Signaling Legitimacy to Foreign Investors: Evidence from Chinese IPOs on U.S. Markets

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Abstract

From 1999-2010 120 Chinese emerging growth firms undertook initial public stock offerings on U.S. markets. This provided a remarkable natural experiment for exploring how this class of organizations from a radically different political economy established their legitimacy and how, once established, this legitimacy permitted organizational and personnel flexibility for later firms. The increased legitimacy allowed changes in the backgrounds of the members of the IPO top management team (TMT) and independent members of the board of directors (BoD). We find that overall composition of both the TMT and BoD in terms of experience in the U.S. decreased and “Chinese-ness” increased, but at different rates. For the operational TMT members, U.S. experience decreased dramatically over time, except for the CFO who is the representative of investors within the TMT. Similarly, on the BoD, the venture capitalists continued to have high levels of US experience, while the other independent members tracked the TMT in having less US experience. In this increased legitimacy allows the acceptance of “foreign” operational management, but investors are less lenient in terms of ensuring that their “monitors,” the CFO and venture capitalists, should show evidence, i.e., U.S. experience and background, that they adhere to the investor’s values.
Introduction

When confronted with uncertainty, in situations where there is both opportunity and risk, individuals search for cues signaling the appropriateness of a particular decision. Homophily is an important criteria used by individuals to rationalize that their decision is legitimate (for a discussion, see McPherson et al. 2001). Consider the conundrum of U.S. investors when confronted with the opportunity to invest in Chinese firms undertaking public offerings in U.S. stock markets. It is universally believed among U.S. business and investor circles that Chinese firms suffer from a lack of transparency and corporate governance practices that differ from U.S. ideals.¹ Further, the Chinese economy and society differ dramatically from the U.S. And yet, since 2000, more young entrepreneurial Mainland Chinese firms (we term these as Chinese Emerging Growth Firms or CEGFs)² have undertaken an initial public stock offering (IPO) on U.S. markets than have entrepreneurial firms from any other nation outside the U.S.

This provides a remarkable natural experiment for exploring how a class of organizations from a radically different political economy establish their legitimacy and how, once established, this legitimacy permits organizational and personnel flexibility for later firms with the same organizational characteristics. Specifically, we explore how this growing flexibility allows the backgrounds of the members of the IPO top management team (TMT) and independent members of the board of directors (BoD) to evolve as investor perception of the legitimacy increases.

It has long been observed that the backgrounds of the individuals affiliated with a young firm are important to potential IPO investors (Chaganti, DeCarolis, and Deeds 1995; Chen et al. 2008; Zimmerman and Zeitz 2002: 420). As Sanders and Boivie (2004: 167) note, “in emerging market

¹ In this paper, unless otherwise noted when we refer to “Chinese” we are only referring to mainland China and excluding both Taiwan and Hong Kong.
² See data section below for definition.
sectors with high levels of uncertainty investors are likely to shift emphasis from objective financial and operating data, which is lacking or not well understood, to indirect, secondary information sources that are better understood.” This secondary information includes affiliated individuals holding respected credentials (Andrews 1996; Chandler 1996; Chandler and Jansen 1992; Deeds et al. 1997; Husted and Pulver 1992; Ostgaard and Birley 1996; Riquelme and Rickards 1992; Westhead 1995).

Firms undertaking an IPO suffer from what Arthur Stinchcombe (1965) termed the “liability of newness” (Chen et al. 2008). For foreign firms making their first U.S. public stock listing the liability of newness is compounded by a “liability of foreignness” (Hymer 1960; Hennart 1982; Zaheer and Mosakowski 1997). These twin liabilities are characteristics that apply to both individual firms and all firms from a particular nation.⁵ For the individual firm, a liability of newness exists, but the liability of foreignness and newness for the class of firms should decline as IPOs of that class become routine. Acquiring legitimacy allows an organization to be accepted in the environment within which it wishes to undertake actions (DiMaggio and Powell, 1983; Dowling and Pfeffer, 1975; Hannan and Freeman, 1989). That is, the organization under existing standard system of beliefs and values is judged to have reasonable and appropriate behaviors (Suchman, 1995:571). As organizational ecologists have observed, legitimacy should increase as the population of an organizational form grows (Hannan and Freeman 1977; Zaheer and Mosakowski 1997). After repeated positive experiences, external audiences should gradually accept the legitimacy of a particular class of organizations (Aldrich and Fiol 1994; Zucker 1977). With the increase in legitimacy, the individual organizations within the class would have greater scope for deviation than did their predecessors. It might be expected that, as legitimacy

⁵ We do not use the concept of “organizational forms,” because these firms do share common characteristics, namely they are CEGFs and operate as variable interest entities, but many of their other organizational characteristics vary dramatically (on organizational forms, see Hannan and Freeman 1977).
increases, younger firms in an organizational class or firms with a greater number of “foreign”
characteristics might successfully list.

Prior to investing in an initial public offering, potential investors consider many factors such as
the firm’s previous performance, yet these are young firms so they generally have short operating
history and some may not even be profitable. In such uncertain environments, investors will base their
decisions on signals such as organizational affiliations and attributes in terms of the individual
experiences and affiliations of the TMT and BoD for justifying their investment decision (Deeds et al.
1997; Higgins and Gulati 2003; Megginson and Weiss 1991; Schmidt and Sofka 2009; Zimmerman and
Zeitz 2002). For the individual organization these affiliations contribute to overcoming the liability of
newness. As Chen et al. (2008) have shown, one strategy to increase legitimacy is to recruit prestigious
individuals particularly in the year prior to the IPO, i.e., to undertake what is termed “window dressing.”
These new recruits signal to investors that the firm is of high quality and consequently worthy of
investment. In our case, we would expect individuals recruited prior to the IPO to have a background
that signals to investors that the firm adheres to their Western norms and values.

While there has been significant research regarding TMTs, these analyses normally aggregate
members of the TMT, despite the recognition that members have different functions and positions (Ruef
et al. 2003). These functional differences, though, suggest that the incumbent in each position may
contribute differently to perceptions of legitimacy. To illustrate, the CEO is responsible for the
successful operation of the firm and thus is likely to be evaluated on the basis of managerial
competence. The CFO is responsible for advising the CEO on major financial decisions and managing
investor relationships, so ability to interact with financiers would be a paramount skill. The other TMT
members are responsible for other operational aspects of the firm. The independent directors can be
divided into representatives of earlier investors, such as, venture capitalists, and other Board members.
The paper begins by describing the setting for our case study. The data and methods discussion describes the data source and collection process. In the results section, the results of the test of each hypothesis are displayed. The concluding discussion explores the implications of the results to our understanding of how growing legitimacy enables organizations to alter their managerial composition.

