding the rules and practices of their own country as a private firm, yet may not have the skills required to grow their firm while simultaneously adhering to the mandatory governance, disclosure, and transparency obligations associated with the legislated requirements of the U.S. capital market (e.g., SOX). Finally, recent research finds that board independence, as regulated in the United States, is associated with an increase in the probability that founders will be replaced as CEOs when going public in U.S. capital markets (Jain and Tabak, 2008). For all of the above reasons, founder-CEOs are less likely to be perceived as legitimate leaders of their firms when they become public in the United States where institutional pressures to professionalize the management of the firm are embedded.

In contrast to the United States, the United Kingdom's 'comply-or-explain' approach to corporate governance rules means that founder-CEOs may be under less pressure to develop an immediate and in-depth understanding of the rules and regulations. For example, the Financial Reporting Council recognizes that 'governance should support, not constrain, the entrepreneurial leadership of the company, while ensuring that risk is properly managed' (Financial Reporting Council, 2006b: 5).

Apart from differences in formal governance regulations, there are also nuanced differences in informal and cultural aspects of governance in the two countries. Within the network economy of the City of London, a high level of professionalization signals a lower level of network embeddedness. In a network economy with strong reputation considerations, having a founder still at the firm's helm may help the firm achieve relatively better results, since reputation is easier to associate with an individual than with a management team. When institutional context is more appreciative of leadership, personal charisma, and the networks of entrepreneurs than the individual skills and professional experience of hired professional managers, having a founder-CEO presents an advantage. This founder-centered model of corporate governance in U.K. IPOs seems to be supported by existing empirical evidence. For example, Filatotchev, Wright, and Arbeerk (2006) found that in the vast majority of newly listed firms (95%) in the United Kingdom, founders continue to lead the firm either as a CEO or as a chairman, indicating both widespread prevalence and social acceptance of this practice. Similar results have been reported by Bruton, Chahine, and Filatotchev (2009) as well. Other studies have found that founders of U.K. IPOs have a strong impact on the development of governance characteristics of their firms, such as board independence and selection of nonexecutive directors (Filatotchev and Bishop, 2002).

The above arguments and empirical evidence clearly suggest that founder-CEOs are more prevalent and valued in the U.K. capital market, while professionalization is more likely to be valued in the United States. Accordingly, we hypothesize that

*Hypothesis 1: Foreign IPOs led by founder-CEOs are more likely to list in the United Kingdom.*

### *Executive incentives*

Beatty and Zajac (1994: 317) emphasize the primacy of incentive alignment to resolve agency problems in IPO firms, and one of the central prescriptions found in agency theory literature is the development of outcome-based contracts for executives (Fama and Jensen, 1983). These contracts should be designed to include appropriate incentives in the compensation plan. Studies have

shown that stock-based compensation has a positive impact on stock market returns and legitimacy (Sanders and Boivie, 2004). This has prompted Zajac and Westphal (1994: 121) to suggest, 'corporations can and should increase their control over top managers by increasing the use of managerial incentives and monitoring by boards of directors.'

Studies based on U.S. IPOs demonstrate that U.S. investors look favorably upon IPO firms that offer options to their executives (Sanders and Boivie, 2004; Certo et al., 2003). In fact, stock-based executive compensation is so prevalent in the United States (Coombes and Watson, 2001) that it has achieved 'taken for granted' or legitimate status (Sanders and Boivie, 2004: 171) among financial and business community members, suggesting that U.S. investors place greater emphasis on this monetary measure as the preferred incentive alignment mechanism. Studies comparing U.S. and U.K. executive compensation have found that the sensitivity of executive compensation to increases in shareholder wealth is much greater in the United States than in the United Kingdom. The difference between the two countries is largely attributable to greater share option awards in the United States (Conyon and Murphy, 2000). Stock options are particularly appealing in the eyes of U.S. shareholders because of their explicit nature, favorable tax treatment under U.S. accounting rules, the assumption that managers are individuals solely motivated by self-interest and extrinsic rewards, and the non-egalitarian ethos of the United States. In light of the greater acceptance of stock options in the U.S. capital market, we expect that foreign firms that use this type of incentive mechanism would find a higher degree of institutional conformity when listing in the United States.

While incentive plans account for 60 percent of total executive compensation in the United States, incentivized compensation is far less prevalent in other institutional contexts and accounts for only 22 percent of executive compensation in the United Kingdom (Watson Wyatt Worldwide, 2009). In their study of executive compensation in U.K. IPO firms, Allcock and Filatotchev (2009) found that a large proportion of firms did not have any executive compensation schemes at all, and less than half of the firms that had executive share option plans had some form of performance criteria attached to them. In the U.K. institutional context, executive share options often contradict prevailing

culture, contingencies, and coalitions of interest (Buck and Shahrim, 2005). When investors rely on reputational considerations rather than formal equity-based incentives in evaluating the probability of self-serving behavior of managers, presence of executive share options would have relatively lower salience.

In the United Kingdom, there is considerable public debate with regard to incentive properties of executive share options. Over the late 1980s and early 1990s, the levels of executive pay were felt by many to have increased dramatically and unjustifiably (Smith and Szymanski, 1995). Although these concerns have been exacerbated in the past by excesses in the financial sector, they stem from a much wider perspective of social justice linked to growing inequalities in income and wealth generated in many European economies, including the United Kingdom.

The U.K. Companies Act (Financial Reporting Council, 2006a) does not regulate the structure of executive compensation, instead it specifies the content of a directors' remuneration report and that it should be approved by the board (Sections 420–422). Specific regulations introduced under the Act include a new provision that requires listed companies to report on how pay and employment conditions of all employees were taken into account in determining directors' pay, including stock options. More generally, investors and their professional associations in the United Kingdom impose restrictions on the way companies may use executive share options. For example, remuneration committees are expected to prepare a statement on remuneration policy, which should include an assessment of the impact of executive share options on the firm's risk profile and employee behavior. These practices are now reflected in 'Remuneration Code' introduced by the U.K. Financial Services Authority in August 2009.

Despite arguments that U.S.-style incentive plans may diffuse to other parts of the world due to factors such as foreign institutional ownership (Fiss and Zajac, 2004; Sanders and Tuschke, 2007), evidence currently points in the opposite direction, as new legislation in the United Kingdom has created even less incentive for the use of stock options. Instead, the emphasis on governance reform has been on transparency and disclosure, rather than stock options. North (1990) argues that laws reflect an important element of formal institutions. In the

case of the United Kingdom, it is clear that stock-based incentives are not yet built into the institutional framework. These arguments lead us to hypothesize that

*Hypothesis 2: Foreign IPOs with executive stock options are more likely to list in the United States.*

### *Board independence*

Board independence is defined as the presence of directors who do not have any 'close personal or professional ties' with the firm, its subsidiaries or affiliates, or firm's management (Daily and Dalton, 1994: 1607). Beatty and Zajac (1994) argue that, when executive incentive mechanisms fail to align interests of managers and investors, IPO firms should rely more heavily on board monitoring. An independent board may be one of the most important favorable governance signals that U.S. investors expect when evaluating unfamiliar firms (Bell, Moore, and Filatotchev, 2010). Independent boards possessing a diverse set of skills and experiences are considered important to investors (Useem *et al.*, 1993) because it implies that the firm will be better governed and capable of attaining higher performance levels (Millestein and MacAvoy, 1998). Furthermore, in their survey of U.S. institutional investors, Gillan and Starks (2003) found that board practices were considered as important as financial performance. The U. S. Securities and Exchange Commission has a regulatory requirement that all publicly listed firms in the United States have a board consisting of at least half independent directors, in addition to having key board committees filled by independent members. When an IPO firm demonstrates its willingness to adhere to heightened governance standards legitimated by the U.S. regulatory environment, investors will be more willing to respond with increased demand for the new issue.

While independent directors fill much of the traditional monitoring role for firms in the United States, in the United Kingdom, the Companies Act does not differentiate between executive and independent directors. According to U.K. law, each board member has the same legal responsibility with regard to the focal company. The U.K. Corporate Governance Code is less concerned with the monitoring capacity of independent directors, asserting, 'the board's role is to



provide entrepreneurial leadership of the company within a framework of prudent and effective controls' (Financial Reporting Council, 2010: 9). Although the U.K. Corporate Governance Code advises that, at least half of the board in FTSE350 companies should comprise nonexecutive directors,<sup>2</sup> it puts a great deal of emphasis on the governance roles of a senior independent director (SID). The U.K. Corporate Governance Code suggests that the SID's role includes providing a sounding board for the chairman and serving as an intermediary for the other directors and shareholders, especially in conflict situations. In fact, the Aggarwal *et al.*, (2009) study found the percentage of independent directors in the United Kingdom to be 32 percent versus 89 percent in the United States. Overall, board independence in the United Kingdom is a less salient or legitimate governance signal.

