

**Strategic and Institutional Effects on Foreign IPO Performance: Examining the Impact of
Country of Origin, Corporate Governance, and Host Country Effects**

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Abstract

Although some empirical attention has been paid to the study of domestic “threshold” firms (i.e., IPOs), to date there has been very little attention paid to the study of *foreign* IPOs and the factors which impact the benefits of international listings. We integrate signaling research with institutional perspective and examine the inter-relationships between IPO performance, the level of investor protection in an issuer’s home country, the level of board independence, and foreign market choice for listing the new issue using a sample of 202 foreign IPOs listed in the U.S. or U.K in 2002-2007. One primary factor impacting the success of new equity issues of foreign firms is found in the strength of legal environment surrounding these organizations in their countries of origin. Furthermore, governance mechanisms, such as board independence, are another factor which could impact the success of foreign firms at IPO. Yet, our findings suggest the salience of country and corporate governance signals for foreign IPO firms are contingent on the institutional environment of the chosen IPO market. Consequently, the effects of country of origin and governance signals are moderated by the host country effects, and this suggests that a more contextualized conception of IPO valuation is necessary.

INTRODUCTION

Recently, the growth in international capital market integration has led an increasing number of firms to make their first equity offers outside their country of origin (Chemmanur and Fulghieri, 2006). According to Thomson Financial, in 2006 foreign companies accounted for 23.4% of IPO proceeds on the New York Stock Exchange (NYSE). The National Association of Securities Dealers Automated Quotations system (NASDAQ) also raised over \$38.3bil. Likewise, non-British companies raised \$22.7 billion through initial public offers on the London Stock Exchange in 2007. The study of IPO firms is especially relevant to strategy scholars because a successful IPO is critical to the development of international firms. Indeed, completing an IPO and becoming a professionally managed firm is often a necessary stage of development for firms to be capable of competing in international markets (Prasad, Vozikis, Bruton and Merikas, 1995). To date there has been very little attention paid to the study of firms who make their first public stock offerings on foreign exchanges and the factors which impact the benefits of international listings (Davenport, Dolan, and Hayashi, 2000; Chemmanur and Fulghieri, 2006). We attempt to address this gap in the literature by examining three possible drivers of IPO valuation, namely country of origin effects (home country levels of investor protection), governance (level of board independence at the time of the IPO), and market choice (listing of the foreign IPO in the US vs. UK capital markets).

Attempts to fully understand and explain the IPO firm's stock market performance, including its valuation, have remained elusive since IPO research began in the early 1980's mainly due to information asymmetry between investors and managers/owners of the firm. One of the most significant challenges investors face when evaluating a new issue is the lack of publicly available information about the firm and deriving reliable estimates of the firm's future

prospects for growth. Since firms at IPO have little operating history, investors cannot rely upon an extensive track record of earnings, cash flows, or sales to judge a firm's health and potential for growth. These uncertainties are particularly acute for firms who make their first equity offerings on foreign stock exchanges. In addition to a "liability of newness," a foreign IPO may suffer from a "liability of foreignness" that increases information asymmetries between a firm and its potential investors in a host country (Petersen and Pedersen, 2001).

In response, scholars have focused upon uncovering a range of characteristics associated with the IPO firm that may convey its value to potential investors at IPO and improve their short- and long-term market performance (e.g., Certo *et al.*, 2001; Filatotchev and Bishop, 2002; Sanders and Boivie, 2004). Yet extant research has predominantly centered upon domestic IPOs who list on local stock exchanges. We extend this research and argue that one factor that should impact the success of new equity issues of foreign firms relates to the legal environment surrounding these organizations at home. A firm's legal environment holds a preeminent place in corporate governance. The important functions of a legal system include holding managers accountable to shareholders, ensuring shareholder voting privilege, preventing self-dealing by managers, and protecting creditors. For countries found lacking in these elements, majority shareholders have the ability to divert resources from the corporation in an attempt to avoid sharing benefits with minority investors. In order for external investors to provide financing to unproven organizations in institutionally distant countries, legal protection must be accessible. Demirgüç-Kunt and Maksimovic (1998) found greater respect for the law leads to greater use of external finance for firms. Building on these arguments we suggest that "country-of-origin" effects associated with investor protection in the IPO firm's home country may have an impact on its performance and requires strategic considerations in governance and market choices.

In addition, the IPO's performance may be affected by firm-level, governance characteristics. Governance mechanisms include not only a country's laws and the regulatory institutions that enforce the laws, but also formal and informal monitors of corporations (Aggarwal, Erel, Stulz, and Williamson, 2007). Up to this point, a significant body of literature has explored the effects corporate governance has on corporate investment, cost of funds, and company growth (Becht, Bolton, and Röell; 2003). In fact, a recent McKinsey survey of more than 200 institutional investors who hold accounts worldwide revealed that their decision to invest is largely determined by the governance structure of a firm (Coombes and Watson, 2000). As many as 75% of institutional investors indicated that board practices were often as important as financial performance (Gillan and Starks, 2003). Further, a majority of respondents indicated that a well governed firm would prompt them to pay a premium over a comparable firm that had lower governance measures. In a separate study, Useem, Bowman, Myatt and Irvine (1993) pointed out that an independent board that also had a diverse set of skills and experiences was considered important to investors. Therefore, in addition to the signaling value associated with the legal environment surrounding the country of origin of foreign new issues, board independence may be another factor which could impact the success of foreign firms at IPO. Up until the current study, the value investors place in *foreign* firms with independent boards at the time these firms become publicly held organizations has yet to be empirically tested.

Despite the importance of both home country and internal governance signals, the institutional context in which these signals are received may impact their salience with potential investors. For many years scholars have recognized that legal differences between common and civil law countries often have significant ramifications to the success of firms. However, outside of political science, few scholars have endeavored to understand how differences within a single

regulatory tradition—specifically those founded within common law traditions—may impact the ability of external firms to acquire capital resources within these markets. While investors may indeed reference home country and corporate governance cues when evaluating their participation in foreign IPOs, the importance of these signals likely depend upon the regulatory contexts in which these investors are conducting their evaluation. Thus, the manner in which investors respond to foreign firms at IPO also reveals the importance of country and corporate governance signals of foreign firms. The basic argument is that some signals are more salient in certain institutional contexts over others, resulting in the need to examine signals in multiple institutional contexts.

In this paper, we integrate signaling research and institutional perspectives to make a number of contributions to previous research. First, although previous IPO studies recognize potential signaling effects of the firm’s governance characteristics (Certo *et al.*, 2001; Filatotchev and Bishop, 2002; Sanders and Boivie, 2004), there is very little research on corporate governance effects on performance of *foreign* IPOs. By focusing on the signaling role of board independence, we attempt to close this conceptual and empirical gap. Second, we advance previous research by considering performance outcomes of the “home country” effects associated with investor protection in the country of origin of the IPO firm. We develop theoretical arguments and provide empirical evidence that suggest that these home country effects may be another additional set of signals that significantly affect performance.

Third, prior research on the impact of corporate governance on IPO performance has been limited to single institutional settings. However, the institutional setting in which these studies are conducted should impact the outcome (e.g., La Porta *et al.*, 1998). Therefore, conceptual contributions of this study include the integration of institutional and signaling

theories. More specifically, scholars have tended to treat agency framework as a universal theory that will be applied exactly the same in different institutional environments. It is reasonable to expect that agency theory should be applied from a finer-grained perspective that makes adaptations based on the institutional setting. In response, this paper builds on comparative governance and institutional theories to contrast the impact of corporate governance on performance of foreign IPOs in the UK and the USA. While belonging to the same common law family of corporate governance (La Porta *et al.*, 1997) these two countries have followed distinctively different paths in terms of corporate governance regulation. In fact, the U.S. approach has been to develop regulatory mechanism in the fields of corporate and securities law. On the other hand, U.K. investors and corporate actors have proposed voluntary codes as an alternative to law (Aguillera, Filatotchev, Jackson and Gospel, 2008). Utilizing a sample of foreign IPOs in which the U.S. or U.K represent the first public listing for a firm located outside of these countries, allows us to contrast these two mature markets (US vs. UK) to gain a finer-grained understanding of the effects of the institutional environment of strategic issues.

Finally, we extend previous research by considering combined effects of firm- and country-level characteristics on IPO performance. More specifically, we explore two- and three-way interactive effects of board independence, host country and country-of-origin effects. This approach also controls for many other extraneous variables, while examining the role that differences in institutional environments and regulatory approaches play on inter-relationships between corporate governance and performance.