**The Setting**

During the last two decades, as it transitioned from being a non-market centrally planned economy to one within which private enterprise is encouraged, China has been the fastest growing large economy in the world. During this growth, the Chinese government has strongly advocated entrepreneurship and the growth of venture capital investing (Ahlstrom and Bruton 2006; Ahlstrom et al. 2007; Batjargal and Liu 2004). Since the mid-1990s, China has received enormous Western corporate investment and, more recently, investment from non-Chinese private equity investors (Ernst and Young 2010). Beginning in the early 1990s, some of the large state-owned Chinese enterprises launched stock offerings in non-Chinese stock markets, particularly the U.S. The investment by Western venture capitalists and successful listing of these large firms opened the way for listing smaller CEGFs in US markets. The first CEGF, China.com Corp, listed on the NASDAQ in July, 1999. Since 1999 more CEGFs have listed on U.S. markets than small emerging growth firms from any other foreign nation including Israel.

As mentioned earlier, the success of CEGFs in listing in U.S. markets is paradoxical as there is an enormous and largely unquestioned literature maintaining that nations with suspect corporate governance and legal institutions should be unable to convince U.S. investors of their suitability for investment (Black and Gilson 1998; Bottazzi et al. 2004; Hege et al. 2004; La Porta et al. 1998; 1999; Lerner and Schoar 2005). It is well known that Chinese firms suffer from uncertain financial reporting, some difficulty in the enforcement of legal contracts, non-Western thinking about intellectual and other
property rights, a lack of clarity as to legal and financial affairs at the local level, and an uncertain commitment by the national government to Western-style corporate governance (Cao 2004). While undoubtedly influenced by pro-U.S. biases, nearly all international indices rate the Chinese business environment as “unfree” and having weak shareholder rights (Heritage Foundation 2012). Firms from environments conforming less closely to U.S. standards for transparency, protection of minority shareholder rights, etc. have been shown to experience lower valuations in U.S. markets (Bell et al. 2008; Chen and Yuan 2004; La Porta et al. 2008). This should be particularly true for IPOs because the Chinese legal and economic system operates according to non-Western conceptions of the “rule of law” and an ethos of “good corporate governance” (Chen and Shih 2003; Leuz et al. 2009; Pei 2002; Pistor and Xu 2005; Wang 2004).

Not only do Chinese firms operate in a different legal regime, but for foreign investors, there are concrete legal issues. Chinese law stipulates that only domestically owned enterprises can operate in a large number of industries, including the Internet and telecommunications. Yet nearly all of the firms in our population are in these restricted industries. To circumvent this law, investors have designed an ownership structure that does not provide direct ownership of the Chinese operating company. Foreign investors invest in a firm incorporated in an offshore tax haven such as the Cayman Islands. This offshore firm owns a “shell” firm in China known as a variable interest entity (VIE). The VIE controls the actual Chinese operating firm through a web of complex contracts with the firm’s Chinese management rather than through direct share ownership. These contracts are arcane, of uncertain legality, and include potentially difficult to enforce agreements stipulating that managers work exclusively for the firm. Further, they contain various shareholder voting protocols, pledges regarding equity, agreements on equity pre-emption, requirements regarding loans, and a variety of other such clauses. It is through these arcane contracts that profits and assets are meant to be controlled by the
offshore entity (Feng et al. 2009). However, from the Chinese government’s perspective, the operating firms are independent domestic enterprises. Because the core of this arrangement is the agreement between the overseas shell enterprise and the domestic operating firm, if the domestic operating firm management makes a decision that the foreign shareholders find problematic, they must sue in Chinese courts where the offshore “owners” may have difficulty proving that they actually own the Chinese operating firm and therefore are principals (Davidoff 2012).

For the Chinese firm and its management listing in foreign markets is attractive. An overseas listing allows investors and the Chinese managers to liquidate their stakes in foreign currencies and thereby circumvent exchange controls. Also, U.S. markets are very liquid and have a wider investor base (Claessens and Schmukler 2007) and U.S. markets are especially amenable to rapidly growing high-technology firms (Pagano et al. 2002). However, to list on U.S. markets the firm’s TMT must be willing to at least show understanding and deference to Western management norms. In a panel study of Chinese entrepreneurial firms listing on the Shenzhen vs. Hong Kong stock markets, Ding et al. (2010: 177) found that those firms listing in Hong Kong were more willing to accept outside investors and “share the benefits of future performance with outsiders.” In other words, to successfully list on the Hong Kong exchange, firms signaled a greater willingness to accept Western norms of corporate governance.

For the investor, the motivation for investing in any firm’s equity is the returns from such an investment. Since 2000, a number of CEGFs have produced excellent returns. The first CEGFs, all of which were Internet-related, went public on U.S. markets during and in the immediate aftermath of the dot.com boom of the late 1990s. While the value of these early firms plummeted with the Bubble’s collapse, they did not go bankrupt. In fact, Chinese firms, such as Netease which went public in June 2000, as of the end of 2012 had garnered a capital gain of 1,300 percent, while Sohu which also went
public in 2000 experienced a return of 260 percent. Other firms such as Baidu that went public in 2005 had, as of the end of 2012, a return in excess of 800 percent. On the other hand, Linktone, a provider of entertainment-oriented value-added services and content to mobile users, which listed in 2004, had by 2012 lost almost all of its value. In Figure 1, we present a returns index for all the CEGF stocks in our database, where each stock is weighted equally. Starting in 1999 through the year 2011, the Chinese stock index outperformed the S&P 500 and the NASDAQ in seven out of thirteen years, even though they declined significantly after the Dot.com bubble. As a general rule, these Chinese IPOs were volatile, producing both outsized gains and losses in comparison with the NASDAQ index. However, ultimately it is these returns that are the source of the legitimacy for CEGF IPOs.

Figure 1.

CEGF 120 Index, NASDAQ, S&P 500

Source: Authors’ database

Theory and Previous Research
Consider the conundrum for U.S. institutional investors who are required by U.S. law to invest prudently, but are seeking good returns (e.g., Longstreth 1987). While the possibility of excellent returns from Chinese IPOs does exist, the institutional environment and ownership structure are not ideal. In effect, investors need assurance that the executives will act as investors’ agents, understanding and accepting the investors’ goals and metrics. Without visible indicators of such goal congruence, investors would be reticent to risk their capital. Potential investors need reassurance that the firm is, in sociological terms, legitimate and a prudent investment (DiMaggio and Powell 1983; Podolny 1993; Rao 1994).