There are other institutional factors at play that may affect the salience of board independence as the IPO firm's governance signal in both the United States and the United Kingdom. Generally, investors in the United Kingdom have more power in terms of appointing and removing board members, and shareholder resolutions with regard to board changes are legally binding. In the United States, the absence of majority voting that would require directors to attain the backing of most of their investors and the nonbinding nature of shareholder proposals mean that it is more difficult for shareholders to appoint a new director and dispose of a nonperforming one, relative to the United Kingdom. As a result, investors may expect that board structure at an IPO may persist for some time and put a premium on IPOs with more independent boards. In the United Kingdom, investors may be less concerned with board independence at an IPO, since they have relatively more power to change it *ex post*.

The foregoing clearly suggests that while investors expect effective monitoring in both markets, the monitoring function is carried out differently in the United States and the United Kingdom. In the formal law-driven institutional environment of the United States, the role of monitoring is carried out by independent directors. On the other hand, U.K. markets rely extensively on informal networks and the role of monitoring is mainly

expected to be carried out by an independent chairman and SID. These arguments suggest that the salience of board independence in the United Kingdom will be lower than in the United States. Therefore,

*Hypothesis 3: Foreign IPOs with independent boards are more likely to list in the United States.*

### Legitimation through external ties

Firms undertaking IPOs in foreign markets face problems associated with liability of foreignness and therefore undertake measures to reduce such liability. One approach is certification by third parties, such as highly prestigious underwriters or VC firms that enjoy credibility in that market. Board interlocks also play a role similar to third party certification in that they represent the ties that the firm has to other firms that are well established. Accordingly, in this section we develop hypotheses regarding the relationship between capital market choice and the legitimacy of these three types of external ties in the U.S. and U.K. capital markets. We base our logic for the hypotheses, in part, on the different approaches associated with gaining sociopolitical legitimacy versus cognitive legitimacy. Sociopolitical legitimacy is attained formally through the certification of powerful stakeholder organizations, such as legal entities, government organizations, or other powerful organizations (e.g., highly prestigious underwriters). On the other hand, cognitive legitimacy arises from the development of an informal reputation through information exchange that is embedded in social networks with strong ties (Baum and Oliver, 1991), such as those associated with VC syndicates.

### Prestigious underwriters

*Sociopolitical legitimacy* is conferred in market economies by the endorsement of legal authorities, government bodies, or other powerful organizations, and is associated with increased access to resources and greater rewards (Aldrich and Fiol, 1994; Hannan and Carroll, 1992). As Rao (1994: 31) notes, 'the very act of endorsement embeds an organization in a status hierarchy and thereby builds the reputation of an organization.' Therefore, a relationship with a high status partner can

<sup>2</sup> Smaller companies should have at least two independent directors.

be considered a powerful endorsement for the unfamiliar firm and, thus, act as a reputational source of legitimacy (Baum and Oliver, 1991). However, the reputational value of endorsements by third parties may not carry the same weight across all institutional contexts.

Among third party stakeholders (e.g., auditors, law firms, etc.), it is underwriters (usually investment banks) that have the most influence in the success of IPOs. Previous research has identified a number of ways the highly prestigious underwriters may positively affect IPO success (Carter and Manaster, 1990; Carter, Dark, and Singh, 1998; Jain and Kini, 1999; Loughran and Ritter, 2004). First, highly prestigious underwriters may use their reputations to certify the quality of a foreign IPO, and, thereby reduce adverse selection problems associated with new issues (Stiglitz, 1985). Second, highly prestigious underwriters may be involved in active post-issue monitoring to protect their reputation assets and reduce *ex post* moral hazard problems associated with potential insider opportunism after the listing (Pollock, Porac, and Wade, 2004). Finally, highly prestigious underwriters deal with top public market investment institutions experienced in monitoring their portfolio companies, which creates a cascading effect of monitoring. Studies have demonstrated that more prestigious underwriters have a greater capability to attract additional analysts (O'Brien and Bhushan, 1990) and maintain close ties to a large base of institutional investors who can serve as effective monitors of the firm (Woidtke, 2002; Gillan and Starks, 2003). All of these factors reduce agency conflicts associated with new issues and should improve IPO performance. However, they also come at a cost, and previous research indicates that more prestigious underwriters charge higher fees compared to second-tier banks (Bell, Correia da Silva, and Preimanis, 2006). To attract IPO firms, less prestigious underwriters rely more on their exclusive network of investment clients and competitive pricing structure. Indeed, Brau and Fawcett (2006) indicate that chief financial officers (CFOs) in firms backed by high prestige underwriters select underwriters based on reputation, quality, expertise, and institutional investor client base. By contrast, CFOs in firms backed by low prestige underwriters are more concerned with valuation promises, retail investor client base, and fee structures.

Differences in the regulatory and information building environments can significantly influence the capital raising activities of firms with different types of underwriters. For example, in the United States, communications between underwriters and investors are highly structured according to the 1933 Securities Act. The Act requires that investors receive financial and other significant information concerning securities being offered for public sale and prohibits deceit, misrepresentations, and other fraud in the sale of securities. Section 5 of the Act prohibits any "offer" prior to the filing of a registration statement. Investors in U.S. offerings are only asked to reveal their views about the IPO once the registration statement, including an initial indicative price range, has been filed. During the registration period, and for 40 days after the IPO (the 'quiet period'), the company and its advisors are able to present statements of fact, but are not allowed to publish any opinions regarding the valuation of the company (Ritter, 2003). Because of the highly regulated approach to information building associated with new listings, the reputation and *ex post* monitoring by highly prestigious underwriters in the United States are particularly important in dealing with both adverse selection and moral hazard problems associated with new issues.

In contrast, the IPO process in the United Kingdom stems from a less strict interpretation of securities laws and an environment that has few formal regulations that prescribe the details of how an offer should be conducted (Jenkinson, Morrison, and Wilhelm, 2006). In fact, stock exchange rules and underwriting regulations across European capital markets tend to establish general principles rather than specific rules regarding particular offering methods (Jenkinson *et al.*, 2006). More importantly, the exchange of information between investors and the investment banking syndicate can occur earlier in the United Kingdom and with much less formality in the dense networks of the City of London. In contrast to the United States, research analysts associated with a U.K. investment banking syndicate routinely produce written research reports prior to the offering's registration, which are then fed into the network. Similarly, key investors within the bank's network are offered meetings with the syndicate's analysts to discuss the offering. They are then asked for feedback regarding the

price at which they would subscribe. In fact, it is not unusual for investment banks to request responses to extensive questionnaires that survey the key investor's investment strategy and holdings, as well as the investor's reaction to the company and his or her thoughts on valuation (Jenkinson *et al.*, 2006). This information then diffuses within the underwriter's network of investors, creating an information cascade, which is different than the monitoring cascade associated with prestigious underwriters in the United States. This information cascade may make reputational and monitoring effects of prestigious underwriters less relevant in the United Kingdom when investors try to ascertain the 'true value' of a foreign IPO.

Therefore, we contend that foreign IPOs consider the differential salience of underwriter signals in their choice of U.S. or U.K. capital markets. As we have mentioned previously, in the United Kingdom there is considerable interaction between buy-side and sell-side IPO participants prior to registration. During the preregistration period, research is circulated by analysts working for the lead managers and, sometimes, more junior syndicate members (Jenkinson *et al.*, 2006). These preregistration interactions with potential investors in the bank's network are strictly prohibited in the United States. Jenkinson *et al.* (2006) stress that there is much less information available for U.S. investors to utilize as a basis for their opinions regarding the appropriate price. In such an environment, the certification role of highly prestigious underwriters becomes very important to investors. In contrast, it is quite possible that the informal informational cascades that begin much earlier in the United Kingdom between buy-side participants could substitute for highly prestigious underwriters in the minds of foreign IPO managers. Given that the United Kingdom's institutional environment fosters such an informal dialogue early in the IPO process among buy-side and sell-side participants, foreign IPO managers would consider highly prestigious underwriters to be less imperative in the United Kingdom. Hence,

*Hypothesis 4: Foreign IPOs with more prestigious underwriters are more likely to list in the United States.*

### VC syndicates

In addition to sociopolitical legitimacy, *cognitive legitimacy* is another important dimension of overall legitimacy (Aldrich and Fiol, 1994; Hannan and Carroll, 1992). *Cognitive legitimacy* is conferred when an organization is considered appropriate within a widely shared system of norms and values (Zucker, 1986). This type of legitimacy arises from the development of an informal type of reputation that is embedded in social networks with strong ties. IPO studies have increasingly recognized that among large-block investors, VCs may have a particularly strong reputational effect because of their early involvement in the strategic development of the fast-growing firm (Carpenter, Pollock, and Leary, 2003).