SIGNALING THEORY AND FOREIGN IPO PERFORMANCE

The fundamental problem that many point to in their attempts to dissect the IPO valuation puzzle stems from the fact the executives and other insiders in an IPO firm will typically know more about the “true value” of their firm than will outsiders (Anderson, Beard, and Born, 1995;

Keasey and Short, 1997; Lawless, Ferris, and Bacon, 1998). Investing in new issues is an inherently risky proposition, and, in order to investigate new issues, investors will often try to obtain a composite picture of a firm by referring to a host of internal and external cues (e.g. past sales, earnings projections, industry competitiveness) which may potentially impact the success of the firm as a publicly held entity. Investors in western IPO markets are often considered knowledgeable traders and remain in the IPO market because of their records of success. Their success stems from the ability to spot private firms that have the proper management and the organizational capabilities to prosper long after their first shares are sold. These investors are certainly aware that not all new issues will go on to achieve Fortune 500 status after going public.

Signaling theory describes the methods investors may use in situations of information asymmetry (Spence, 1973) and is consistent with the notion that insiders of an IPO hold more information than outsiders. Two central criteria of signaling theory are: (1) signals be known in advance and be observable, and (2) they must also be costly or difficult to imitate (Spence, 1973; Ross, 1977; Certo *et al.*, 2001). From a signaling perspective, many researchers have looked at a wide assortment of organizational, third party, and environmental attributes that serve as indicators of the strength of an organization at IPO and lessen the likelihood managers would need to reduce the offer price in order to attract investors (e.g., Beatty, 1989; Carter and Manaster, 1990; Ritter, 2003). Finance scholars have explored the signals associated with the price of new issues. Others have demonstrated that IPOs of firms in certain knowledge intense industries, can pose challenges to the investing public, since investors may not be fully aware of a firm's collection of intangible assets. In addition to cues associated with internal organizational characteristics, research has shown the signaling value of third parties (e.g., prestigious

underwriters, audit firms, and alliance partners) to the performance of firms at IPO. Recent research has also demonstrated the positive signals emerging market firms send to potential U.S. investors, especially when these organizations concentrate on internationalizing their operations prior to making their first public equity offers in the U.S. (Bell, Moore, and Al-Shammari, 2008).

Kim and Ritter (1999) point out that traditional finance theory has assumed historical accounting measures, cash flow, book value, earnings and revenue can all be incorporated to help predict the value of a firm at IPO. However, these authors found that only 5% of the variance in IPO values can be attributed to traditional accounting measures. Adding to the complexity that investors face when evaluating their participation levels in a new foreign issue, many foreign firms have short operating history which can impede the market's ability to assess their future value (Wat, 1983).

More recent studies in the strategic management field emphasize that the firm's governance characteristics may be another potent signal that investors may consider when making decisions about the firm's ability to deal with information asymmetries and associated agency costs (e.g., Certo et al., 2001; Filatotchev and Bishop, 2002; Sanders and Boivie, 2004). We develop this strand of research further by suggesting that these firm-level, governance signals should be considered in conjunction with institutional and legal environments of the IPO's firm home and host countries. In the subsequent sections we develop these arguments further and suggest testable hypotheses.

Legal Protection in the Country of Origin

Unlike other types of IPO signals which emanate from the firm itself or through third party affiliations, a foreign IPO firm's country of origin represents a unique extra-organizational

signal. Potential investors may reference country related cues to judge the merits of foreign firms attempting to make first time equity issues. In keeping with the signaling perspective, companies from countries with “questionable” legal environments may raise suspicion among potential investors regarding the safety and security of their investments.

Therefore, issues surrounding a firm’s country of origin may work to enhance investor uncertainties regarding the safety and security of their investments. For many years finance authors have pointed to the benefits that cross-border diversification can bring to equity portfolios (Grubel, 1968; Levy and Sarnat, 1970; Solnik, 1974; Grauer and Hakansson, 1987; Eldor, Pines, and Schwartz, 1988; DeSantis and Gerard 1997; among others). Yet despite the benefits, research has also shown that investors do not always exploit such international diversification opportunities. Instead, investors tend to allocate a relatively large fraction of their wealth to domestic equities, a phenomenon commonly called the “home bias” (Obstfeld and Rogoff, 2000; Tesar and Werner, 1995). Indeed, for many years finance researchers have pointed to the unique country related risks associated with investments in foreign securities can entail. These include their vulnerability to foreign market volatility and changes in exchange rates, as well as their susceptibility to foreign political, economic, and social events. These risks can be quite pronounced in some countries and benign in others.

While investors are accustomed to the legal environment surrounding western firms, they tend to be more apprehensive in the security of their investments in foreign firms. Studies have found that the legal protection afforded to outside investors has a significant bearing on the size, value, and liquidity of a nation’s capital markets. La Porta, *et al.* (1998) suggested that shareholders are better protected when certain standards are ensured by corporate law, including (1) proxy by mail, (2) non-blocking of shares before the shareholders’ meeting, (3) cumulative

voting or proportional representation for designating members of the board of directors, (4) oppressed minority protection, (5) preemptive right to new issues, and (6) a relatively low percentage of shareholders required to call an extraordinary meeting. La Porta, *et al.* (1998, 1999) also found that while common-law countries tended to grant the best legal protection to investors, French civil law countries grant the weakest protection. Others have also endeavored to examine the support that a country's legal environment provides organizations seeking additional resources. For example, Demirgüç-Kunt and Maksimovic (1998) utilize the International Company Risk Guide's Law and Order indicators of the effectiveness of a country's legal system rather than the measures identified by La Porta, *et al.* (1998, 1999) to show that countries with appropriate legal systems offer greater protection of long-term external financing and are able to grow faster. Roe (2003) criticized identifying Common Law as providing inherently high levels of protection for shareholders' rights by suggesting that much of the protection offered to shareholders in the United States has resulted from legislation that was necessary because Common Law courts had insufficiently protected shareholder rights. Yet despite this criticism, Anglo-Saxon legal systems do appear to provide stronger protection for shareholder rights (Coffee, 2002). In addition, La Porta *et al.*, (1998, 1999) observed that financing activity is significantly reduced in countries with poor investor protection systems. These findings support research by Lins, Strickland and Zenner (2004) as well as that of Reese and Weisbach (2002), which shows that weaker shareholder protection in a domestic market may be one reason why a number of publicly held foreign firms have chosen to cross-list their equity shares on both their local exchange and on U.S. exchanges.

Because of the uncertainty surrounding a foreign IPO, the strength of a home country's legal environment may have a significant bearing on the success of foreign firms at IPO. Some

legal scholars suggest foreign firms who engage in the process of listing on U.S. stock exchanges commit themselves to respect minority investor rights and to provide fuller disclosure (Coffee, 2002). However, the legal environment surrounding foreign new issues is especially salient to investors in the U.S. and U.K. markets because it relates not only to minority investor rights, but also in the ability of investors to sue and enforce a legal judgment to recover all or a sizable portion of their investments. Even if a U.S. investor was successful in bringing a lawsuit against a firm domiciled in a foreign country, enforcement of judgments may be difficult if not impossible. Western courts generally do not have jurisdiction over foreign defendants and foreign courts often do not recognize judgments of western courts for liabilities grounded in U.S. or U.K. securities laws. Therefore, the only protection available to western investors of foreign firms may be whatever legal remedies are available in the issuer's home country. In some cases, these legal remedies may be very similar to those of western investors, and investors may feel more at ease in backing riskier investments in firms originating from these countries. Alternatively, the legal remedies against firms domiciled within emerging economies may be limited to such an extent that western investors may be hesitant to invest in firms which originate from these markets. Thus, we expect IPOs from countries with higher levels of investor protection to perform better in western capital markets. Formally stated,

H1: There is a positive relationship between investor protection in the country of origin and performance of the foreign IPO.

Board Independence

In a recent survey, Gillan and Starks (2003) revealed that institutional investors considered the firm's corporate governance practices at least as important as financial performance when evaluating new issues. In fact, a majority of respondents revealed that a well governed firm would prompt them to pay a premium over a comparable firm that had lower

governance measures. A number of studies have demonstrated that independent boards that possess a diverse set of skills and experiences are considered important to investors (Useem, Bowman, Myatt, and Irvine; 1993) because it implies the firm will be better governed and capable of attaining higher performance levels (Millestein and MacAvoy, 1998). In light of the weight investors place in well governed firms, foreign IPOs with independent boards may experience considerable success in their new equity offers.