Investment in a young firm at its IPO is predicated upon a belief that the firm will grow and the investor will be rewarded with capital gains, yet at the time of the IPO offering the firm normally has limited operating experience. For this reason, potential investors examine not only the financial results reported in the prospectus, but also the other actors involved in the firm for more clues to its prospects. This paper builds upon previous work on how startup firms that are newly listing on the market signal their legitimacy to potential investors and extends it (Starr and Macmillan 1990). The composition of the TMT, the BoD, the auditing firm, and the lead investment bankers have been recognized as attributes that can signal that the firm will perform according expectations (Barondes et al. 2007; Lee and Wahal 2004; Michaely and Shaw 1995). Put differently, the biographies of the individuals and organizations affiliated with the listing firms can reassure investors as to the prudence of the investment. Affiliation with specialized and highly respected organizations such as elite investment bankers and globally recognized auditors can also build cognitive legitimacy among potential investors.

As a concept, legitimacy has been recognized to have a number of dimensions. At the most basic level, there is what Suchman (1995: 578) termed “pragmatic legitimacy,” which at a simple level,

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4 For a review of the literature on the role of legitimacy in new ventures, see Zimmerman and Zeitz (2002).
refers to whether the organization being judged will meet the desires of those making the judgment. In the case of IPOs, this refers to the self-interests of actors in the process including investors. In this respect, a class of IPOs, as defined by institutional investors and financial analysts, that results in public investors reaping capital gains will be increasingly perceived as legitimate.

Legitimacy is, of course, not static, but is monitored by external actors and subject to reassessment. New organizations must demonstrate their legitimacy (Suchman 1995: 586). According to Suchman (1995: 587), because the audience for US IPOs is US institutional investors it is vital for the firm to conform to investors’ definitions of what a listing firm should look like. Due to their environmental handicaps, CEFGs have to prove their legitimacy. Previous research has shown that the affiliation of various institutional actors in the IPO process serves as a certification mechanism. This research has demonstrated the role of actors such as venture capitalists (Hursti and Maula 2007; Makela and Maula 2006), investment bankers (Carter and Manaster 1990; Higgins and Gulati 2003; Pollock et al. 2004; Stuart et al. 1999), auditors, and the firm’s corporate counsel (Suchman 2000). Other research has examined the background and experiences of individuals on the BoD (Certo 2003; Hillman and Dalziel 2003) and the TMT (Beckman et al. 2006; Cohen and Dean 2005; Higgins and Gulati 2006). As Kostova et al. (2008: 1001) observe, for organizations suffering from a liability of foreignness and trying to establish legitimacy it is important to have multiple actors providing certification.

China is the market and the location of the vast preponderance of the operations of all of our firms. While this paper examines the institutions affiliated with these Chinese IPOs, there is, in fact, little difference among them. Substantially all of the firms use high prestige investment banks in their listings, are audited by either the Big Four accounting firms or their Chinese affiliates, have prestigious

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5 Our concept of the entrepreneurial support network around an IPO makes no presumption of independence between the different members. In many cases, there would be preexisting relationships between say the venture capitalists and lawyers or investment bankers.
Western legal counsel, etc. Finally, a large number of them have Western venture capitalists on their BoD.

Our study examines the attributes of the individuals on the TMT and BoD, as these are the individuals upon which governance of the firm rests and who manage for and/or represent investors. TMTs are composed of executives with different titles, skills, experiences, and responsibilities. To be brief, the CEO is responsible for the entire firm and most of the remaining executives are responsible for operations. The greatest uncertainty about CEGFs as a class of firms would be expected when pioneers were listed. For this reason, we would expect these early IPOs to have the highest percentage of TMT and BoD members with Western experience. Over time, as Chinese CEGF listings became more legitimate, this should decrease.

The CFO in the U.S. corporate governance system has become an increasingly important figure (Zorn 2004), and is the corporate executive most involved in the IPO process (Brau and Fawcett 2006: 405). The CFO is also the individual that most directly represents investors, liaises with the financial analysts so important for a successful public offering (on financial analysts and investors, see Rao et al. 2001; Rao and Sivakumar 1999; Zuckerman 1999), and assists in the choice of the auditor (Brau and Fawcett 2006). This role leads to an expectation that the CFO would have substantially different characteristics from those of the other members TMT in terms Western experience and education, and that these characteristics would change more slowly than that of other TMT members.

Finally, our data allows us to identify the year in which each individual joined the firm. We infer that those joining the firm either in the year of the IPO or the immediately preceding year were added in preparation for the IPO, and though obviously this is not always the case, it does provide a way of separating those that joined during the startup phase and those that joined later. Our expectation is that those that join immediately prior to the IPO would have greater levels of US experience and education.
Moreover, we would expect that there would be more additions of CFOs and venture capitalists immediately prior to the IPO than of the other groups. In other contexts, this has been termed window-dressing, but normally has referred to accounting issues (Chen et al. 2008; Lerner 1994). In the case of Chinese CEGFs, this window dressing may have been particularly important for the earlier IPOs and as Chinese CEGFs became more legitimate one would expect that window dressing to decrease.

Many studies have found that, for either developed or the emerging capital markets, there is a strong preference for investing in firms domiciled in their own countries (Ke et al. 2010). This has been termed a “home country bias” (French and Poterba 1991; Tesar and Werner 1995). If an enterprise is listed in a foreign market but its business operations, headquarters, and commercial network are in China, the distance between the product markets and the capital market may result in a lack of familiarity by potential investors in the firm’s products and markets. Furthermore, because accounting systems, corporate governance requirements, restrictions and investor protection differ internationally, country of origin effects are considered by investors (Bell, Moore and Shammar 2008).

Investors rely on the reputation of the third-party institutions and the information transferred by enterprises. If the enterprises to be listed overseas are affiliated with a third party (such as VC, IB, Audit, and other institutional investors) with a reputation recognized by investors, investors’ perception of the organization’s legitimacy is likely to be higher (Stuart et al. 1999; Gulati and Higgins 2003; Sauders and Boivie 2004; Arikan and Capron 2010).

The implications of whether a firm’s founder is still affiliated with the firm either on the TMT or BoD have also been examined. For example, Kaplan et al. (2009) found that such affiliation led investors to believe that the management team has greater commitment to the firm and thus is a positive for investors. However, other observers such as Young et al. (2008) note that such affiliation may create principal-principal conflicts because there are two classes of principals, the controlling shareholders
(such as entrepreneur and their family) and minority shareholders. This complicates agency theory which suggests that greater the stake of the agent in the firm, the more aligned the interests of the management and shareholders should be (Jensen and Meckling 1976). In our population this potential for conflict may be exacerbated by the VIE mechanism, which does not allow investors direct voting rights in the operating company.