Within an institutional framework, the role of a VC syndicate can be related to the IPO firm's cognitive legitimacy. As Pollock (2004) points out, the primary market for IPOs is an interesting example of a mediated market. In mediated markets, the social capital of a broker can significantly shape market outcomes. VC syndicates typically possess higher amounts of social capital related to their informal networks, which include various stakeholders such as financiers, political actors, IPO advisors, and VCs. Network embeddedness provides a structural and/or relational safeguard against opportunistic behavior because of the effects a negative reputation can have on future relations (e.g., Gulati, Nohria, and Zaheer, 2000). Prior research has indicated that the closeness and trust that exists between actors serves as a social lubricant for ongoing interactions such that critical transaction-specific informational resources can be of acceptable availability and quality (Nahapiet and Ghoshal, 1998). Furthermore, these types of networks reduce requisite safeguarding/monitoring of transactional assets and provide informal, socially based mechanisms that govern firm behavior (Uzzi, 1997).

Vcs provide informal monitoring and the U.K. institutional climate prefers informal monitoring of firms, resulting in better institutional fit. Network-based gentlemanly capitalism in the United Kingdom should increase the positive impact of the VC syndicate backing the IPO firm by utilizing nonlegal sanctions, including trust, mutual dependence, and reputation as governance mechanisms within a VC syndicate (Lockett, Ucbasaran, and Butler, 2006). Both Ahlstrom and Bruton (2006)

and Makela and Maula (2005) argue that VC syndicates are embedded within broader international and institutional networks. Makela and Maula (2005) found that commitment by a VC firm is contingent upon the degree to which the firm is embedded in a social network of relationships with the focal market. These embedded firms take on longer-term decision bases than purely financial firms. The authors attribute this finding to the reputation-related risks of relinquishing participation and commitment in the syndicate. Moreover, Ahlstrom and Bruton's (2006) study finds that informal institutions act as substitutes in situations where there are less formal institutions. The study expects informal network mechanisms to be a central element of VC firms' future business practices. Thus, networks can substitute for less formal institutional mechanisms and, as previously noted, the United Kingdom prefers informal monitoring. The above arguments clearly suggest that VC syndicates are associated with network embeddedness and should be associated with IPOs that choose to list in the United Kingdom.

Although VC syndication is common in both the U.S. and U.K. capital markets, there are considerable differences in the extent of agency conflicts associated with VC syndication in the two markets. Syndication is a means by which VCs can share risk through portfolio diversification, since for a given funds' size, syndication enables the spreading of capital across a greater number of investments. However, syndication itself may create another agency problem related to the behavior of syndicate members, especially when they have different objectives and decision-making horizons (Admati and Pfleiderer, 1994). Such principal-principal conflicts may be less prevalent in the U.K. VC syndicates for several reasons. In the United States, an IPO is primarily an exit strategy for VC firms, whose success is measured on the basis of the IPO performance. Prior research clearly indicates that there is substantial pressure on VC firms in the United States to bring companies public, resulting in 'undercooked' IPOs (Barnes, Cahill and McCarthy, 2003). Gompers (1996) referred to this behavior on the part of U.S. VCs as 'grandstanding.' On the other hand, U.K. VC firms tend to maintain their shareholdings in firms they take public and continue to play a certification and monitoring role. U.K. VCs typically do not view IPOs as an opportunity for exit (Filatotchev *et al.*, 2006). Success for U.S. VCs

is largely based upon the monetary success they enable their portfolio firms to achieve at IPO, while the reputations of VCs in U.K. capital markets seem to be contingent on how well they position their portfolio firms for longer-term success after IPO (Wright, Pruthi, and Lockett, 2005). Further, the close geographical proximity of VCs in the United Kingdom, being primarily based in London, and the dense informal network links also provide a mechanism for arbitration between the potentially diverse objectives of syndicate partners (Robbie, Wright, and Chiplin, 1997), mitigating anticipated conflicts of interest within a syndicate. Reputational considerations of syndicate members that are so important in the United Kingdom, plus longer-term collaboration among syndicate members, suggest that investors' perceptions of the extent of principal-principal conflict within the syndicate will be lower in IPOs in the United Kingdom, other things being equal. As a result, foreign firms with larger syndicate backings are likely to prefer the U.K. capital markets due to greater post IPO involvement by VCs. Hence,

*Hypothesis 5: Foreign IPOs with syndicated VC investors are more likely to list in the United Kingdom.*

### *Board interlocks*

Our previous arguments focused on the monitoring and control aspects of corporate governance and their impact on the agency costs associated with foreign IPOs. The resource dependence and strategic change perspectives suggest that corporate governance factors may also play resource and strategic roles in the decision-making process (Zahra and Pearce, 1989). More specifically, strategy research emphasizes the importance of the board's service and strategic roles when the firm faces a highly uncertain environment (Daily and Dalton, 1994; Chaganti, Mahajan, and Sharma, 1985). In particular, the links that nonexecutive directors have with a firm's environment can prove useful in obtaining financial resources needed for growth, restructuring expertise, and the establishment of relationships with a variety of stakeholders (Pfeffer, 1972; Pearce and Zahra, 1991; Provan, 1980). These links are directly related to board ties, measured in terms of the number of outside directorships ('interlocks') each individual board member holds in other organizations both within

and outside the industry (Dalton *et al.*, 1998; Filatotchev and Bishop, 2002; Pfeffer, 1972). Companies with greater growth opportunities are expected to gain most by having their directors serve on the boards of other companies (Beatty and Zajac, 1994).

A comparison of the institutional environments of the United States and the United Kingdom suggests that board interlocks are more likely to be considered legitimate by investors in the U.K. capital market for a number of reasons. Given the greater emphasis placed on network relationships in the United Kingdom and the relatively more important roles that informal networks play in the City of London, foreign IPOs led by board members with a large number of external board memberships may find a better fit with the U.K. environment. Investors in the U.K. market consider firms with boards who possess extensive interlocks not only a resource but also a mechanism to gain legitimacy and acceptance among investors. Rao, Davis, and Ward (2000) indicate that board interlocks may serve as an infrastructure for cohesion and as a mechanism that enables the communication and transfer of norms and values.

In the United States, on the other hand, board interlocks may have less salience because of the regulatory focus on the monitoring and control functions of independent directors. More specifically, the absolute number of directors and their external directorships may provide a negative effect on investors' assessment of firm quality. In other words, investors may believe that board size and external links of directors beyond a certain threshold may compromise directors' effectiveness and the time directors are able to allocate to the focal firm (Daily, Johnson, and Dalton, 1999).

Based on the above comparison, we contend that due to the U.S. market's reliance on arm's-length market transactions compared to the informal institutions governing the U.K. capital market, board interlocks may be more salient and considered more legitimate in the United Kingdom. Indeed, foreign IPOs with enhanced board interlocks will achieve greater fit with institutional environments characterized by network embeddedness. Hence,

*Hypothesis 6: Foreign IPOs with more board interlocks are more likely to list in the United Kingdom.*

## RESEARCH METHOD

### Sample selection

Our study focuses exclusively on foreign issuers that are not listed on any exchange, including their home country, prior to their U.S. or U.K. IPO. Consistent with a number of studies focusing on this unique population of firms (Bell *et al.*, 2008; Bruner, Chaplinsky, and Ramchand, 2006; Kadiyala and Subrahmanyam, 2002; Ejara, Ghosh, and Nunn, 1999), we used Thomson Financial's Security Data Corporation (SDC) New Issues database to identify all foreign firms that made IPOs in the U.S and U.K. markets between 2002 and 2006. We classified 'foreign' in both the U.S. and U.K. samples to be those companies incorporated and whose primary executive offices are located outside of the United States, for the U.S. sample, and outside the United Kingdom for the U.K. sample.<sup>3</sup> We excluded from the sample firms whose stock listings resulted from mergers or acquisitions, spin-offs of publicly listed firms, and units, warrants, and rights offerings. We also followed the selection procedures outlined by Bruner *et al.*, (2006) by removing all new issues of foreign utility firms from consideration. Finally, we eliminated U.S. or U.K. financial service firms incorporated in Bermuda, the Bahamas, and the Cayman Islands from consideration, as firms based in these countries often choose to incorporate in these countries for tax purposes alone. After identifying the sample of foreign IPOs made on U.S. and U.K. exchanges between 2002 and 2006, we referred to each offering firm's prospectus to acquire our governance and control variables. We selected the period after introduction of SOX in the United States because it marked growing differences in regulatory approaches to corporate governance in the United Kingdom and the United States. Our final sample includes 103 and 99 foreign IPOs in the United States and United Kingdom, respectively. Table 1 provides sample characteristics.

<sup>3</sup> Our definition of a foreign IPO includes U.K. firms listed in the United States and U.S. firms listed in the United Kingdom. This small subsample of firms makes a choice between listing at home and abroad compared to other IPOs that chose between the two foreign markets. To address this issue, we ran the models without U.S. firms in the U.K. sample and U.K. firms in the U.S. sample and obtained the same results.