When foreign IPOs signal their willingness to adhere to heightened governance standards by increasing the level of independent members on their corporate boards, it is conceivable to expect that investors will be more willing to respond with increased demand for the new issue. There are a number of exchange mandated changes which foreign firms must adhere to in order to list stock on U.S. or U.K. exchanges. While domestic firms are required to maintain a majority of independent members on their boards, western exchanges do not compel foreign firms to adhere to these governance requirements when listing in the U.S. (NYSE or NASDAQ) or U.K. (LSE or AIM). Because of the voluntary nature of the board independence requirement on western stock exchanges, investors may view enhanced independence on the firm's board as a positive sign that the firm will break away from the governance model of the firm's home country. Indeed, an independent board may signal a governance structure which western investors have grown accustomed to and may even expect when evaluating unfamiliar firms from distant countries. In addition, increased board independence may suggest to potential investors that the firm is attempting to increase its level of transparency and monitoring by adhering to a more demanding corporate governance system than the accepted model espoused in its home market. There is empirical evidence suggesting that investors pay a premium when

the firm has an independent board (IRB, 2000). Thus, we expect higher levels of board independence to be associated with higher levels of IPO performance. We state this formally as:

H2: There is positive relationship between the level of board independence and foreign IPO performance.

Previous arguments suggest that “country-of-origin” effects and board independence may be powerful governance-related signals that affect IPO firm’s performance. However, these signals are not mutually independent, and they may complement each other. For example, Ang and Brau (2003) suggest that an IPO allows multiple signals, making a confounding strategy possible. Previous research has found strategic actions such as increasing the level of international operations and board insider ownership effectively reduce the effect of negative country of origin signals when going public (Bell *et al.*, 2008). As a result, the IPO firm is involved in a complex process of evaluating the costs and benefits of various signaling mechanisms in search of an optimal combination that minimizes both information asymmetry and costs of signaling (Titman and Trueman, 1986). Since country-of–origin effect is given for a particular foreign IPO, one strategic action that firms take in terms of creating a confound governance effect is to increase levels of board independence. Thus, governance signals should interact with country of origin signals and significantly predict IPO valuation. Hence:

H3: The level of board independence positively moderates the relationship between investor protection and foreign IPO performance.

Market of Listing and Regulatory Trade-offs.

In previous sections we linked a foreign IPO’s performance with two firm-level factors: its country-of-origin effect and the signaling role of the firm’s board. In addition, there may be

external factors associated with the firm's choice of listing market that affects IPO performance directly or indirectly. A number of recent studies associated with the contingency theory of corporate governance argue that the effectiveness of firm-level governance parameters is contingent on various external factors associated with the firm's environment (see Aguilera *et al.*, 2008, for a review). Accordingly, this contingency framework suggests that corporate governance interrelates with variations in firms' internal and external strategic resources that shape its interdependence with market, regulatory, or institutional environments. For example, Schmidt *et al.* (2004) analyze potential complementarities between various elements of national governance systems and governance practices at the organizational level. Recent comparative work stresses the potential for organizational diversity within national systems, so that institutions may support certain types of organizations at the expense of others (Aoki, 2001; Williamson, 1991). The benefit of a contextual- and organizational-level view of corporate governance is a better understanding of organizational effectiveness resulting from the coincidence and interaction among multiple factors.

A major theme in the 'law and finance' literature in recent years has been the importance of legal origins in determining cross-national differences in corporate governance (La Porta *et al.*, 1998; La Porta *et al.*, 2000). While the legal origins approach allows for variation within the group of civil law countries, less attention has been paid to differences within the Anglo-Saxon group of common law countries. While common law countries may use similar types of law, substantial variation exists in terms of corporate governance regulatory traditions, in particular the importance of so-called 'soft law' and self-regulatory arrangements, such as codes. The U.K. has long tended to supplement legal regulation with a strong tradition of voluntary self-regulation in areas related to listing, takeovers, and accounting. In recent years, this tradition has

advanced through the development of a set of codes for corporate governance, which have culminated in the Combined Code. The U.K. tradition contrasts with that of the U.S. which developed a more extensive body of securities and corporate law at both Federal and State level beginning from the inter-war years. Meanwhile, soft law remains less pronounced than in the U.K. The most recent manifestation of the ‘hard’ law approach was the passage of the Sarbanes-Oxley Act (SOX) in 2002. Hence, despite their common legal origins, the U.K. and U.S. differ substantially in the relative importance of legal regulation and self-regulation.

Such differences between national regulatory traditions have been emphasized within political science. Broadly, this literature argues that differences in the historical relationships between states and societies—and the different social classes and elite groups within them—shape the typical modes of policy intervention and the ultimately the effectiveness of state action. Several recent contributions have focused on the role of politics and regulatory cultures in the development of corporate governance (Roe, 1994; 2003). This literature argues that legal regulation operates as part of a wider institutional context with other regulative and normative pressures on corporations (DiMaggio and Powell, 1991; Scott, 2003). Conversely, the scope and effectiveness of voluntary self-regulation depends closely on the institutionalization of trust, social networks, and intermediary associations capable of collective action that exerts discipline on market actors.

These perspectives suggest that different regulatory approaches to corporate governance are the result of complex interactions of law, politics, and institutions that are often specific to a particular country’s history. They also have specific cost-benefit properties, or regulatory trade-offs (Aguillera *et al.*, 2008). The recent U.K. approach based on codes is argued to offer the advantage of not imposing a ‘one size fits all’ approach to corporate governance and thereby

promotes considerable flexibility. However, it may have problems with market-based enforcement of compliance with good practices. Meanwhile, the more legalistic U.S. approach may offer certain advantages in terms of coverage, greater powers of enforcement, and ultimately high levels of compliance. However, concerns with the legal approach have been the lack of flexibility and high costs of “over-regulation”.

Bearing in mind these differences in regulatory approaches in the US and UK we argue that the foreign IPO firm’s performance will be affected by institutional and regulatory traditions not only in its country of origin, but also in its chosen country of listing. Thus, in addition to “home country” effects, we suggest “host country” effects may also impact the inter-relationships between firm-level parameters and performance. More specifically, we argue that corporate governance regulation within a host country may have an impact on the salience of foreign IPO signals and possible confounding effects that, in turn, affect performance.

With the passage of Sarbanes-Oxley legislation it is reasonable to suggest that the playing field for new issues in New York may be somewhat more level than its London counterpart. Once a foreign IPO has met the stringent transparency and listing standards of the SEC and New York exchanges, individual signals associated with a new foreign issue’s legal environment as well as its governance structures may become less salient to investors evaluating their participation levels in a foreign new issue. Alternatively, in London, legal protection levels as well as board independence should prove especially important to first day investors because the LSE and AIM listing standards are considerably less stringent than their New York counterparts. Since the U.K. regulatory environment is based on a comply-or-explain principle, investors may put a premium on IPOs with more robust governance systems and firms coming from countries with higher governance standards and legal protection of minority investors.

In addition, Aguilera *et al.* (2008) emphasize that governance attributes impose monitoring costs on firms. More specifically, in their discussion of signaling effects of governance factors in IPO firms Sanders and Boivie (2004) argue that an increase in the marginal costs of monitoring may more than offset the reduction in investor uncertainty. These arguments are consistent with more recent research that suggests that investors may be concerned with “over-regulation” of firms. For example, Claessens *et al.* (2007) provide evidence that the stock-market performance of firms with higher individual Institutional Shareholder Service (ISS) corporate governance score is relatively lower in countries with high governance standards compared to well-governed firms in countries with lower standards. They argue that investors may consider a combination of stringent internal governance and high national governance standards as too excessive to the extent that investors put a discount on this specific population of firms. Building on the signal salience and over-regulation arguments, we suggest the following two-way interaction effects:

H4a: The relationship between investor protection and performance of foreign IPOs is negative for listings in the US.

H4b: The relationship between board independence and performance of foreign IPOs is negative for listings in the U.S.

Finally, a number of studies suggest to view corporate governance as a system of inter-related elements having strategic or institutional complementarities (Aoki, 2001; Milgrom and Roberts, 1994; 1995). Some authors have recognized that governance mechanisms operate interdependently, with the overall effectiveness depending on a simultaneous operation of several mechanisms in limiting managerial opportunism and strategic errors (Rediker and Seth, 1995; Walsh and Seward, 1990). A more recently developed set-theoretic approach to organizations suggests that for individual firms, corporate control involves different sets of practices that need

to operate as a whole in order to be effective (Fiss, 2007). Since alternative control mechanisms exist, greater use of one mechanism need not to be positively related to firm performance. Similarly, where one specific mechanism is used less, others may be used more, resulting in equally good performance (Agrawal and Knoeber, 1996). Different governance mechanisms can operate in concert, and the cost-benefit trade-offs among a variety of governance mechanisms would determine their use.

Therefore, investors may evaluate their participation levels in foreign IPOs less upon individual signals, and more on the unique bundle of signals surrounding a foreign IPO. Our arguments suggest that this bundle includes not only focal firm's corporate governance, but also country-of-origin and host country effects. Once a foreign IPO has met the stringent transparency and listing standards of the New York exchanges, individual signals associated with a new foreign issue's legal environment at home as well as its governance structures may become less important to investors evaluating a new foreign issue. In this sense, both legal protection and board independence levels would have a stronger interactive effect among those firms who choose to list in London compared to on US exchanges. In addition, a combination of high legal protection at home, board independence and listing in the US may create the "over-regulation" effect outlined above. These arguments suggest a three-way inter-relationship between the foreign IPO firm's home legal protection, its board independence and its choice of a listing market. Hence,

H5: There is a three-way interaction between investor protection, board independence and choice of listing market in explaining performance of foreign IPOs: when investor protection and board independence are both high, listing in the U.S. has negative relationship with performance of foreign IPOs.