The previous career experience of the TMT (Eisenhardt and Schoonhoven 1990; Beckman et al. 2006), such as work experience in the suppliers or customers in the upstream or downstream of the industries (Cohen and Dean 2005; Higgins and Gulati 2006; Moore, Bell and Filatotchev 2012), have been shown to impact the IPO’s results. Moore et al. (2012) found that the U.S. capital markets paid greater attention to the professionalization and specialization of the TMT than did those of the UK. Credentials also are a signal about the knowledge and skills of the individual being evaluated (Bantel, 1993; Burton, Sorensen and Beckman 2001; Qin, Zimmerman, and Jiang 2011). In the face of uncertainties, the work experience and educational background of the TMT and BoD operate as signals to investors, but they also can be understood as signals to investors as to whether they know and presumably subscribe to the goals of U.S. investors (Waller, Huber and Glick 1995; Bantel and Jackson 1989; Bhide 2000). Investors are more likely to perceive TMT members having educational or work experience with U.S. firms as having greater understanding and acceptance of the Western values of governance (Hasan and Waisman 2010).

Educational attainment has long been recognized as a signal of managerial ability. For this study the more interesting observation is, as sociologists such as Mills (1956) and Domhoff (1967) have long recognized, that educational background is an important method for cultivating shared values and then the degree becomes a proof of adherence to such values. Due to the cross-border nature of these investments, educational attainment and the institutions attended operates as a signal (Waller, Huber and
Glick 1995; Bantel and Jackson 1989; Bhide 2000). The assumption is that TMT and BoD members with a Western educational background will better understand and accept their new status as agents of the investors (Hasan and Waisman 2010).

**Corporate Function and Changing Attributes of TMT and Directors**

When considering whether to invest in an initial public stock offering, investors consider the quality of the TMT (Beatty and Zajac 1994; Certo 2003). At an IPO the firm’s management and investors transfer a portion of their rights as principals to the new owners who, because of their institutional position, have less information and limited resources for monitoring (Zingales 1995). The new owners are being asked to trust the corporate management to be good agents. The process of “going public” thus is an effort to sell the prospective new principals that the firm is legitimate and will provide a return (Ibbotson et al. 1988). For those accepting the role as principal there is significant risk, and this is magnified by the fact that the management is Chinese and the firm is located in China. Therefore, investor’s confidence must be built.

Our first basic hypothesis is that as Chinese IPOs become more legitimate the aggregate proportion of independent directors and members of the TMT with U.S. backgrounds will decline over time for all actors.

Because these firms are serving the Chinese market, we would expect members of the TMT and independent directors, as a group, to become more “Chinese” in terms of education and experience as CEGFs become more legitimate. Therefore as more CEGFs go public and their pragmatic legitimacy increases, we would expect investors would become more comfortable with managers and board members with a Chinese background, we propose that:
**Proposition 1:** Over time the proportion of individuals on the TMT and BoD that have exclusively mainland Chinese work experience or education at exclusively mainland universities will increase.

**Proposition 2:** Over time the proportion of U.S.-experienced- and– educated individuals on the TMT and BoD will decrease.

The above general propositions apply to all managers and independent directors as a group.

**Unpacking the TMT**

Individuals in different TMT positions have different responsibilities. The most important TMT members are the CEO and CFO. The CEO is responsible for all corporate decisions and bears primary responsibility for firm success. Since our firms are dependent upon the Chinese market, the CEO must be able to operate effectively in China. In contrast, the CFO’s job is to monitor capital investment and communicate with investors and the financial community. The role of the CFO in building legitimacy for the firm through communicating to investors suggests that they will have greatest U.S. experience, but that this should decrease over time. These differing roles and orientations give rise to the following propositions:

**Proposition 3A:** The decline in the number of CEOs with Western experience will be the most pronounced of all TMT or BoD members.

**Proposition 3B:** While all TMT members will become more “Chinese” in both their education and work experience, the CFO will become Chinese more slowly than the CEO.

**Proposition 3C:** The CFO’s U.S. experience will decrease more slowly than does that of other TMT members.
The CEO and CFO are the most important actors in influencing foreign investor perception of a firm’s legitimacy because of their critical roles in the new firm’s operational and financial decisions.

*Understanding the Independent Board Members*

Independent members of the BoD are crucial actors in the firm because they vote on all major firm decisions and have a fiduciary responsibility to represent investors. As representatives of the stock holders, the directors are particularly important in situations where there are high levels of information asymmetry. The status of the BoD members is often used as a signal of the legitimacy of the stock offering (Megginson and Weiss 1991; Lerner 1995; Stuart et al. 1999). Institutional investors are familiar with certain venture capitalists and the fact that they invested in a firm is considered to be an indicator of the firm’s quality. Given the widespread belief that property rights are not as strongly protected in China as in Western nations, and that the Chinese legal system will not provide redress for foreign investors, this signaling should be particularly important. Because of the role of BoD members in certifying the IPO to investors, their U.S. experience will not diminish even though the legitimacy of Chinese IPOs increases. Therefore we propose:

**Proposition 4A:** The U.S. experience of both the VC Board members and the non-VC independent directors will decline over time.

The non-VC independent Board members are a diverse association of customers, suppliers, representative of other affiliated organizations, and, in some cases, individuals closely related to the TMT, in distinction from the VC representatives on the BoD. For this reason, we propose:
**Proposition 4B**: VC independent directors will have more U.S. experience than non-VC independent directors.

**Proposition 4C**: Over time, the U.S experience of the non-VC independent directors will decline more rapidly than that of the VC representatives on the Board.

The key individuals involved in a firm have different functions, backgrounds, and impacts upon investors’ perceptions of the legitimacy of the firm. Because of their role in certifying the legitimacy of the firm we hypothesize that:

**Ethnicity and Nationality**

The previous section viewed the participants in terms of their U.S. educational and employment experience. However, these characteristics are achievements. In this section, we develop propositions regarding the ascribed characteristics of ethnicity and nationality. Given that our firms are dependent upon and operate in the Chinese market, having strong local connections could be expected to improve a firm’s performance. However, during earlier years, U.S. investors are likely to have been uncomfortable with firms operated entirely by Chinese. As they became more familiar with Chinese IPOs this might be expected to ease. For this reason, we expect:

**Proposition 6A**: In each group of managers and directors, the proportion of individuals with Chinese surnames increased over time.