Table 1. Sample characteristics

Issuing year	Host market	
	Foreign IPOs on U.S. exchanges	Foreign IPOs on U.K. exchanges
2006	30	38
2005	31	40
2004	28	18
2003	7	1
2002	7	2

  

Home market	Host market	
	Foreign IPOs on U.S. exchanges	Foreign IPOs on U.K. exchanges
Asia/Pacific	45	30
Europe	19	33
Middle East/Africa	11	11
Latin America	22	5
North America	6	20
BRIC countries*	34	7
Emerging economies**	48	23
Developed economies	55	76

  

Industry characteristics	Host market	
	Foreign IPOs on U.S. exchanges	Foreign IPOs on U.K. exchanges
Mining	7	12
Food/drink preparation	4	5
Healthcare	7	9
Production	28	16
Communications	7	9
Computer related	28	19
Transportation	16	8
Real Estate	0	6
Insurance	4	10
Other	2	5

**Notes:**

\* indicates BRIC countries: Brazil, Russia, India, and China.

\*\* indicates emerging economies according to Hoskisson *et al.* (2000).

**Measures***Dependent variable*

Our research question is aimed at identifying those factors that predict the likelihood that a firm will choose the U.S. or U.K. exchanges for their IPO. Therefore, the dependent variable in our study is binary: whether a foreign firm makes their IPO on the U.S. or U.K. exchanges between 2002

and 2006. We coded foreign IPOs listed on U.S. exchanges as 1 and U.K. listed foreign IPOs as 0.

*Independent variables*

*Founder-CEO* was a dummy variable, coded as 1 if one of the original founders of a company was the CEO at the time the company went public. *Executive stock options* was dummy coded as 1 if stock options were offered to the CEO prior to the firm's IPO (Certo *et al.*, 2003; Beatty and Zajac, 1994). We measured *Board independence* as the percentage of independent directors each firm had at IPO (Carpenter *et al.*, 2003; Certo *et al.*, 2001), as identified in the offering prospectuses. We measured *Board interlocks* as the sum of directorships of all board members (Filatotchev and Bishop, 2002). *Underwriter prestige* was measured based on the ratings assigned to the underwriters by Carter and Manaster (1990) and Carter *et al.*, (1998) after the modifications suggested by Loughran and Ritter (2004). Finally, we measured *VC syndication* as the number of VC firms involved in an IPO. We identified the presence of VC backing by first referencing the 'Principal Stockholders' section of each prospectus and then verifying those VCs we identified against 'The VentureOne Venture Capital Source Book' (VentureOne, 2001) to ensure the shareholder was indeed a VC firm.

*Control variables*

To account for the different size and scale of firms likely to list on U.S. exchanges (NYSE and NASDAQ) and U.K. exchanges (LSE and AIM), we controlled for a host of firm characteristics. We controlled for the effects of *firm age* by taking the difference in years between the IPO firm's founding date and the date of the IPO (Daily *et al.*, 2005). We also controlled for organizational size and issue size. We measured *firm size* as revenue at time of IPO and *IPO size* as total proceeds from the IPO, less fees and expenses associated with the underwriter, investment bank, and auditor (Sanders and Boivie, 2004). We expect that larger and older IPOs would prefer to list in the United States because of the relatively larger size of the U.S. stock market.

Although not directly related to our theoretical framework, we also controlled for certain leadership, ownership, and firm characteristics that previous studies have identified to be generally associated with U.S. IPOs. Despite arguments against CEOs holding dual roles as CEO and board president (Fama and Jensen, 1983), as many as 80 percent of Fortune 500 firms have a CEO serving as chairman (Rechner and Dalton, 1991). To account for this, we coded the *CEO duality* variable as 1 if the CEO held dual positions and 0 otherwise. Similar to CEO duality, blockholder sell-off is characteristic of the short-term orientation of U.S. capital markets (Pound 1988; Stiglitz 1985). We identified *blockholder sell-off* as the percentage change in blockholder shares on the day of IPO. Finally, previous studies have suggested that knowledge-intensive, innovative firms are more likely to favor the United States over their domestic capital market (Hursti and Maula, 2007; Pagano et al., 2002; Blass and Yafeh, 2001). The first of our two measures to account for knowledge-intensive, innovative firms is a dichotomous variable indicating whether the IPO operates in a *high tech* industry or not (Daily et al., 2005). Firms operating in high technology industry sectors were coded as 1, while those in low technology industry sectors were coded as 0. The second measure we used to account for knowledge-intensive, innovative firms was to control for the total number of *patents* that were awarded to each firm prior to IPO.

Additional variables were incorporated into the data analysis to control for institutional proximity effects and country of origin effects. We controlled for foreign IPOs that originated from *U.K. Commonwealth* nations and *North America* based on the assumption that firms would choose to list in countries that share common historical and cultural legacy or are closer to their country of origin. We also controlled for foreign IPOs that originated from *emerging economy* countries to account for country of origin effects based on Hoskisson et al. (2000). Finally, to control for differences between secondary and primary markets both within and between countries, we included a dummy variable for foreign IPOs that listed on a *main market* (NYSE or LSE) versus a secondary market (NASDAQ or AIM). These controls were incorporated because differences between primary and secondary markets could influence the likelihood to go public in a certain market (Rao et al., 2000) and in a certain country.

## DATA ANALYSIS AND RESULTS

We tested our hypotheses using the logistic regression model (Hosmer and Lemeshow, 2000; Wright, 1995) and general estimating equations. Logistic regression allowed us to assess how well our set of predictor variables explains a firm's decision to list on the U.S. versus U.K. stock exchanges based on the sign of beta coefficients associated with a particular independent variable. We coded IPOs that listed in the United States as 1 and U.K. IPOs as 0. Consequently, a positive (+) coefficient suggests the independent variable is predictive of U.S. IPOs, while a negative (−) coefficient is interpreted as being predictive of U.K. IPOs. Logistic regression provides an indication of the relative importance of each predictor variable as well as the model's accuracy of classifying observations.

Table 2 contains descriptive statistics and correlations for the variables used in the study. Revenues prior to the IPO, CEO duality, and executive stock options variables were strongly correlated with VC syndication. While there is no formal way to test for multicollinearity in logistic regression, the bivariate correlations between independent variables are well below the 0.85 rule of thumb (Leahy, 2000). We ran models with all possible combinations of variables that had high levels of correlation with VC syndication and found no significant change in size of beta coefficients and no changes in signs or significances. Finally, we inspected the residuals for evidence of outliers. We had one observation with a high residual (−3.343). Since this observation had no substantive effect on the model results when removed from the dataset, we retained it in the final analysis.

In order to test our hypotheses, we examined the beta coefficients and odds ratios for individual variables. The betas presented in Table 3 are the values that would be used in an equation to calculate the probability of a case falling into a specific category. According to Tabachnick and Fidell (2007: 461), the odds ratio represents the change in odds of being in one of the categories of outcome when the value of a predictor increases by one unit, all other factors equal. For odds ratios that are less than 1 and accompany a negative beta, we have inverted the odds ratio to aid interpretation.

Model 1 in Table 3 presents the results of the logistic regression with our control variables. Model 1 suggests that larger firms, based on firm revenues ( $\beta = 0.0001$ ,  $p < .01$ ), are more likely to

Table 2. Descriptive statistics and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 US_IPO	0.51	0.50																
2 Age	7.96	9.18	-0.016															
3 Blockholder sell off	-0.31	0.02	-0.109	0.11														
4 Revenues	\$292.8M	\$1.11B	.218**	0.012	0.129													
5 CEO duality	0.39	0.49	.333**	-0.079	-0.009	0.06												
6 High tech industry	0.44	0.50	.187**	0.008	0.129	0.015	0.097											
7 Patents	17.66	184.83	0.082	0.088	0.071	.302**	0.099	0.102										
8 Emerging economy	0.31	0.46	.356**	-0.066	0.05	0.135	.195**	0.105	-0.047									
9 U.K. Commonwealth	0.23	0.42	-.245**	-0.002	0.024	-0.033	-0.087	-0.123	-0.03	-.210**								
10 North America	0.06	0.25	-0.024	0.043	-0.124	-0.026	0.1	0.013	-0.015	-.176*	.483**							
11 NYSE or LSE IPO	0.22	0.42	.362	-0.002	-0.09	.327**	-0.014	-.257**	-0.042	.158*	-0.094	-0.044						
12 Founder = CEO	0.35	0.48	0.02	-0.021	-0.023	-0.138	.234**	.232**	-0.051	.161*	-.159*	-0.041	-.149*					
13 Executive stock options	0.85	0.36	.382**	0.056	-0.099	0.101	0.089	0.014	0.039	0.048	0.037	0.057	0.132	-0.063				
14 Board independence	0.40	0.23	.217**	0.126	-0.083	0.002	0.021	-0.058	0.035	-0.004	0.012	0.077	0.096	0.002	.194**			
15 Board interlocks	6.13	10.83	-.404**	-0.005	0.081	-0.082	-.196**	-0.018	-0.04	-0.085	0.08	-0.059	-.195**	-0.095	-0.023	-0.092		
16 Underwriter prestige	5.35	3.70	.794**	0.013	-0.054	.169*	.199**	.218**	0.084	.333**	-.252**	-0.05	.402**	0.077	.339**	.176*	-.206**	
17 VC syndication	2.59	3.41	-0.061	-0.072	0.122	-0.123	0.043	0.129	-0.051	0.069	0.041	-0.01	-0.121	-0.002	0.018	-0.103	-0.023	-0.043

Notes:

\* correlation significant at 0.05 level; \*\* correlation significant at 0.01 level.