SAMPLE AND DATA COLLECTION

Research which examines the capital raising activities of firms in foreign capital markets can be classified in two categories: a) cross-listings, where public firms listed on one stock exchange list on another exchange, frequently in a foreign market; and b) foreign initial public offers, where a U.S. or U.K. stock exchange represents the first public listing for a firm located outside these countries. Because of the growth in foreign firms seeking equity capital on U.S. and London stock exchanges, direct foreign initial offerings has emerged as a new stream of research with a small but growing number of studies (Bell *et al*, 2008; Bruner, Chaplinsky and Ramchand, 2006; Kadiyala and Subrahmanyam, 2002; Ejara, Ghosh, and Nunn, 1999). However, studies investigating the cross-listings of public firms on foreign exchanges have received considerably more attention (Karolyi, 2006; Foerster and Karolyi, 1999). Bruner *et al.* (2006) suggests that much of the problems associated with studies of foreign firms attempting to raise capital on major exchanges stems from the fact that a significant portion of the firms included in most studies are already listed in their home market. Therefore, in contrast to earlier research, our study focuses exclusively on a hand selected sample of foreign issuers which are not listed on any exchange prior to their U.S. or U.K. initial public offer.

Due to the nature of the firms under investigation in this study, an appropriate sample selection criteria is imperative. We began by utilizing Thomson Financial's Security Data Corporation (SDC) New Issues database to identify all foreign firms that made initial public offerings in the U.S market, as well as those who made first initial public offerings in the U.K market between 2002 and 2006. This sample period was chosen as it reflects the time period after the governance provisions specified within Sarbanes-Oxley legislation went into effect for U.S. new issues. 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 U.S., for the U.S.

sample, and outside the U.K. for the U.K. sample of foreign IPO firms. Consistent with prior IPO research conducted upon domestic samples, firms excluded from both the U.S. and U.K. samples were stock listings resulting from mergers or acquisitions, as well as from spin-offs of publicly-listed firms. In addition, units, warrants and rights offerings were excluded from analysis. We also followed selection procedures outlined by Bruner *et al.*, (2006) by removing all new issues of foreign utility firms from consideration. Finally, we eliminated from consideration U.S. or London financial services incorporated in Bermuda, Bahamas and Cayman Islands. These firms 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 then referred to each offering firm's prospectus to acquire our governance and control variables. Our final sample includes 103 and 99 foreign IPOs in the US and UK, respectively.

Dependent Variable. Previous research in finance and strategic management fields has generated a number of proxies for IPO performance, including underpricing (e.g., difference between offer and first day of trading prices), offer price-to-sales and offer price-to-assets ratios, etc. However, these proxies have been criticized for over-restrictive underlying assumptions (see Chahine and Filatotchev, 2008, for a discussion). As an alternative, we employed the recently developed IPO Success measure (Gulati and Higgins, 2003) as the mechanism to test our hypothesis associated with foreign IPO performance. This single indicator of financial success is comprised by averaging four separate financial measures: net proceeds of the IPO offering, pre-money market valuation, the 90-day post-IPO market valuation, and 180-day post-IPO valuation.

Independent Variables. Investor protection is commonly defined as the protection of outside investors by the enforcement of regulations and laws (La Porta *et al.* 2000; Shleifer and Wolfenzon 2002). La Porta *et al.* (2000) first suggested that investors rights are protected when

they receive dividends on pro-rata terms are allowed to vote for directors, to participate in shareholders' meeting, to subscribe to new issues of securities on the same terms as the insiders, and to sue directors or the majority for suspected expropriation. Investors who do not have these powers are susceptible to the possibility that insiders can steal a firm's profits. Following Defond and Hung (2004) and Leuz, Nanda, and Wysocki (2003), we measure the strength of a country's law enforcement institutions using the mean score of three law enforcement variables identified by La Porta *et al.* (1998): 1. the efficiency of a country's judicial system, 2. tradition of law and order within a country 3. extent of government corruption. La Porta's index ranges from 0 to 6, with higher scores representing stronger law enforcement institutions. We utilize these proxies to assess investor protection levels in the countries represented in this study.

Board independence was assessed by utilizing the ratio of independent directors to total board size. Following other studies (Carpenter *et al.*, 2003; Certo *et al.*, 2001) in order to capture director independences, our board composition measure classifies independent (non-management) directors as only those with no prior professional or personal tie to the company or to management. This information was collected from the offering prospectuses.

Finally, the Market Choice variable indicated the firm's market of listing: Non-US IPOs that listed on US exchanges (NYSE and NASDAQ) were coded as 1, and while those foreign firms that listed on UK exchanges (LSE and AIM) were coded as 0.

Control Variables. Foreign firms making initial public offers on U.S. exchanges vary greatly in a number of respects. Following previous research we controlled for the effects of firm size, age, and industry as well as a host of other firm related factors which could impact their success at initial offering. This information will be collected from the offering prospectuses.

Firm size was accounted for by accounting for the revenues at the time of IPO (Sanders and Boivie, 2004). Firm age was operationalized by taking the difference in years between the IPO firm's founding date and the date of the IPO (Daily, Certo, Dalton, and Roengpitya, 2003). We controlled for effect prestigious underwriters may have on the success of foreign firms at IPO by utilizing the Carter and Manaster (1990) index. The measures are based on analyzing investment banks' positions in the tombstone announcements of IPOs. The scale presented in Carter *et al.* (1998) is incremented in units of 0.125. Scores may assume a value ranging from 0, indicating lowest prestige, to 9, indicating highest prestige. Following Daily *et al.* (2005), we controlled for industry effects using a dichotomous variable indicating whether the IPO operates in a high-tech industry or not. Firms identified as operating in high technology industry sectors were coded as 1, while those in low-technology industry sectors were coded as 0. The SDC Platinum database categorizes all internet related, electronics, and software firms as "high-tech". Examples of "high-tech" firms include the new issues of manufacturers of semiconductors, internet service providers, software communication and network software developers. We also controlled for foreign IPOs that were shipping or mining firms because these firms tended to have 100% international assets. Consistent with prior research, we summed the number of risk factors listed in a foreign firm's prospectus to provide an overall level of foreign IPO firm risk at the time of the IPO (Welbourne and Andrews 1996; Certo *et al.* 2001). Previous studies indicate that firms with larger boards can be beneficial to experience better performance IPO (Certo *et al.* 2001; Daily, *et al.*, 2003). Scholars suggest that larger boards provide a firm with a wider array of resources and act to reduce investor uncertainties concerning a new issue. The measurement of *Board Size* is the total number of individuals serving as directors on the board. Research suggests that the size of a company's TMT can affect cognitive differences, social integration, and

consensus (Lester, *et al.*, 2006). Similar to the rationale for controlling *Board Size*, investors may look favorably upon distant and otherwise unknown companies with a large TMT. Following Carpenter *et al.* (2003) we measured *TMT size* by summing all individuals identified in each offering prospectus as key company executives.

RESULTS

Descriptive statistics and correlations are provided in Table 1. Based on the correlation matrix, there are minimal levels of multicollinearity between independent variables. Only the correlations of the US IPO indicator variable with firm risk and underwriter prestige have high degrees of correlation. We examined models with firm risk and underwriter prestige auditor reputation removed and found no change in the interpretation of the results.

Insert Table 1 about here

In order to examine the direct relationship between investor protection and IPO success (H1), we performed a hierarchical regression analysis that initially controls for generally accepted predictors of IPO performance. Our various control variables are in the direction we would theoretically expect (see Model 1 in Table 2) and tend to significantly relate to IPO success ($R^2=21.3\%$). The regression results of Model 2 in Table 2 provide empirical support for the direct effects of investor protection on IPO success (H1), while controlling for other effects. We find a positive relationship between investor protection and IPO success ($\beta=0.122$, $p<0.01$). Thus, we find support for the direct relationship between country of origin effect (i.e., investor protection) and firm performance hypothesized in H1. This addition increased the explained variance in IPO Success ($\Delta R^2 = .017$, $p<0.001$). Our second hypothesis argued for a positive

relationship between board independence and IPO success (H2). This addition increased the explained variance in IPO Success ($\Delta R^2 = .011$, $p < 0.001$). Contrary to H2, Model 3 in Table 2 finds a significant, negative relationship between board independence ($\beta = -0.037$, $p < 0.05$). Interestingly, board independence appears to be a significant cost when considering the longer-term performance implications after the firm has gone public.