Chinese surnames, as an indicator of Chinese ethnicity, are of course not synonymous with nationality as our population does contain Chinese from a number of other locations including Taiwan
and U.S. Most importantly we did not include Hong Kong as part of the Chinese mainland. Therefore, we expect that:

**Proposition 6B:** The proportion of Mainland Chinese increased over time.

Mainland Chinese are defined as ethnic Chinese who received their first degree from a Chinese university.

*Founders*

The experience and background of the firm’s founders is interesting because they are often major stock holders and have a strong identification with “their” firm. While the research on founders is mixed, using a sample of all IPOs in 1991, Nelson (2003) found that firms with a founder-CEO had higher valuations than those whose CEO was not a founder. In contrast, using underpricing as a measure, Certo et al. (2001) found having a CEO-founder increased IPO underpricing. Our interest differs from these studies as we are concerned with whether over time the proportion of firms with a surviving founder with U.S. experience is changing. The motivation for this interest emerges from the belief that firms led by founders are likely to be less easily controlled by anonymous investors, and therefore would be perceived as less legitimate. For this reason, we propose that

**Proposition 7:** The percentage of surviving founders with U.S. experience declines over time.
Data and Methods

The study population includes only those self-identified mainland Chinese firms that have never listed on any market. All state-owned enterprises, as well as all spin-offs from existing firms or holding companies, were excluded. Chinese firms entering the U.S. market by purchasing a listed U.S. firm, i.e., shell company transactions and reverse mergers, were also excluded. The 120 firms classified as being CEGFs and subject to our study were identified from among the 217 Chinese firms that made an initial public stock offering in U.S. markets prior to 2012. The preponderance of our population were listed using either American Depository Rights (ADR) or as common stocks. All the firms listed on either the NASDAQ (52%) or the NYSE (47%), with one listing on the AMEX. All our data was extracted from either U.S. Securities and Exchange Commission filings or firm websites.

Every member of the TMT and BoD is required to provide a biography in the IPO prospectus providing information on their professional experience over the previous five years that would be of importance to investors. From these, every member’s corporate title, age, employment career, and educational background was extracted. This data made it possible to ascertain whether these individuals had worked for a foreign firm or had foreign educational experience (for this study we consider “foreign” to include Taiwan and Hong Kong). Because the experiences of these individuals were multiple and thus could be coded into a number of categories we established the following hierarchical categories: Any individual with U.S. educational or work experience was classified as such even if they also had educational or work experience outside the U.S. So, for example, an individual with both a Chinese and a U.S. degree in our hierarchical system was categorized as having a U.S. education. In our hierarchical system, an individual without U.S. experience, but work experience outside mainland

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7 For a detailed discussion on options for listing on U.S. markets, see Ejara and Ghosh (2004). Our study includes only Level Three American Depositary Shares.
China, was classified as “Other.” The final residual category was those with exclusively mainland Chinese experience and/or education. The names of the universities from which all individuals received their undergraduate degree is used as a proxy for national origin. All members of the Board affiliated with a venture capital firm were identified as independent VC directors.

All the individuals in the database were coded by their surnames. So all those having names similar to “James Smith,” “Kazuo Yamazaki,” or “Raghu Gupta” were classified as non-Chinese foreigners. However, if their names were what most would consider Chinese such as, for example, "Wang Tao" and "James Ding," they were considered ethnically Chinese. If they had a Chinese name and completed any of their education in mainland China, then they were classified as having a mainland Chinese origin. Due to our theoretical interest, for the remainder of this paper, unless otherwise specified, we study only those individuals that had either U.S. or Chinese experience as defined above. All of those in the Other category (approximately 20%) are omitted unless specified.

There is a significant literature suggesting that prior to listing, firms “window dress” their TMT and BoD (Chen et al. 2008; Gutterman, 1991; Husick and Arrington, 1998). Such changes can be captured because the SEC requires that each BoD and TMT member state in which year (and often but not always the month) they were first employed in this capacity. This year was subtracted from the year of the offering to establish their duration with the firm. Those BoD or TMT members that served with the firm for 0-1 years were defined as members of the “IPO Team,” while those serving for 2 or more years are termed the “Early Team.” This differentiation allows examination of whether the characteristics of the new additions differ from the other members.

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8 It is well known that recently wealthy Chinese have begun their children abroad for undergraduate degrees. This phenomenon is rather recent and we believe it unlikely to affect most of the individuals in our population who are invariably over thirty years of age.
The annual number of CEGFs IPOs fluctuated over time (see Figure 2). The first CEGF listing was in 1999 and they increased in 2000 coincident with the U.S. Internet Boom. With the collapse of the Boom, there were no listings in 2001 and 2002. There was a muted revival of listings from 2003-2006. From 2007-2008, there was an acceleration of listings as the Chinese economy expanded rapidly and Chinese stocks were hot. When the U.S. stock market collapsed in 2009, so did the number of Chinese listings. However, while the number of listings by U.S. firms remained quite low, in 2010 over 30 Chinese firms undertook IPOs—nearly as many as U.S. firms.

Figure 2.

![Chart showing the number of Chinese Emerging Growth Firms listing on American Markets: 1999-2011](chart)

**Fig.3.** Chinese EGCs firms listing on US: 1999-2011

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9 This is not surprising as it has long been known that IPOs come in waves (see, for example, Ritter 1980 and Ibbotson and Jaffe 1975). Moreover, these are timed to take advantage of favorable markets, see Ritter (1991) and Loughran and Ritter (1995).
The firms in our database are quite concentrated on a number of dimensions (see Table 1). In terms of the location of headquarters, Beijing and Shanghai with 43% and 20% respectively were by far the most popular locations. During the later years, listed firms from outside these two locations grew as an overall percent of listings, but Beijing, Shanghai, and Guangdong province remained dominant through the entire period. The dominant industrial sectors were services, and computer and information technology (CIT), which included most of the high-visibility Internet firms such as Baidu, Sina and Sohu. Services is a large and diverse category that included private educational, motel and restaurant chains, advertising, as well as computer services and programming. The preponderance of the firms (83%) were venture capital-financed and had at least one founder still affiliated with the firm (83%). The mean age of the firms at the time of the listing was 7.5 years, In terms of governance; the average BoD had 6.7 members, of which 2.4 were independent.

Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Firm HQ</th>
<th>Percent</th>
<th>Firm Industry</th>
<th>Percent</th>
<th>Firm Data</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing</td>
<td>43%</td>
<td>Bio-medical</td>
<td>8.3%</td>
<td>Age at IPO</td>
<td>7.50</td>
</tr>
<tr>
<td>Shanghai</td>
<td>20%</td>
<td>ICT</td>
<td>20.8%</td>
<td>Employees at IPO</td>
<td>1510.5</td>
</tr>
<tr>
<td>Guangdong</td>
<td>10%</td>
<td>Retail</td>
<td>5.0%</td>
<td>Board Members</td>
<td>6.72</td>
</tr>
<tr>
<td>Other Coastal</td>
<td>21%</td>
<td>Services</td>
<td>35.8%</td>
<td>Independent Members</td>
<td>2.39</td>
</tr>
<tr>
<td>Other Inland</td>
<td>6%</td>
<td>Manufacturing</td>
<td>9.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>20.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Exchange</td>
<td>Percent</td>
<td>Internet Classification</td>
<td>Percent</td>
<td>Firm Data</td>
<td>Percent</td>
</tr>
<tr>
<td>NASDAQ</td>
<td>52%</td>
<td>Internet</td>
<td>25.8%</td>
<td>VC or PE Backed</td>
<td>82.5%</td>
</tr>
<tr>
<td>NYSE</td>
<td>47%</td>
<td>Non-Internet</td>
<td>74.2%</td>
<td>Founder with Firm</td>
<td>83.3%</td>
</tr>
<tr>
<td>AMEX</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ database
Operationalizing the Hypotheses

A basic question considered in this study is whether, as Chinese IPOs became more legitimate over time, the proportion of TMT and BoD members with U.S. backgrounds decreased, and the proportion of those with exclusively mainland Chinese backgrounds increased. To test our hypotheses we employ logistic regressions of personal biographies on the year of the IPO. This type of regression is suitable when dependent variables are limited to a dichotomous outcome; the person either has a certain attribute (a value of 1) or they do not (a value of 0). The estimated value of this regression is the probability of the individual having this characteristic depending on the independent variables, which in this case is year of IPO.

In fitting the curve the individual is the unit of observation, so the dependent variable is whether they have U.S. or exclusively mainland Chinese work experience, while the independent variable is the year of the IPO. The STATA software used throughout this study fitted these curves by estimating the following logistic equation:

\[
\text{Probability (attribute}=1) = \frac{\exp(\beta_0 + \beta_1 \text{year})}{1 + \exp(\beta_0 + \beta_1 \text{year})}
\]

\(\beta_0\) is the intercept term while \(\beta_1\) captures the effect of time on the probability that an individual manager or director of a firm going public will have a particular attribute in the year of the IPO. The logistic regression in Equation (1) is applied to each group of actors over various attributes to test the general hypotheses regarding the change in education and work experience of these actors. If the coefficient \(\beta_1\) on IPO year is found to be significantly different from zero, this indicates that the proportion of actors with this attribute is changing over time.
Legitimacy and the Changing Nature of the TMT and BoD

Equity purchasers in an IPO are contracting their agents, or the TMT and BoD. We hypothesized that as the legitimacy of Chinese IPOs increased over time the number of U.S.-experienced managers and directors would decrease. As Figure 3 shows, this is, in fact, the case for both work and educational experience. For the entire population, the probability of U.S. experience decreased dramatically and significantly, while the proportion with only Mainland experience increased and the proportion of individuals with a Chinese surname increased significantly. The slopes of all these logistic regressions were significant at the .001 level. Put simply, the attributes of our population changed dramatically over our time.

The results displayed in Figure 5 provide support for both Proposition 1 and Proposition 2 advanced above. As a general observation of the TMT and BoD as a group, individuals with U.S. work experience and education declined over time, while individuals whose education and work experience was exclusively obtained from the Chinese mainland increased.

Figure 3: Changing Attributes of the Entire Population
Significance of slope: *** (.001)  ** (.01)  * (.05)  no indication (not significant)

Source: Authors’ database

**CEO**

As the individual most responsible for the operation of the firm, the CEO must bridge all of the constituencies and, in many respects, is the public face of the corporation. As Figure 4 indicates, initially USA educated and experienced CEOs were the majority. When measured by Chinese surnames, the preponderance of these CEOs were Chinese, but a number were from the U.S., Taiwan, or Hong Kong. The proportion with exclusively Mainland educational experience initially was less than 50%, but this steadily increased over time. Most telling was that the number of CEOs that had only mainland work experience increased as well. This parallels a decrease in CEOs with U.S. work experience and education, and suggests that for CEOs, as Chinese IPOs became more legitimate
investors shifted their focus and put more value on CEOs with an understanding of the Chinese market, rather than certification through their U.S. experience.

Figure 4. CEO Education and Work Experience, Chinese Ethnicity and Mainland Origin

Significance of slope: *** (.001)   ** (.01)   * (.05)   no indication (not significant)

Source: Authors’ database

The literature on the role of founders in entrepreneurial firms has received much attention with some arguing this is a positive sign for investors, while others finding a more mixed outcome. In our firms, just over half of all founders that were still associated with the firm as either a manager or director at the time of the IPO were CEOs (CEOs = 83 of a total of 162 founders). It has been noted that in East Asia, firms are often perceived by their founders as being an extension of themselves and their families (Ahlstrom et al. 2004; Weidenbaum 1996). In all of our firms, the founders continued to hold significant stock, but more important, the legal ownership structure makes the CEO very powerful as the
stock held by investors of the firm is through the previously discussed VIE structure. For this reason, the changes in the founder-CEO background can provide much insight into the willingness of investors to treat Chinese IPOs as legitimate. As Figure 5 shows, the likelihood of US experience decreases rapidly over time, while the number of CEO-founders with Chinese education and work experience increases significantly. The only increase that is not significant is that of Chinese mainland origin that started high initially and increased to nearly 100 percent. Mainland educational background increased significantly also, as did Mainland work experience.

Figure 5. CEO-Founder Education and Work Experience, Chinese Surname and Mainland Origin
Significance of slope: *** (.001)    ** (.01)    * (.05)    no indication (not significant)

Source: Authors’ database

**CFO**

The unique nature of the CFO, as being the key individual with regard to communicating with investors, suggested that the proportion with a U.S. education or experience would not decrease significantly. As Figure 6 indicates, though there was a very slight decline in U.S. education and a somewhat larger decline in those with US work experience, neither of these declines were significant. The mirror image, the increase in the number with only Chinese experience was also not significant. However, there was a significant increase in the proportion of CFOs who were ethnically Chinese, and CFOs from the mainland. Effectively, as Chinese IPOs became more common, investors became more comfortable with CFOs that were ethnically Chinese and had a Mainland background, but these
individuals had a U.S. education. Of all the indicators of Western experience, only U.S. education for CFOs started at a high proportion and remained unchanged.