Table 3. Results of logistic regression analysis for IPO stock market choice

Variable	Model 1	Model 2	
	Beta	Coefficients	Odds ratio
<b>Control variables</b>			
Age	0.00	−0.18	0.83
Blockholder sell off	−0.02**	0.02	1.02
Revenues	0.00*	0.00*	1.00
CEO duality	1.81***	4.47*	87.67
High tech	1.20*	5.09*	163.16
Patents	0.05*	−0.04*	0.96
Emerging economy	1.39**	−1.94	0.14
U.K. Commonwealth nation	−2.30**	−8.53	0.00
North America	2.03*	0.57	1.76
Main market IPO (NYSE OR LSE)	−2.79***	1.21	3.36
<b>Predictors</b>			
H1: Founder-CEO		−4.88*	0.01
H2: Executive stock options		12.77**	352.49
H3: Board independence		−8.02†	0.00
H4: Board interlocks		−2.99**	0.05
H5: Underwriter prestige		0.96**	2.62
H6: VC syndication		−0.54*	0.58
<b>Goodness of fit</b>			
−2 log likelihood	149.99***	23.04***	
Chi-square	103.71***	230.65***	
Cox & Snell R2	43.30%	71.60%	
Nagelkerke R2	57.70%	95.50%	
<b>Classification accuracy</b>			
Percentage accuracy classification	82.50%	97.30%	
Positive predictive value (U.S. IPO)	83.00%	98.00%	
Negative predictive value (U.K. IPO)	81.90%	96.40%	

†  $p < 0.10$  \*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$ .

list in the United States. Also, CEO duality ( $\beta = 1.81$ ,  $p < 0.001$ ), high tech industries ( $\beta = 1.20$ ,  $p < 0.05$ ), and firms with more patents ( $\beta = 0.05$ ,  $p < 0.05$ ) tend to choose U.S. markets. Additionally, firms from emerging economies ( $\beta = 1.39$ ,  $p < 0.01$ ) and North America ( $\beta = 2.03$ ,  $p < 0.05$ ) were more likely to list in the United States, while firms from U.K. Commonwealth nations ( $\beta = -2.30$ ,  $p < 0.01$ ) and those choosing a main market ( $\beta = -2.79$ ,  $p < 0.01$ ) were more likely to list in the United Kingdom, suggesting significant country of origin and institutional proximity effects. Alternatively, we found that blockholder sell-off ( $\beta = -0.02$ ,  $p < 0.01$ ) was associated with a U.K. listing.

Model 2, the full unrestricted model, in which we entered the control variables and our hypothesized variables, demonstrates effective classification of U.S. and U.K. IPOs based on our independent variables. The model significantly predicts market choice for the IPOs in our sample

(chi-square = 23.065,  $p < 0.001$ ) with a change in the log likelihood of 23.04 ( $p < 0.001$ ). Furthermore, the variables included in the model accurately identify characteristics of U.S. listings (sensitivity = 98.0%) and U.K. listings (specificity = 96.4%), resulting in a percentage accuracy classification score of 97.3 percent.

We found support for Hypothesis 1 based on our results that firms with a founder-CEO were more likely to file IPOs in the United Kingdom ( $\beta = -4.88$ ,  $p < 0.05$ ). The odds ratio indicates that when a firm's founder is the CEO, the odds the firm will list in the United Kingdom are 100 (1/0.01) times higher than firms whose CEO is not a founder. We found support for Hypothesis 2, which argued that executive stock options would be associated with U.S. IPOs ( $\beta = 12.77$ ,  $p < 0.01$ ). The odds a firm that provides CEO stock options will list in the United States are 352.49 times higher than firms without CEO stock options. Given the nonsignificant, negative beta for board

independence ( $\beta = -8.02$ ,  $p < 0.10$ ), we failed to find support for Hypothesis 3, which argued that higher levels of board independence would be associated with U.S. IPOs.

Our results show that the use of prestigious underwriters would be associated with IPOs that list in the United States ( $\beta = 0.96$ ,  $p < 0.001$ ), in line with Hypothesis 4. In fact, we find for every one unit increase in underwriter's rankings, the odds of listing in the United States increase by a factor of 2.62. We also found support for Hypothesis 5, which argued that higher levels of VC syndication would be associated with U.K. IPOs ( $\beta = -0.54$ ,  $p < 0.05$ ). By taking the inverse of the odds ratio for VC syndication, we find the odds that a firm backed by a larger VC syndicate will list in the United Kingdom are 1.72 ( $1/0.58 = 1.72$ ) times higher than the odds that the firm will list in the United States for each additional member of the VC syndicate. Finally, the empirical results provide support for Hypothesis 6, which argued that board interlocks characterize IPOs listed on U.K. exchanges ( $\beta = -2.99$ ,  $p < 0.01$ ). By taking the inverse of the odds ratio for board interlocks, the results suggest that for each interlock a board member adds, the odds of a firm making their IPO in the United Kingdom increase by a factor of 20 ( $1/0.05 = 20$ ).

## DISCUSSION

The results of our study suggest that foreign firms contemplating a new equity offer would tend to select a host market where there is a 'fit' between its characteristics and existing affiliations and the host market's institutional environment. The basis for evaluating such fit with a host country's financial markets is the extent to which firm attributes and characteristics meet legitimacy standards in host markets. However, the value placed by investors on specific firm attributes are likely to vary from one market to another because the norms and expectations of host market participants are, to a great extent, shaped by the institutional context of that country. Given the differences in institutional contexts between the U.S. and U.K. institutional environments, our research indicates that the value of specific internal governance characteristics and external ties will vary from one location to another.

Historically, firms were largely legally confined to offer their shares only on the exchanges of their country of origin. However, decreased regulation along with increased competition for financing sources have prompted firms from foreign countries to bypass domestic exchanges and look to the financial markets of the United States and the United Kingdom. Our data suggests that firms from different parts of the world are increasingly foregoing their domestic capital markets and accessing foreign markets. The makeup of firms seeking new sources of equity financing suggests that these firms range from mature and well established, to entrepreneurial ventures seeking to establish themselves. In addition to wide variances in age and size, these foreign firms differ with regard to investor familiarity. Yet, despite these differences, each foreign firm attempting an equity listing in western capital markets is trying to appeal to investors and maximize the value of its new issue.

The literature in international business has long recognized that firms experience costs of doing business abroad that are not experienced by local firms (Hymer, 1976). Apart from the market-driven economic costs, firms incur social costs of access and acceptance (Zaheer, 2002) when attempting to do business in a foreign country. The social costs of being a 'stranger in a strange land' are usually referred to as liability of foreignness and arise because of unfamiliarity hazards, discrimination hazards, and relational hazards (Eden and Miller, 2004). In the case of firms undertaking their IPO on foreign stock exchanges, the liability of foreignness is compounded by the liability of newness (Certo, 2003). Analogous to the arguments of Sanders and Boivie (2004) in the context of IPOs in emerging industries, investors and analysts lack the codified body of knowledge and country-specific experience that is necessary for a systematic evaluation of foreign IPO firms. Although the concepts of liability of foreignness and liability of newness were developed in the context of product markets, they are quite salient in the case of firms competing in foreign capital markets due to the well-documented existence of 'home bias' within financial markets. 'Home bias' refers to the tendency among investors to neglect the portfolio benefits associated with international diversification and allocate a relatively large fraction of their wealth in domestic equities (Grubel, 1968; Levy and Sarnat, 1970; Solnik, 1974; Grauer and Hakansson, 1987). Given that foreign new issues

are fully aware of the problems associated with liabilities of foreignness and newness, our research suggests that their efforts will be focused on overcoming these liabilities and making their IPO a success.