Insert Table 2 about here

In order to further examine the inter-relationships between variables, we conducted hierarchical moderated regression to verify two-way interactions described in hypotheses 3, 4a, and 4b. The variance inflation factor values of all variables in Models 4 through 6 in Table 2 range from 1.03—2.17, which suggest a lack of multicollinearity before including the interaction terms (Neter, Wasserman, and Kunter 1990; Velleman and Welsch 1981). We centered all moderating variables on their respective means as suggested by Aiken and West (1991) to remove the inherent multicollinearity between predictor variables and interaction terms that include these predictors. After performing these steps we find support for our third hypothesis, which examines the moderating effect that board independence has on investor protection's relationship with IPO success (H3). In Model 4 of Table 2 (H3), board independence was found to positively moderate the relationship between investor protection and IPO success ($\beta = 0.061$, $p < 0.05$). This addition increased the explained variance in IPO Success ($\Delta R^2 = .033$, $p < 0.001$). Thus, we find support for our third hypothesis such that high board independence increases the positive relationship between investor protection and IPO success. We further analyzed the interaction by performing a simple slope analysis (Aiken and West, 1991) for each regression line to test whether its slope was significantly different from zero. In line with Hypothesis 3, we

find that the relationship between investor protection and IPO success is significantly positive when board independence is high ($b=0.24$, $p<0.01$). Additionally, we have plotted the interaction in Figure 1. This Figure shows that high levels of board independence increase IPO Success more than low levels of board independence for IPOs from countries with high to moderate levels of investor protection. With the broad-term measure of performance (IPO success), high board independence appears to have a steeper slope as investor protection increases. Based on this figure, board independence increases firm performance, but has a more pronounced effect for IPOs coming from countries where investor protection is high.

Insert Figure 1 about here

In H4a, we further argued that investor protection would have differential effects on IPO success for the US versus the UK market. In Model 5 of Table 2, we found a significant difference in IPO success ($\beta=-0.052$, $p<0.05$) based on the market chosen by the firm. This addition increased the explained variance in IPO Success ($\Delta R^2 = .087$, $p<0.001$). In order to further validate the moderating effects, we have plotted the interactions in Figure 2 for IPO success, where we find that the positive slope for the curve representing the UK market is steeper than that of the US market. We also find that the slope of the line representing the relationship between investor protection and IPO success in the US ($b=0.03$, $p<0.10$) and the UK ($b=0.09$, $p<0.05$) is significantly different from zero. In all, these results show considerable moderation by taking into account the choice of market when examining the effect that investor protection has on firm performance. While higher levels of investor protection result in increased performance for both markets, the effect is more pronounced in the UK. The data suggest that

UK investors value IPOs from countries with moderate to high levels of investor protection higher than US investors.

Insert Figure 2 about here

In H4b, we made the argument that the relationship between board independence and IPO success would differ in the US and UK markets. In Model 6 of Table 2, we found further evidence that market choice moderated the relationship between board independence and IPO success ($\beta = -0.028$, $p < 0.05$), in line with Hypothesis 4b. This addition increased the explained variance in IPO Success ($\Delta R^2 = .033$, $p < 0.001$). However, we find in Figure 3 that board independence appears to have decreasing returns in both the UK and US markets, although the slope in the US is significantly steeper than in the UK ($b = -0.08$, $p < 0.05$).

Insert Figure 3 about here

Finally, in H5 we hypothesized a three-way interaction between investor protection, board independence, and listing in the US for explaining performance of foreign IPOs. We argued when investor protection and board independence are both high, listing in the U.S has negative relationship with the performance of foreign IPOs. The results of our analysis are contained in Model 7 of Table 2. We find consistent evidence of a three-way interaction between investor protection, board independence, and market choice for IPO Success ($\beta = -0.149$, $p < 0.01$). The full model significantly explains 32.3% of the variance in IPO Success ($p < 0.01$). In absolute terms and based on the regression coefficient, when investor protection and board independence

are both high, listing in the U.S. has negative relationship with performance of foreign IPOs as predicted in Hypothesis 5.

In order to further validate three-way interaction results, we have plotted the interaction in Figure 4. Based on face validity, we find that when we compare board independence and investor protection, the market choice for the IPO is an important predictor of success. The graphs show that high board independence has differential effects in the US and UK markets, such that high board independence appears to be valued higher in the UK than US, which is in support of Hypothesis 5. We performed a significance test for slope differences (Dawson and Richter 2006) for each regression line in Figure 4. The analysis supports our prediction that the relationship between investor protection, board independence, and IPO success was different in the US and UK markets. We find that the slope for firms with high levels of board independence that are from countries with high levels of investor protection that list in the US are significantly different from those that list in UK ($b= 1.99, p<0.05$).

Insert Figure 4 about here

DISCUSSION

Since the 1990s an increasing number of foreign firms have forgone local stock markets in favor of making initial public offers on either U.S. or U. K. stock exchanges. To date scholars have broadened our understanding of the motivational influences that prompt foreign executives to choose to go public on western exchanges. However, the factors that affect performance of foreign firms on western exchanges have yet to be uncovered. In fact, the country and organizational factors which impact the success of organizations in foreign capital markets at

IPO have been an area largely neglected to date by international business, strategy, and entrepreneurship scholars. Indeed, scholars and foreign executives alike should note that the interaction of signals associated with a foreign firm's legal environment and internal governance structures may prove more salient to investors in some markets over others.

We find clear evidence that country of origin effects exist for foreign firms. IPOs from countries with higher levels of investor protection have higher levels of firm performance when controlling for a number of generally accepted predictors of IPO performance. IPOs from countries with high investor protection appear to enjoy more long-term performance effects in the UK market. However, when we also consider increased investment in board independence by foreign firms, the costs appear to result in decreasing returns when considering longer-term performance for investors. Thus, increased levels of board independence decrease the degree of longer-term IPO success. However, further analysis shows that these results are mainly driven by IPO firms that obtained listing in the U.S., and this finding suggests that U.S. investors think that board independence in foreign IPOs is a mere "box ticking" or "window dressing" factor and does not significantly improve performance across markets. On the other hand, independent directors play an important signaling role in the U.K. where "comply-or-explain" regulatory practices and potential agency costs of non-compliance make the governance roles of independent directors particularly important.

In further analysis, we found the effect of board independence has a greater effect on the relationship between investor protection and firm performance in the UK. Here, we found that board independence had a positive slope when considering IPO success as the measure of firm performance and was steeper in the UK. In further analysis, we obtained a richer understanding of the relationships between country of origin effects, corporate governance, and firm

performance, when we consider more sophisticated relationships between variables. We find that governance mechanisms that reduce agency concerns are contingent on country of origin.

Furthermore, these effects showed considerable differences when we also take into account the international choice of market for the foreign IPO.

Governance research is growing in importance and the role of corporate boards and the extent of investor protection are central features of such research. Much of previous research on the governance effects on performance is focused on mature companies, and has particularly used samples drawn from the US. However, there is growing appreciation of the heterogeneity of governance mechanisms and that the effectiveness of governance factors may differ as the setting of the firm changes (Aguilera *et al.*, 2008). To date, empirical work has not fully explored these conceptual developments. In particular, the implication of different firm and institutional contexts for the relationship between governance and firm performance has been neglected.

Using a unique, hand-collected matched sample of IPOs in the US and UK, we show that recognition of the heterogeneity of governance regulatory mechanisms may be especially important in different institutional contexts. Specifically, national institutional differences can moderate the links between firm-level governance factors and performance. Thus, unlike much of the prior research that has focused on mature firms in North America this research clearly shows that board independence and investor protection can have a significant effect on performance, but that national institutional setting may affect the relative significance of that impact.

This study extends the existing literature in a number of ways. First, we focus on foreign firms that obtained a stock market listing overseas, and explore how their corporate governance

characteristics may help to overcome liabilities of newness and foreignness and affect their stock market performance. Second, we integrate institutional and agency theory in order to examine two different regulatory environments, which allow us to contrast corporate governance effects in common law countries. These two contributions advance the understanding of agency theory and its perspective on corporate governance. The research also makes methodological advances in examining board- and investor protection-related effects on performance of newly listed firms. Prior research has focused on mature firms with highly dispersed ownership. Instead this research examines the context of IPO firms which have very short previous history of governance development. This approach has allowed an examination of firms in a setting with fewer confounding variables and with a clearer focus on the role of corporate governance.

Future Research

Our findings indicate a rich set of future research possibilities. For example, the findings suggest that agency problems may be different in different national settings. This implies that the agency framework should be integrated with institutional analysis to generate robust predictions. Future research should expand on this concept further and seek to more explicitly examine agency theory and its implications when different institutional settings are involved (Aguilera *et al.*, 2008). For example, this research contrasted UK and US, two common law countries. However, there is also a civil law tradition in Germany and France and a distinctive Scandinavian legal environment (La Porta *et al.*, 1998). Do these institutional environments also have a significant impact on signaling properties of IPO firms? For example, investor protection in German civil law is generally seen as less than in common law but more than in French civil law. Therefore, is the impact of German civil law somewhere between the other two legal environments?