Figure 6. CFO Education and Work Experience, Chinese Surname and Mainland Origin

Significance of slope: *** (.001)    ** (.01)    * (.05)    no indication (not significant)
Source: Authors’ database

TMT Members other than CEO and CFO
The remaining TMT members after accounting for the CEO and CFO are responsible for operational aspects of the firm. As a result, we would expect that they would exhibit attributes similar to the CEO, and this is borne out in Figure 7. Every attribute, but one, of the remaining TMT exhibits change at the .001 level of significance, and these changes show an increasingly Chinese background and are of the same magnitude as that shown by the CEO in Figure 6.

![Attributes of TMT (minus CFO & CEO) over Year of IPO](image)

Significance of slope: *** (.001) ** (.01) * (.05) no indication (not significant)
Source: Authors’ database

**Independent Members of the BoD**

Independent members of the BoD have a fiduciary responsibility to represent investors. In addition, independent directors who are affiliated with venture capital investors are the representative of these VC firms. A large proportion of the IPOs studied here, 83%, have VC representation, and so these
independent VC directors comprise a relatively high number of total directors, 233 out of 572. We therefore divide independent directors into two mutually exclusive groups; VC independent directors and non-VC independent directors. We would expect that both of these groups would be characterized by less Western experience over time as Chinese IPOs increase in legitimacy as advanced by Proposition 4A above.

*Non-VC Independent Directors*

Non-VC independent directors, as shown in Figure 8, exhibit characteristics that are quite similar to the TMT. Both groups started with a low proportion of individuals with a mainland Chinese background, but these attributes increase over time along with the proportion of those of Chinese ethnicity. Mirroring this development was a corresponding decline in the proportion of individuals having a U.S. background. All of these changes were quite significant and provide support for Proposition 4A.
Figure 8.

Significance of slope: *** (.001) ** (.01) * (.05) no indication (not significant)

Source: Authors’ database

**Venture Capitalist Independent Directors**

VC directors start the time period with high levels of U.S. experience and maintain these high levels even as they decline at a significant rate over time in support of Proposition 4A, as shown in Figure 9. This change in U.S. background is mirrored by changes in exclusively Chinese Mainland background. VC directors start at a low level of Mainland background that only increases slightly. In the case of Mainland work experience this change is not significant. In contrast, the Mainland experience for non-VC directors starts out at a higher level and increases significantly.
These observations comparing the VC and non-VC independent directors lend support to
Propositions 4B and 4C. Later in the paper these and other propositions based on a direct comparison of
actors across attributes will be tested more rigorously.

Figure 9.

Significance of slope: *** (.001) ** (.01) * (.05) no indication (not significant)
Source: Authors’ database
Mainland Background

One of the main questions addressed in this study is the way in which legitimacy is established. For example, does it adhere to the individuals by their ascribed characteristics such as race or nationality, or can individuals build legitimacy through achievements? As we saw above the change over time in U.S. experience for VC directors was not great, and for CFOs this change was not significantly different from zero, thereby suggesting that for these functions investors were not willing to accept Chinese-only experienced individuals. However, when we reclassified our population by mainland origin based on whether they had obtained their first degree from a Mainland Chinese university we found a different result. While still remaining lower in proportion than CEOs and non-VC directors, the change in proportion of individuals over time with an initial Mainland degree was significant for both VC directors and CFOs as shown in Figure 10. This suggests an increased willingness to consider individuals in these functions as legitimate, provided they had U.S. experience. This finding suggests that investors were interested in achieved characteristics, rather than ascribed characteristics. As investors became more familiar with Chinese firms as a category, they were willing to accept individuals from a foreign background for the function of CFO and VC director as their most proximate representatives, provided they demonstrate by experience their likelihood of understanding their needs as investors. Figure 12 also provides support for Proposition 6B which hypothesized that the proportion of Mainland Chinese increased over time. This was found to be significant true for the four groups in Figure 10.

Figure 10. Proportion of Individuals with an Initial Degree from a Mainland University
Window Dressing over Time: IPO and Early Teams

Proposition 8 dealt with IPO window dressing of management and directors. If this is true then we would expect that the IPO Team would have a greater proportion of individuals with U.S. backgrounds than the Early Team. To test this we look at individual actors over time comparing their inclusion in the IPO Team and the Early Team. We do this by logistically regressing attribute \( y \) (such as U.S. work experience) on IPO year and a dummy term applied to distinguish if individuals are part of either the IPO Team or Early Team.

\[
(2) \quad \text{Probability (y=1)} = f(\alpha + \beta_1 \text{year} + \beta_2 D + \beta_3 D \times \text{year})
\]

where \( \alpha \) is the intercept of the reference group.
\( \beta_1 \) is the coefficient on year of reference group

D is the dummy variable, with \( D = 1 \) if the individual is part of the IPO Team, 0 otherwise

\( D \times \text{year} \) is the interaction term of the dummy multiplied by year of IPO

Let the reference group be the Early Team of a particular actor such as TMT, and the dummy be the IPO Team so when a member of the TMT is part of the IPO Team \( D=1 \), and zero otherwise. The coefficient \( \beta_3 \) on the interaction term is the addition to the reference group slope, and the coefficient \( \beta_2 \) on \( D \) is the addition to the reference group intercept. Therefore,

- Early Team intercept = \( \alpha \)
- Early Team slope = \( \beta_1 \)
- IPO Team intercept = \( \alpha + \beta_2 \)
- IPO Team slope = \( \beta_1 + \beta_3 \)

If the coefficient on \( D \times \text{year} \), \( \beta_3 \), is significant, then the slope for the IPO Team is significantly different from the slope for the Early Team. This tests Proposition 8A that the rate of change in proportions between the IPO Team and Early Team differs. If the coefficient on the interaction term is not significant, then we may assume that the slopes of both curves are the same. As it turns out, in no case is the coefficient statistically different from zero for any given actor or any group of actors. That is, \( \beta_3 \) was found to be statistically indistinguishable from zero in equation (2) in all cases. This supports Proposition 8A.

In these cases we may assume that the slopes are the same, and run the logistic regression again allowing only the intercepts of the IPO Team and Early Team vary while holding the slope of each team constant. Thus we would logistically regress \( y \) on:
(3) \(\alpha + \beta_1\text{year} + \beta_2D\)

If the coefficient \(\beta_2\) on \(D\) is significant then we can say that the IPO Team is significantly different in the proportion of individuals with the attribute in question. This allows us to test Proposition 8.