Our paper makes several important contributions to the literature on institutional differences in general and to the growing body of studies on governance and IPOs in the management area in particular. The increasing globalization of capital markets makes the choice of capital markets an important area of study for strategy scholars. However, to the best of our knowledge, no prior studies have examined how foreign firms can distinguish between the U.S. and U.K. capital markets and make informed strategic choices regarding the placement of their first public equity offers. To that extent, we believe our study can serve as a point of departure for future studies of capital market choices and institutional influences on the capital market strategies of firms. Second, the results of our study demonstrate that the salience of governance signals can vary significantly even between two common law countries. We attribute such variance to differences in institutional environments and suggest that these institutional differences can be more subtle and more nuanced than generally assumed. However, the differences between the regulatory environments of U.S. and U.K. capital markets become most observable when foreign firms attempt to exploit the capital market resources of the two markets. Indeed, by focusing on the disparities between the regulatory institutions of the United States and the United Kingdom, our study adds to the manner in which we may evaluate formal and informal institutions (North, 1990; Glaeser *et al.*, 2004). A country's regulatory institutions are considered the easiest for foreign firms to observe and adhere to (Eden and Miller, 2004), simply because rules and procedures are frequently codified. On the other hand, our study suggests that comparisons of governance regulations across countries may inadequately account for the informal and normative nature of some institutional environments. While the U.K. Corporate Governance Code (Financial Reporting Council, 2010) does present an outward display of codified rules with regard to governance policies, there is considerably less distinction between regulative and normative institutions found in the 'gentlemanly capitalism' practices of the U.K. capital market.

## LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

When interpreting the results of our study, it is important to bear in mind some of its limitations. First, despite the prominence of New York and London, firms are not restricted to the exchanges of these two markets. Indeed, today firms can choose to raise equity capital on the exchanges of a number of prominent markets, such as Hong Kong, Singapore, Tokyo, and Toronto, in addition to regional exchanges such as Dubai. Our data is limited to the information that can be garnered from the prospectuses of the examined firms. For example, we did not find any significant effects of the board independence variable. However, it was used as a measure of board monitoring capability, which is a crude proxy for a complex process of interactions between board members (Chaganti *et al.*, 1985; Dalton *et al.*, 1998). In addition, relying heavily on a firm's prospectus highlights the cross-sectional design of the study, thereby raising considerable caution in making inferences of causality. The prospectus also limits our ability to examine the process of strategic decision making by the firms in our sample because we cannot examine how the process unfolds over time. Therefore, given that capital market choices unfold over time and are subject to a number of formal and informal influences, we believe richer insights can be developed about the content of these strategic decisions by studying the underlying processes. These limitations notwithstanding, we believe that the high explanatory power and resultant correct classifications suggest that our model is well specified.

There are a number of promising directions in which the future study of capital market choices can be extended. First, given that our study focused on choice between two common law countries, it would be interesting to investigate the factors that influence the choice between common and civil law countries. Additionally, investigating the interdependent nature of signals surrounding a new issue may provide rich new insights about the behavior of firms and capital markets. Indeed, certain combinations of signals may be quite necessary in certain institutional contexts, while less salient in others. Additionally, examining the performance consequences of capital market choices will be helpful to practicing managers who bear the responsibility to make this crucial choice.

Our study suggests that capital markets can have different ‘institutional logics.’ Institutional logics are social mechanisms that shape the way societal actors view the legitimacy of organizations (Zajac and Westphal, 2004b). Scholars conceptualize institutional logics along multiple dimensions, such as markets (Dunn and Jones, 2010). An institutional logic ‘guides organizing and provides actors with vocabularies, identities, and rationales for action’ (Dunn and Jones, 2010: 114). Thus, our study finds that U.S. and U.K. institutional environments differ in terms of their respective institutional logics in relation to corporate governance and capital markets. Future research should examine the role of differing institutional logics, boundaries, support mechanisms, and constraining mechanisms and their impact on capital market participants.

## CONCLUSION

A firm’s initial choice of capital market in which to make its first public equity offer is an important domain choice that may impact its growth and development in the long run. Our paper offers theoretical and empirical insights into how firms make their IPO market decision when they consider a listing outside their home markets. By combining IPO research with institutional perspective, we offer a richer theoretical framework that suggests that economic rationale behind these choices should be analyzed within a more contextualized approach that focuses on issues related to institutional fit. A more contextualized approach offers a number of further research avenues that may lead to a more holistic view of the complex interrelationship between governance and key strategic decisions.

## ACKNOWLEDGEMENTS

We would like to thank Editor Ed Zajac and two anonymous reviewers for their helpful comments on the previous versions of our paper.

## REFERENCES

Admati A, Pfleiderer P. 1994. Robust financial contracting and the role of venture capitalists. *Journal of Finance* **49**: 371–402.

- Aggarwal R, Erel I, Stulz R, Williamson R. 2009. Differences in governance practices between U.S. and foreign firms: measurement, causes, and consequences. *Review of Financial Studies* **22**(8): 3131–3169.
- Ahlstrom D, Bruton GD. 2006. Venture capital in emerging economies: networks and institutional change. *Entrepreneurship: Theory & Practice* **30**(2): 299–320.
- Aldrich HE, Fiol CM. 1994. Fools rush in? The institutional context of industry creation. *Academy of Management Review* **19**: 645–670.
- Allcock D, Filatotchev I. 2009. Executive incentive schemes in initial public offerings: the effects of multiple agency conflicts and corporate governance. *Journal of Management* **36**(3): 663–686.
- Barnes E, Cahill E, McCarthy Y. 2003. Grandstanding in the U.K. venture capital industry. *Journal of Alternative Investments* **6**(3): 60–80.
- Baum JAC, Oliver C. 1991. Institutional linkages and organizational mortality. *Administrative Science Quarterly* **36**(2): 187–218.
- Beatty RP, Zajac EJ. 1994. Managerial incentives, monitoring and risk bearing: a study of executive compensation, ownership, and board structure in initial public offerings. *Administrative Science Quarterly* **39**(2): 313–335.
- Bell L, Correia da Silva L, Preimanis A. 2006. Report by Oxa Consulting Ltd.: *The Cost of Capital: An International Comparison*. City of London: London, UK. Available at: <http://www.londonstockexchange.com/companies-and-advisors/main-market/documents/brochures/cost-of-capital-aninternational-comparison.pdf> (9 August, 2010).
- Bell RG, Moore CB, Al-Shammari H. 2008. Country of origin and foreign IPO legitimacy: understanding the role of geographic scope and insider ownership. *Entrepreneurship: Theory & Practice* **32**: 185–202.
- Bell RG, Moore CB, Filatotchev I. 2010. Strategic and institutional effects on foreign IPO performance: examining the impact of country of origin, corporate governance, and host country effects. *Journal of Business Venturing* DOI:10.1016/j.jbusvent.2010.11.001.
- Blass A, Yafeh Y. 2001. Vagabond shoes longing to stray: why foreign firms list in the United States. *Journal of Banking & Finance* **25**: 555–572.
- Bourgeois JL. 1980. Strategy and the environment: a conceptual integration. *Academy of Management Review* **5**: 25–39.
- Brau JC, Fawcett SE. 2006. Initial public offerings: an analysis of theory and practice. *Journal of Finance* **61**(1): 399–436.
- Bruner R, Chaplinsky S, Ramchand L. 2006. Coming to America: IPOs from emerging market issuers. *Emerging Markets Review* **7**: 191–212.
- Bruton GD, Chahine S, Filatotchev I. 2009. Founders, private equity investors, and underpricing in entrepreneurial IPOs. *Entrepreneurship: Theory & Practice* **33**(4): 909–928.
- Bruton GD, Prasad D. 1997. Strategy and IPO market selection: implications for the entrepreneurial firm. *Journal of Small Business Management* **35**(4): 1–10.