This study has a number of limitations that suggest areas for further research. First, we did not discuss other governance factors such as ownership structure and the role of the CEO/Founder. Second, in line with many other IPO papers, our study focused only on short term stock-market performance. Longitudinal data is needed to explore the longer-term post-IPO effects of ownership patterns on performance. Third, while we have examined the distinction between regulatory regimes in the two countries, there are some other differences in the institutional infrastructure of IPO markets in the US and UK. More fine-grained analysis is needed to analyze these aspects of corporate governance.

CONCLUSIONS

This research has provided a strong indication that board independence and “country of origin” effects can be powerful signals affecting performance of foreign IPOs. However, it also demonstrates that these factors do not have a universal impact on IPO performance. Instead, they can be of great use in some “host country” settings. Future research should build on these findings to seek to better determine the exact nature of those settings where there can be a performance benefit associated with “good governance”, and how it is obtained.

BIBLIOGRAPHY

- Agrawal, A., and Knoeber, C. 1996. Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3): 377-395.
- Aggarwal, R., Erel, I., Stulz, R. M. and Williamson, R. G. 2007. Do U.S. firms have the best corporate governance? A cross-country examination of the relation between corporate governance and shareholder wealth. Fisher College of Business Working Paper No. 2006-03-006.
- Aguilera, R., Filatotchev, I., Gospel, H., and Jackson, G. 2008. An organizational approach to comparative corporate governance: costs, contingencies and complementarities. *Organization Science*, forthcoming.
- Aiken LS, West SG. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Sage: Newbury Park, CA.
- Anderson S. C., Beard, T. R., and Born, J. A. 1995. *Initial Public Offerings: Findings and Theories*. Kluwer: Boston, MA.
- Ang, J.S., and JC. Brau (2003), "Concealing and confounding adverse signals: insider wealth-maximizing behavior in the IPO process," *Journal of Financial Economics*, 67, 149-172.
- Aoki, Masahiko (2001) *Toward a Comparative Institutional Analysis*. Cambridge, MA, MIT Press.
- Beatty. R. 1989. Auditor reputation and the pricing of initial public offerings. *The Accounting Review*, 64: 693-709.
- Bell, R. G., Moore, C. and Al-Shammari, H. 2008. Country of Origin and Foreign IPO Legitimacy: Understanding the Role of Geographic Scope and Insider Ownership. *Entrepreneurship: Theory and Practice*, 31(1): 185-202.
- Becht, Marco, Patrick Bolton, and Ailsa Röoell, 2003, Corporate governance and control, in George M. Constantinides, Milton Harris, and René M. Stulz, eds.: *Handbook of the Economics of Finance* (Elsevier, North Holland).
- Bruner, R., Chaplinsky, S. and Ramchand, L. 2006. Coming to America: IPOs from emerging market issuers. *Emerging Markets Review*, 7(3): 191-212.
- Carpenter, M. A., Pollock, T. G. and Leary, M. M. 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: 803-820.
- Carter, R.B. and Manaster, S. 1990. Initial public offerings and underwriter reputation. *Journal of Finance*, 65: 1045-1067.

- Certo, S. T., Covin, J. G., Daily, C. M., and Dalton, D. R. 2001. Wealth and the effects of founder management among IPO-stage new ventures. *Strategic Management Journal*, 22: 641-658.
- Chahine, S., and Filatotchev, I. 2008. "Signalling the firm's value": information disclosure, corporate governance and performance of IPOs". *Journal of Small Business Management*, forthcoming.
- Chemmanur, T. J. and Fulghieri, P. 2006. Competition and cooperation among exchanges: A theory of cross-listing and endogenous listing standards. *Journal of Financial Economics*, 82: 455-489.
- Claessens, S., and Bruno, V. 2007. Corporate Governance and Regulation: Can there be Too Much of a Good Thing? World Bank Working Paper 4140.
- Coffee, J. C. 2002. Racing towards the top? The impact of cross-listings and stock market competition on international corporate governance. *Columbia Law Review*, 102: 1757-75.
- Coombes, P., and Watson, M. 2000. Three surveys on corporate governance. *The McKinsey Quarterly Special Ed.* 4:74-77.
- Daily, C. M., Certo, S. T., Dalton, D. R., and Roengpitya, R. 2003. IPO underpricing: A meta-analysis and research synthesis. *Entrepreneurship Theory and Practice*, 27: 271-295.
- Davenport, K. A., Dolan, M. F., and Hayashi, Y. 2006. A primer for non-US issuers. *International Financial Law Review*, 25: 59-70.
- Dawson, JF and Richter, AW. 2006. Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology* 91(4): 917-926.
- DeFond, M. L., and Hung, M. 2004, Investor protection and corporate governance: evidence from worldwide CEO turnover, *Journal of Accounting Research* 42, 269-312.
- Demirguc-Kunt, A. and Maksimovic, V. 1998. Law, finance and firm growth. *Journal of Finance*, 53: 2107-2139.
- DiMaggio, Paul J. and Walter W. Powell (1991) 'The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organization Fields'. In Powell, Walter W. and Paul J. Dimaggio (Eds.) *The New Institutionalism in Organizational Analysis*. Chicago, IL, University of Chicago Press. pp.63-82.
- Ejara, D. D., Ghosh, C., and Nunn, K., 1999. IPO underpricing and aftermarket performance: A comparison of american depositary receipt (ADRs) IPOs and US IPOs, *European Finance Association Conference*, 25-28th August, Helsinki (Finland).
- Filatotchev, I., and Bishop, K. 2002. Board composition, share ownership and 'underpricing' of U.K. IPO firms. *Strategic Management Journal* 23:941-955.

- Fiss, P.C. 2007. A set-theoretic approach to organizational configurations. *Academy of Management Review* 32(4): 1180 – 1198.
- Foerster, S.R., Karolyi, G.A., 1999. The effects of market segmentation and investor recognition on asset prices: evidence from foreign stocks listing in the United States. *Journal of Finance* 54 (3), 981–1013.
- Gillan, S., and Starks, L. 2003. Corporate governance, corporate ownership and the role of institutional investors: A global perspective, *Journal of Applied Finance*, 13: 4-22.
- Gulati, R., and Higgins, M. C. 2003. Which ties matter when? The contingent effects of interorganizational partnerships on IPOs success. *Strategic Management Journal*, 24: 127-144. Investors Relations Business (IRB), (2000), “Good governance pays off: institutions will pay a premium for an independent board”, Staff Reports, Institutional Shareholder Services, 10 July, pp. 1-3.
- Jackson, J. C., Stone, S. W. 2006. Regulatory and operational issues for US advisers investing overseas. *Investment Lawyer*, 13:3-9. Kadiyala, P. and Subrahmanyam A. 2002. Foreign firms issuing equity on US exchanges: An empirical investigation of IPOs and SEOs. *International Review of Finance*, 3: 27-51.
- Karolyi, G.A., 2006. The world of cross-listings and cross-listings of the world: Challenging conventional wisdom. *Review of Finance*, 10 (1), 99–152.
- Keasey, K. and Short, H. 1997. Equity retention and initial public offerings: The influence of signaling and entrenchment effects. *Applied Financial Economics*, 7: 75–85.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1997. Legal determinants of external finance. *Journal of Finance*, 52: 1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, F. and Vishny, A. 1998. Law and finance. *Journal of Political Economy*, 106: 1,113-1,155.
- La Porta, R, Lopez-de-Silanes, F., Shleifer, F. and Vishny, A. 1999. The quality of government. *Journal of Law, Economics, and Organization*, 15: 222-79.
- La Porta, R, Lopez-de-Silanes, F., Shleifer, F. and Vishny, A. 2000. Investor protection and corporate governance, *Journal of Financial Economics* 58, 3-27.
- Lawless, R. M., S. P. Ferris, and Bacon, B. 1998. The influence of legal liability on corporate financial signaling. *The Journal of Corporation Law*, 23: 209-243.
- Lester, R. H., Certo, S. T., Dalton, C. M., Dalton, D. R., and Cannella, A.A., Jr. 2006. Initial public offering investor valuations: An examination of top management team prestige and environmental uncertainty. *Journal of Small Business Management*, 44: 1-26.
- Leuz, C., Nanda, D. and Wysocki, P. 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69: 505–27.

- Lins, K., Strickland, D. and Zenner, M. 2004. Do non-U.S. firms issue equity on U.S. exchanges to relax capital constraints? *Journal of Financial and Quantitative Analysis* 40: 109-133.
- Meyer, J. W. and Rowan. B. 1977. Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83: 341-63.
- Michaely, R. and Shaw, W. H. 1994. The pricing of initial public offerings: Tests of adverse-selection and signaling theories. *The Review of Financial Studies*, 7: 279–319.
- Milgrom, P. R., and Roberts, J. 1994. Complementarities and systems: understanding Japanese economic organization. *Estudios Economicos*, 9(1): 3-42.
- Milgrom, P. R., and Roberts, J. 1995. Complementarities and fit: strategy, structure, and organizational change in manufacturing. *Journal of Accounting and Economics*, 19(2-3): 179-208.
- Millestein, I. M., and MacAvoy, P. W. 1998. The active board of directors and performance of the large publicly traded corporation. *Columbia Law Journal*, 98: 1283-1321.
- Neter, Wasserman, and Kunter. 1990. *Applied Linear Statistical Models*. 3rd edition, Irwin.
- Petersen, Bent and Pedersen, Torben, 2001. "Coping with Liability of Foreignness: Different Learning Engagements of Entrant Firms," Working Papers 11-2001, Copenhagen Business School, Department of International Economics and Management.
- Prasad, D., Vozikis, G., Bruton, G. and Merikas, A. 1995. Harvesting through initial public offerings (IPOs): The implications of underpricing for the small firm. *Entrepreneurship Theory and Practice*, 20: 31-41.
- Rediker, K. J., and Seth, A. 1995. Boards of directors and substitution effects of alternative governance mechanisms. *Strategic Management Journal*, 16(2): 85-99.
- Reese, W.A., and Weisbach, M., 2002. Protection of minority shareholder interests, cross-listings in the United States, and subsequent equity offerings. *Journal of Financial Economics*, 66: 65–104.
- Ritter, J. R. 2003. Differences between European and American IPO markets. *European Financial Management*, 9: 421–34.
- Roe, Mark J. (1994) *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance*. Princeton, NJ, Princeton University Press.
- Roe, Mark J. (2003) *Political Determinants of Corporate Governance: Political Context, Corporate Impact*. Oxford, Oxford University Press.
- Ross, S. 1977. The determination of financial structure: the incentive-signaling approach. *Bell Journal of Economics*, 8: 23-40.
- Sanders, G.W., Boivie, S. 2004. Sorting things out: Valuation of new firms in uncertain markets. *Strategic Management Journal* 25:167-186.

- Shleifer, A. and Wolfenzon, D. 2002. Investor Protection and Equity Markets. *Journal of Financial Economics*, 66(1): 3–27.
- Schmidt, Reinhard H. and Gerald Spindler (2004) 'Path Dependence and Complementarity in Corporate Governance'. In Gordon, Jeffrey N. and Mark J. Roe (Eds.) *Covergence and Persistence in Corporate Governance*. Cambridge, Cambridge University Press. pp.114-127.
- Scott, W. Richard (2003) *Organizations: Rational, Natural, and Open Systems*. Englewood Cliffs, NJ, Prentice-Hall.
- Spence, A. 1973. Job market signaling. *Quarterly Journal of Economics*, 87: 355-379.
- Titman, S., and B. Trueman (1986), "Information quality and the valuation of new issues," *Journal of Accounting and Economics*, 8, 159-172.
- Useem, M., Bowman, E. H., Myatt, J., and Irvine, C. W. 1993. U.S. institutional investors look at corporate governance in the 1990s. *European Management Journal*, 11: 175-189.
- Velleman and Welsch. 1981. "Efficient Computing of Regression Diagnostics," *American Statistician*, 35(4): 234-242.
- Walsh, J. P., and Seward, J. K. 1990. On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*, 15(3): 421-458.
- Welbourne, T. M. and Andrews, A. O. 1996. Predicting the performance of initial public offerings: Should human resource management be in the equation? *Academy of Management Journal*, 39: 891–919.
- Williamson, Oliver E. (1991) 'Comparative Economic Organization: Analysis of Discrete Structural Alternatives', *Administrative Science Quarterly*, 36: 269-296.

Table 1: Descriptive Statistics and Correlations

	<u>Variable</u>	<u>Mean</u>	<u>s.d.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
1	Firm Age at IPO	7.959	9.176											
2	Total Revenues Before Offering	\$292M	\$ 1.12B	-0.007										
3	Ship Or Mine	0.069	0.255	-0.133*	-0.019									
4	High Tech	0.441	0.497	0.007	0.079	-0.202*								
5	Firm Risk	31.936	17.868	-0.103	0.122*	0.094	0.133*							
6	Underwriter Prestige	5.36	3.7	-0.033`	0.055	0.053	0.039	0.390**						
7	Board Size	6.762	2.193	0.07	-0.024	-0.184**	0.101	0.276**	0.264**					
8	TMT Size	6.03	2.949	0.04	-0.072	-0.089	0.324	0.062	0.255**	0.344**				
9	Investor Protection	3.266	1.411	0.157*	0.012	-0.045	-0.071	-0.318**	-0.192**	-0.006	-0.032			
10	US IPO (Market Choice)	0.51	0.226	-0.016	0.069	0.150*	0.191**	0.680**	0.433**	0.292**	0.189**	-0.227**		
11	Board Independence	0.402	0.226	0.019	-0.08	0.007	0.05	0.037	-0.132*	-0.032	-0.1	-0.218**	0.053	
12	IPO Success	0	0.832	-0.086	0.690**	0.051	-0.008	0.163*	0.099	0.238**	0.264**	-0.144	-0.036	.209**

Table 2: Hierarchical Regression Results for IPO Success

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	β	β	β	β	β	β	β
Control Variables							
Firm Age at IPO	-0.099*	-0.086*	0.007 [†]	-0.084*	-0.084*	-0.084*	-0.080*
Total Revenues Before Offering	0.659***	0.659***	-0.023*	0.651***	0.651***	0.651***	0.627***
Ship Or Mine	0.028*	0.024*	-0.179**	0.024*	0.024*	0.024*	0.017*
High Tech	0.031*	0.034*	-0.116**	0.042*	0.042*	0.042*	0.038*
Firm Risk	0.028*	0.017*	-0.195**	0.033*	0.033*	0.033*	0.006 [†]
Underwriter Prestige	-0.008 [†]	-0.041*	-0.128**	-0.038*	-0.038*	-0.038*	-0.072*
Board Size	0.076*	0.089*	-0.175**	0.078*	0.078*	0.078*	0.083*
TMT Size	0.037*	0.036*	-0.067*	0.034*	0.034*	0.034*	0.042*
Independent Variables							
Investor Protection		0.122**		0.121**	0.104**		0.138**
% independent to total board			-0.037*	-0.048*		-0.046*	-0.026*
Market (US vs. UK)					0.038*	0.045*	0.067*
2-way Interaction Terms							
Inv. Protect. X Board Ind.				0.061*			0.080**
Inv. Protect. X Market					-0.052*		-0.056*
Board Ind X Market						-0.028*	-0.038*
3-way Interaction Terms							

Inv. Protect X Board Ind. X Market								-0.149**
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Model F	2183.2	2336.5	2264.3	2535.6	3865.7	2535.6	4013.6
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Adjusted R2	0.213	0.230	0.224	0.257	0.311	0.257	0.323
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Sig. of Change	0.000	0.000	0.000	0.000	0.012	0.000	0.012
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† p < 0.10
 * p < 0.05
 ** p < 0.01
 *** p < 0.001

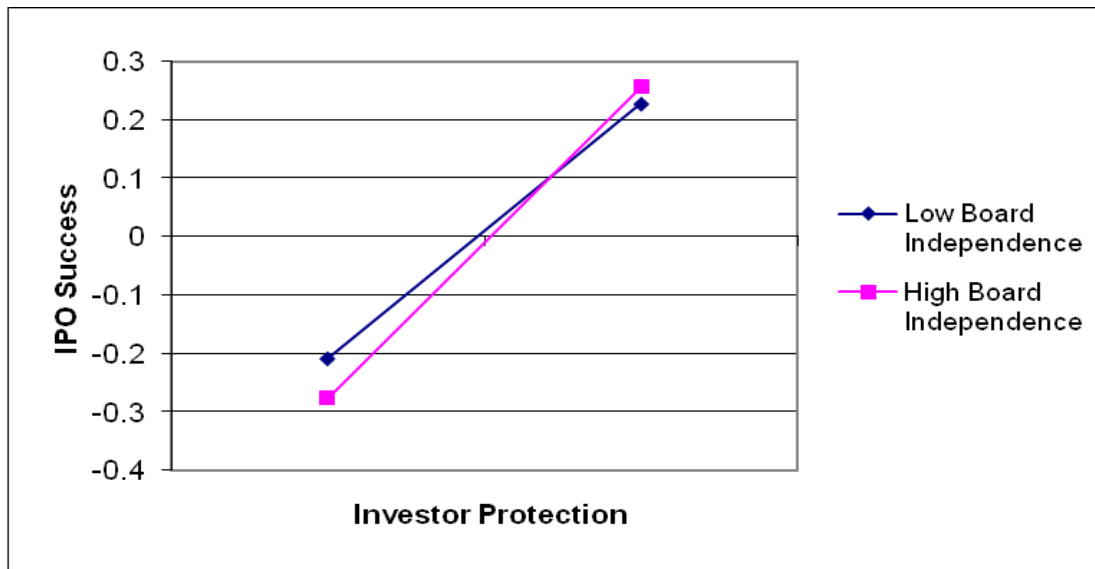


Figure 1: Board Independence Moderating the Investor Protection—IPO Success Relationship