- Buck T, Shahrim A. 2005. The translation of corporate governance changes across national cultures: the case of Germany. *Journal of International Business Studies* **36**(1): 42–61.
- Cain PJ, Hopkins AG. 1980. The political economy of British expansion overseas. *Economic History Review* **33**: 463–490.
- Cain PJ, Hopkins AG. 1986. Gentlemanly capitalism and British expansion overseas II: new imperialism, 1850–1945. *Economic History Review* **40**: 1–26.
- Carpenter MA, Pollock TG, Leary MM. 2003. Testing a model of reasoned risk-taking: governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal* **24**(9): 803–820.
- Carter RB, Dark FH, Singh AK. 1998. Underwriter reputation, initial returns and the long-run performance of IPO stocks. *Journal of Finance* **53**: 285–311.
- Carter RB, Manaster S. 1990. Initial public offerings and underwriter reputation. *Journal of Finance* **45**: 1045–1067.
- Cassis Y. 1994. *City Bankers 1890–1914*. Cambridge University Press: Cambridge, UK.
- Certo ST. 2003. Influencing initial public offering investors with prestige: signaling with board structures. *Academy of Management Review* **28**(3): 432–446.
- Certo ST, Covin JG, Daily CM, Dalton DR. 2001. Wealth and the effects of founder management among IPO-stage new ventures. *Strategic Management Journal*, June–July Special Issue **22**: 641–658.
- Certo S, Daily C, Cannella A Jr., Dalton D. 2003. Giving money to get money: how CEO stock options and CEO equity enhance IPO valuations. *Academy of Management Journal* **46**: 643–653.
- Certo ST, Daily CM, Dalton DR. 2001. Signaling firm value through board structure: an investigation of initial public offerings. *Entrepreneurship Theory and Practice* **26**(2): 33–50.
- Chaganti R, Mahajan S, Sharma S. 1985. Corporate board size, composition and corporate failures in retailing industry. *Journal of Management* **22**: 400–417.
- Coffee JC. 2002. Racing towards the top? The impact of cross-listings and stock market competition on international corporate governance. *Columbia Law Review* **102**: 1757–1775.
- Coleman JS. 1990. *Foundations of Social Theory*. Harvard University Press: Cambridge, MA.
- Collins M. 1991. *Banks and Industrial Finance in Britain 1800–1939*. Macmillan: London, UK.
- Canyon MJ, Murphy KJ. 2000. The prince and the pauper? CEO pay in the United States and United Kingdom. *Economic Journal* **110**: F640–F671.
- Coombes P, Watson M. 2001. Corporate reform in the developing world. *McKinsey Quarterly* **4**: 89–92.
- Currie R. 1979. *Industrial Politics*. Oxford University Press: Oxford, UK.
- Daily CM, Certo ST, Dalton DR. 2005. Investment bankers and IPO pricing: does prospectus information matter? *Journal of Business Venturing* **20**: 93–112.
- Daily CM, Certo ST, Dalton DR, Roengpitya R. 2003. IPO underpricing: a meta-analysis and research synthesis. *Entrepreneurship: Theory & Practice*, **27**(3): 271–295.
- Daily CM, Dalton DR. 1994. Bankruptcy and corporate governance: the impact of board composition and structure. *Academy of Management Journal* **37**(6): 1603–1617.
- Daily CM, Johnson JL, Dalton DR. 1999. On the measurements of board composition: poor consistency and a serious mismatch of theory and operationalization. *Decision Sciences* **30**: 83–106.
- Dalton DR, Daily CM, Ellstrand A, Johnson J. 1998. Meta-analytic review of board composition, leadership structure, and financial performance. *Strategic Management Journal* **19**: 269–290.
- Deeds DL, Mang PY, Frandsen ML. 2004. The influence of the firms' and industries' legitimacy on the flow of capital into high-technology ventures. *Strategic Organization* **2**(1): 9–34.
- Deephouse DL. 1996. Does isomorphism legitimate? *Academy of Management Journal* **39**(4): 1024–1039.
- Deephouse DL. 2000. Media reputation as a strategic resource: an integration of mass communication and resource-based theories. *Journal of Management* **26**(6): 1091.
- Deephouse DL, Carter SM. 2005. An examination of differences between organizational legitimacy and organizational reputation. *Journal of Management Studies* **42**(2): 329–360.
- DiMaggio PJ. 1988. Interest and agency in institutional theory. In *Institutional Patterns and Organizations: Culture and Environment*, Zucker LG (ed). Ballinger: Cambridge, MA; 3–21.
- DiMaggio PJ, Powell WW. 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* **48**(2): 147–160.
- Ding Y, Nowak E, Zhang H. 2010. Foreign vs. domestic listing: an entrepreneurial decision. *Journal of Business Venturing* **25**(2): 175–191.
- Dunn MB, Jones C. 2010. Institutional logics and institutional pluralism: the contestation of care and science logics in medical education, 1967–2005. *Administrative Science Quarterly* **55**(1): 114–149.
- Eden L, Miller Sr. 2004. Distance matters: liability of foreignness, institutional distance and ownership strategy. In *Theories of the Multinational Enterprise, Volume 16: Diversity, Complexity and Relevance (Advances in International Management)*, Hitt M, Cheng JL-C (eds). Elsevier: New York; 187–221.
- Ejara DD, Ghosh C, Nunn K. 1999. IPO underpricing and aftermarket performance: a comparison of American Depositary Receipt (ADRs) IPOs and U.S. IPOs. *European Finance Association Conference*, 25–28th August, Helsinki, Finland.
- Fama EF, French KR. 2004. New lists: fundamentals and survival rates. *Journal of Financial Economics* **73**: 229–269.
- Fama EF, Jensen MC. 1983. Separation of ownership and control. *Journal of Law and Economics* **26**: 301–325.

- Filatotchev I. 2006. Effects of executive characteristics and venture capital involvement on board composition and share ownership in IPO firms. *British Journal of Management* **17**: 75–92.
- Filatotchev I, Bishop K. 2002. Board composition, share ownership and ‘underpricing’ of U.K. IPO firms. *Strategic Management Journal* **23**(10): 941–955.
- Filatotchev I, Wright M, Arberk M. 2006. Venture capitalists, syndication and governance in initial public offerings. *Small Business Economics* **26**: 337–350.
- Financial Reporting Council. 2006a. Combined code on corporate governance. Financial Reporting Council: London, UK, October. Available at <http://www.frc.org.uk/documents/paganager/frc/Combined%20code%202006%20OCTOBER.pdf> (5 March 2011).
- Financial Reporting Council. 2006b. The UK approach to corporate governance. Financial Reporting Council: London, UK, November. Available at <http://www.frc.org.uk/documents/paganager/frc/FRC%20The%20Uk%20Approach%20to%20Corporate%20Governance%20final.pdf> (5 March 2011).
- Financial Reporting Council. 2010. The UK corporate governance code. Financial Reporting Council: London, UK, June. Available at [http://www.frc.org.uk/documents/paganager/corporate\\_governance/uk%20corp%20gov%20code%20june%202010.pdf](http://www.frc.org.uk/documents/paganager/corporate_governance/uk%20corp%20gov%20code%20june%202010.pdf) (5 March 2011).
- Finkle TA. 1998. The relationship between boards of directors and initial public offerings in the biotechnology industry. *Entrepreneurship: Theory and Practice* **22**: 5–29.
- Fiss PC, Zajac EJ. 2004. The diffusion of ideas over contested terrain: the (non)adoption of a shareholder value orientation among German firms. *Administrative Science Quarterly* **49**(4): 501–534.
- Gillan S, Starks L. 2003. Corporate governance, corporate ownership and the role of institutional investors: a global perspective. *Journal of Applied Finance* **13**: 4–22.
- Glaeser E, La Porta R, Silanes F, Shleifer A. 2004. Do institutions cause growth? *Journal of Economic Growth* **9**: 271–303.
- Gompers PA. 1996. Grandstanding in the venture capital industry. *Journal of Financial Economics* **42**: 133–156.
- Grauer RR, Hakansson NH. 1987. Gains from international diversification: 1968–85 returns on portfolios of stocks and bonds. *Journal of Finance* **42**: 721–739.
- Grubel HG. 1968. Internationally diversified portfolios. *American Economic Review* **58**: 1299–1314.
- Gulati R, Nohria N, Zaheer A. 2000. Strategic networks. *Strategic Management Journal*, March Special Issue **21**: 203–215.
- Hannan MT, Carroll GR. 1992. *Dynamics of Organizational Populations*. Oxford University Press: Oxford, UK.
- Hoskisson RE, Eden L, Lau CM, Wright M. 2000. Strategy in emerging economies. *Academy of Management Journal* **42**(3): 249–267.
- Hosmer DW, Lemeshow S. 2000. *Applied Logistic Regression* (2nd edn). Wiley: New York.
- Hubbard RG, Thornton JL. 2006. Action plan for capital markets. *Wall Street Journal*, 30 November, A16.
- Hurst J, Maula M. 2007. Acquiring financial resources from foreign equity capital markets: an examination of factors influencing foreign initial public offerings. *Journal of Business Venturing* **22**: 833–851.
- Hybels RC. 1995. On legitimacy, legitimation, and organizations: a critical review and integrative theoretical model. In *Academy of Management Best Papers Proceedings*, Moore DP (ed). Academy of Management: Briarcliff Manor, NY; 241–245.
- Hymer SH. 1976. *The International Operations of National Firms*. MIT Press: Cambridge, MA.
- Jain BA, Kini O. 1999. On investment banker monitoring in the new issues market. *Journal of Banking and Finance* **23**: 49–84.
- Jain BA, Tabak F. 2008. Factors influencing the choice between founder and non-founder CEOs for IPO firms. *Journal of Business Venturing* **23**(1): 21–45.
- Jenkinson T, Morrison A, Wilhelm W. 2006. Why are European IPOs so rarely priced outside the indicative price range? *Journal of Financial Economics* **80**: 185–209.
- Kadiyala P, Subrahmanyam A. 2002. Foreign firms issuing equity on U.S. exchanges: an empirical investigation of IPOs and SEOs. *International Review of Finance* **3**: 27–51.
- Kynaston D. 1994. *The City of London (Volume 1): A World of its Own, 1815–1890*. Chatto and Windus: London, UK.
- Kynaston D. 1995. *The City of London (Volume 2): Golden Years, 1890–1914*. Chatto and Windus: London, UK.
- Kynaston D. 1999. *The City of London (Volume 3): Illusions of Gold, 1914–1945*. Chatto and Windus: London, UK.
- Kynaston D. 2001. *The City of London (Volume 4): A Club No More, 1945–2000*. Chatto and Windus: London, UK.
- Leahy K. 2000. Multicollinearity: When the solution is the problem. In *Data Mining Cookbook: Modeling Data for Marketing, Risk and Customer Relationship Management*, Rud OP (ed). Wiley: New York; 106–108.
- Levy H, Sarnat M. 1970. International diversification of investment portfolios. *American Economic Review* **60**(4): 668–675.
- Lockett A, Ucbasaran D, Butler J. 2006. Opening up the investor-investee dyad: syndicates, teams, and networks. *Entrepreneurship: Theory & Practice* **30**(2): 117–130.
- London Stock Exchange. 2009. AIM Disciplinary Notice. Available at <http://www.londonstockexchange.com/exchange/site-search/search-all.html?lang=en&searchString=aim+disciplinary+notice&x=0&y=0> (19 November 2009).
- Loughran T, Ritter Jr. 2004. Why has IPO underpricing changed over time? *Financial Management* **33**: 5–37.
- Makela MM, Maula MVJ. 2005. Cross-border venture capital and new venture internationalization: an isomorphism perspective. *Entrepreneurship: Theory & Practice* **7**(3): 227–257.

- Meyer JW, Rowan B. 1977. Institutional organizations: formal structure as myth and ceremony. *American Journal of Sociology* **83**: 341–63.
- Millestein IM, MacAvoy PW. 1998. The active board of directors and performance of the large publicly traded corporation. *Columbia Law Journal* **98**: 1283–1321.
- Moore CB, Bell RG, Filatotchev I. 2010. Institutions and foreign IPO firms: the effects of ‘home’ and ‘host’ country institutions on performance. *Entrepreneurship: Theory & Practice* **34**(3): 469–490.
- Nahapiet J, Ghoshal S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review* **23**: 242–266.
- Neilsen EH, Rao MVH. 1987. The strategy-legitimacy nexus: a thick description. *Academy of Management Review* **12**: 523–533.
- Nelson T. 2003. The persistence of founder influence: management, ownership, and performance effects at initial public offering. *Strategic Management Journal* **24**(8): 707–724.
- North D. 1990. *Institutions, Institutional Change, and Economic Performance: Political Economy of Institutions and Decisions*. Cambridge University Press: Cambridge, UK.
- O’Brien P, Bhushan R. 1990. Analyst following and institutional ownership. *Journal of Accounting Research* **28**: 55–76.
- Pagano M, Roell AA, Zechner J. 2002. The geography of equity listing: why do companies list abroad? *Journal of Finance* **57**: 2651–2694.
- Pearce JA II, Zahra SA. 1991. The relative power of CEOs and boards of directors: associations with corporate performance. *Strategic Management Journal* **12**(2): 135–153.
- Peng MW, Wang DY, Yi J. 2008. An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies* **39**(5): 920–936.
- Pfeffer J. 1972. Size and composition of corporate boards of directors: the organization and its environment. *Administrative Science Quarterly* **17**: 218–222.
- Pollock TG. 2004. The benefits and costs of underwriters’ social capital in the U.S. initial public offerings market. *Strategic Organization* **2**(4): 357–388.
- Pollock TG, Porac JF, Wade JB. 2004. Constructing deal networks: brokers as network ‘architects’ in the U.S. IPO market and other examples. *Academy of Management Review* **29**(1): 50–72.
- Pound J. 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics* **20**: 237–265.
- Provan K. 1980. Board power and organizational efficiency among human service agencies. *Academy of Management Journal* **23**: 221–236.
- Rao H. 1994. The social construction of reputation: certification contests, legitimation, and the survival of organizations in the American automobile industry: 1895–1912. *Strategic Management Journal*, Winter Special Issue **15**: 29–44.
- Rao H, Davis G, Ward A. 2000. Embeddedness, social identity and mobility: why firms leave the NASDAQ and join the New York Stock Exchange. *Administrative Science Quarterly* **45**: 268–292.
- Rechner PL, Dalton DR. 1991. CEO duality and organizational performance: a longitudinal analysis. *Strategic Management Journal* **12**(2): 155–160.
- Ritter J. 2003. Difference between European and American IPO markets. *European Financial Management* **9**: 421–434.
- Ritter J, Welch I. 2002. A review of IPO activity, pricing, and allocations. *Journal of Finance* **57**: 1795–1828.
- Robbie K, Wright M, Chiplin B. 1997. The monitoring of venture capital firms. *Entrepreneurship: Theory and Practice* **21**: 9–28.
- Sanders WG, Boivie S. 2004. Sorting things out: valuation of new firms in uncertain markets. *Strategic Management Journal* **25**(2): 167–186.
- Sanders WG, Tuschke A. 2007. The adoption of institutionally contested organizational practices: the emergence of stock option pay in Germany. *Academy of Management Journal* **50**(1): 33–56.
- Singh J, Tucker D, House R. 1986. Organizational legitimacy and the liability of newness. *Administrative Science Quarterly* **31**: 171–193.
- Smith R, Szymanski S. 1995. Executive pay and performance: the empirical importance of the participation constraint. *International Journal of the Economics of Business* **2**(3): 485–495.
- Solnik B. 1974. An equilibrium model of the international capital market. *Journal of Economic Theory* **8**: 500–524.
- Stiglitz JE. 1985. Credit markets and the control of capital. *Journal of Money, Credit and Banking* **17**: 133–152.
- Suchman MA. 1995. Managing legitimacy: strategic and institutional approaches. *Academy of Management Review* **20**: 571–610.
- Tabachnick BG, Fidell LS. 2007. *Using Multivariate Statistics* (5th edn). Allyn & Bacon: Boston, MA.
- Thomson Securities Data Corporation. 2008. *New Issues Database*. Thomson Financial: New York.
- Useem M, Bowman EH, Myatt J, Irvine CW. 1993. U.S. institutional investors look at corporate governance in the 1990s. *European Management Journal* **11**: 175–189.
- Uzzi B. 1997. Social structure and competition in interfirm networks: the paradox of embeddedness. *Administrative Science Quarterly* **42**: 35–67.
- VentureOne. 2001. *The VentureOne Venture Capital Sourcebook*. VentureOne Corporation: San Francisco, CA.
- Wat L. 1983. *Strategies for Going Public*. Deloitte Haskins and Sells: New York.
- Watson Wyatt Worldwide. 2009. *Executive Pay Practices around the World*. Watson Wyatt: London, UK.
- Woidtke T. 2002. Agents watching agents? Evidence from pension fund ownership and firm value. *Journal of Financial Economics* **63**: 99–131.
- Wright M, Pruthi S, Lockett A. 2005. International venture capital research: from cross-country comparisons to crossing borders. *International Journal of Management Reviews* **7**(3): 1–31.

- Wright RF. 1995. Logistic regression. In *Reading and Understanding Multivariate Statistics*, Grimm LG, Yarnold PR (eds). American Psychological Association: Washington, DC; 217–244.
- Zaheer S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal* **38**(2): 341–363.
- Zaheer S. 2002. The liability of foreignness, redux: a commentary. *Journal of International Management* **8**: 351–358.
- Zaheer S, Mosakowski E. 1997. The dynamics of the liability of foreignness: a global study of survival in financial services. *Strategic Management Journal* **18**(6): 439–464.
- Zahra SA, Pearce JA. 1989. Boards of directors and corporate financial performance: a review and integrative model. *Journal of Management* **15**: 291–334.
- Zajac EJ, Westphal JD. 1994. The costs and benefits of incentives and monitoring in the largest U.S. corporations: when is more not better? *Strategic Management Journal*, Winter Special Issue **15**: 121–142.
- Zajac EJ, Westphal JD. 2004a. Should sociological theories venture into ‘economic territory’? Yes! *American Sociological Review* **69**(3): 466–471.
- Zajac EJ, Westphal JD. 2004b. The social construction of market value: institutionalization and learning perspectives on stock market reactions. *American Sociological Review* **69**(3): 433–457.
- Zucker LG. 1986. Production of trust: institutional sources of economic structure. In *Research in Organizational Behavior (Volume 8)*, Staw BM, Cummings LL (eds). JAI Press: Greenwich, CT; 53–111.