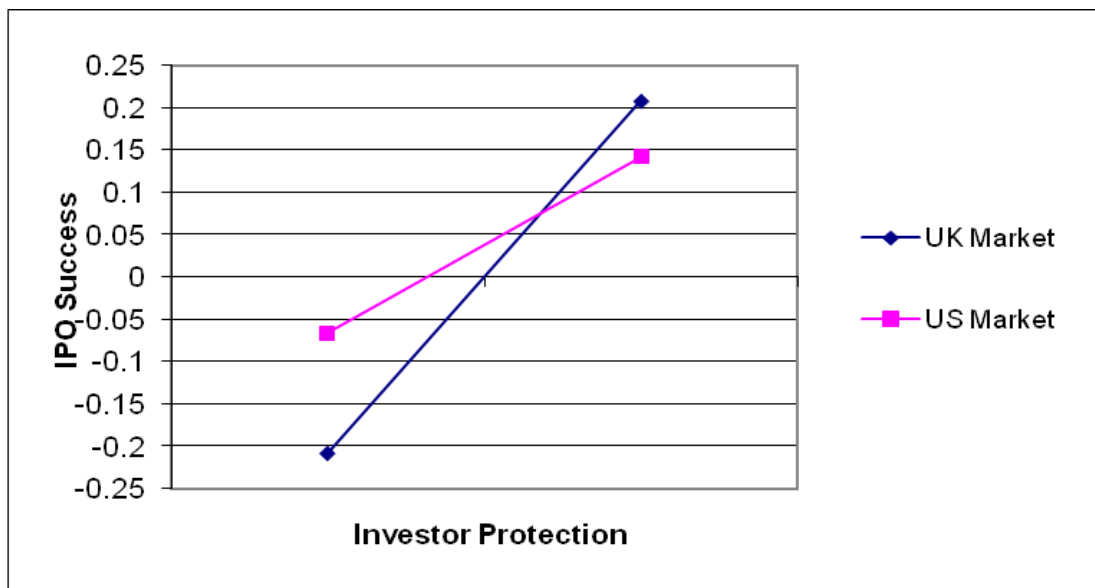


Figure 2: Market Choice Moderating the Investor Protection—IPO Success Relationship

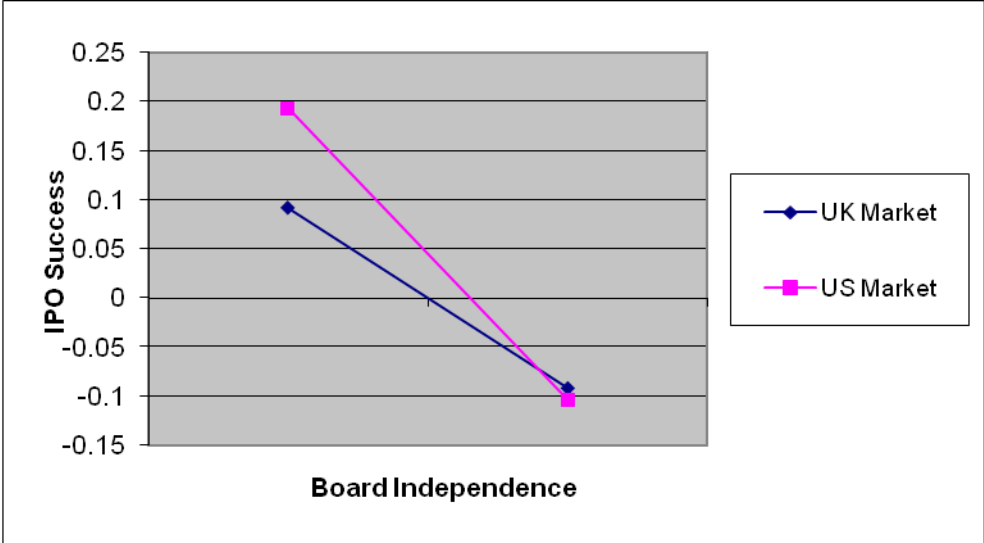


Figure 3: Market Choice Moderating the Board Independence—IPO Success Relationship

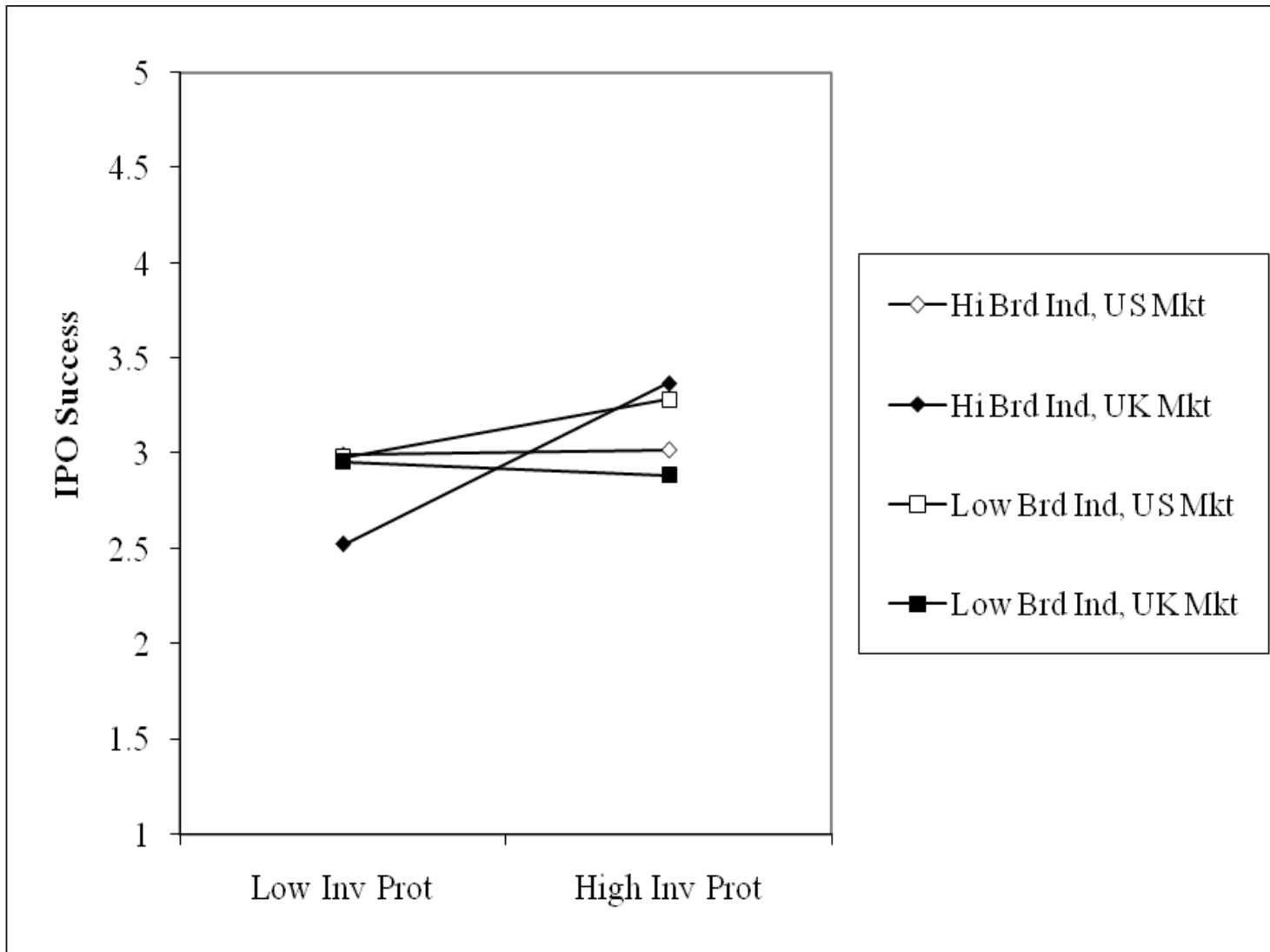


Figure 4: Three-way Interaction Plots for IPO Success