The results of these tests are shown on Table 2 below. The cases considered can be divided between those attributes indicating a U.S. background, U.S. work experience and education; and those attributes indicating a Chinese background, exclusively Chinese mainland work experience and education, and Chinese ethnicity. To illustrate, the general case of actors having a U.S. background is presented in Figure 11A, while the general case of actors having a Chinese background is roughly the mirror image shown in Figure 11B.
The hypothesis in Proposition 8 was that for every actor or group of actors, those chosen as “window dressing” for the IPO (the IPO Team) would have greater U.S. experience than those in the Early Team. Conversely, there was a lower probability of having members having an exclusively mainland Chinese background or of being ethnically Chinese. As Table 2 indicates, the only actors where the differences were not significant was among the Directors and VC directors and this is the result of the VC directors in both teams having such high levels of U.S. experience. This level for VC directors is so high that it also affects the entire director category. A similar but less pronounced effect can be seen with the CFOs. The overall conclusion is that prior to the IPO these firms did undertake window-dressing, a result suggesting the firms were concerned about the investors’ perception of the legitimacy of their personnel.

Table 2. The Statistical Significance of the Difference between IPO Team and Early Team Actors

<table>
<thead>
<tr>
<th></th>
<th>U.S. Work Experience</th>
<th>U.S. Education</th>
<th>Mainland Work Experience</th>
<th>Mainland Education</th>
<th>Chinese Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Actors</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>Directors</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>VC Directors</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Non-VC Directors</td>
<td>.001</td>
<td>.05</td>
<td>.01</td>
<td>.05</td>
<td>n.s.</td>
</tr>
<tr>
<td>TMT (including CFO)</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>CFO</td>
<td>.05</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

**Actors Directly Compared**

Conjectures based on direct comparisons among actors can be tested with the same methods as applied in the section on window dressing. In these cases, the tests are applied to equations (2) and (3)
above, only the dummy now refers to membership in a particular group rather than the IPO Team. Among the relationships specified by the propositions in equation (2), only the comparison of CFOs with remaining TMT indicated a significant difference in change over time of the attribute U.S. education. That is, the interaction term in equation (2) was found to be significant only when the groups CFO and remaining TMT were compared.

This result provides support to Proposition 3C which hypothesized that CFOs’ U.S. experience declines more slowly than the rest of the TMT. This was also true for the attribute U.S. education. The other propositions regarding the rate of change of attributes were found to not be statistically significant, but they clearly described the general rate of change of attributes as shown in Figures 4 through 9.

Proposition 3B hypothesized that the CFO is becoming ethnically Chinese more slowly than the CEO, and while that rate of change is not significant at the .05 level, it is true as a general observation from comparing Figure 4 and Figure 6. Proposition 3A hypothesized that the decline in CEOs with Western experience would be more pronounced that other TMT members and independent directors. This is true with regard to the CFO compared to VC directors, but the makeup of the remaining TMT is very similar to the CEO. Finally, Proposition 4C hypothesized that non-VC independent directors will decline more rapidly in U.S. experience that VC directors. Again, this was accurate as can be seen in Figures 8 and 9, but the difference in rate of change was not significant at the .05 level.

If we suppress the interaction term in equation (2) and allow only the intercepts among comparison groups to vary we obtain equation (3), but in the cases tested here the dummy variable applies to a comparison group rather than IPO Team. Table 3 below presents these results for a variety of group comparisons across five attributes. In Table 3 the odds ratios are presented rather than the coefficients, but their statistical significance is the same as would be obtained from reporting coefficients.
Odds ratios provide a more intuitive way of presenting the results. For example, in comparing CEOs and CFOs on the extent to which they have U.S. work experience, Table 3 indicates that the odds of CFOs having U.S. work experience are 3.3 times the odds that CEOs have U.S. work experience. Similarly, VC directors have 3.547 times the odds of U.S. work experience than do non-VC independent directors. Most of these results are highly significant with the exception of CEOs compared to remaining TMT and CFOs compared to VC directors—the two groups that have strong internal resemblance.

Table 3. Differences Between Actors: Ratio of odds of an individual in the first group having an attribute to such odds for an individual in the second group.

<table>
<thead>
<tr>
<th>Odds Ratio of First Actor to Second Actor</th>
<th>U.S. Work Experience</th>
<th>U.S. Education</th>
<th>Mainland Work Experience</th>
<th>Mainland Education</th>
<th>Chinese Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMT vs. Directors</td>
<td>0.416</td>
<td>0.380</td>
<td>2.304</td>
<td>2.814</td>
<td>4.061</td>
</tr>
<tr>
<td>CFO vs. CEO</td>
<td>3.307</td>
<td>4.768</td>
<td>0.064</td>
<td>0.128</td>
<td>0.111</td>
</tr>
<tr>
<td>CEO vs. Remaining TMT</td>
<td>1.422 n.s.</td>
<td>1.358 n.s.</td>
<td>1.507 n.s.</td>
<td>1.017 n.s.</td>
<td>2.790 n.s.</td>
</tr>
<tr>
<td>CFO vs. Remaining TMT</td>
<td>4.973</td>
<td>6.865</td>
<td>0.096</td>
<td>0.125</td>
<td>0.311</td>
</tr>
<tr>
<td>VC vs. Non-VC Directors</td>
<td>3.547</td>
<td>2.210</td>
<td>0.157</td>
<td>0.320</td>
<td>0.594 (.01)</td>
</tr>
<tr>
<td>CEO vs. VC Directors</td>
<td>0.193</td>
<td>0.208</td>
<td>15.87</td>
<td>8.274</td>
<td>16.83</td>
</tr>
<tr>
<td>CFO vs. VC Directors</td>
<td>0.651 n.s.</td>
<td>1.016 n.s.</td>
<td>0.981 n.s.</td>
<td>1.019 n.s.</td>
<td>2.093 (.01)</td>
</tr>
<tr>
<td>Remaining TMT vs. VC Directors</td>
<td>0.133</td>
<td>0.151</td>
<td>10.25</td>
<td>8.197</td>
<td>6.283</td>
</tr>
<tr>
<td>CEO vs. Non-VC Directors</td>
<td>0.683 n.s.</td>
<td>0.460</td>
<td>2.527</td>
<td>2.632</td>
<td>10.55</td>
</tr>
<tr>
<td>CFO vs. Non-VC Directors</td>
<td>2.312</td>
<td>2.257</td>
<td>0.152</td>
<td>0.326</td>
<td>1.243 n.s.</td>
</tr>
<tr>
<td>Remaining TMT vs. Non-VC Dir.</td>
<td>0.483</td>
<td>0.336</td>
<td>1.652</td>
<td>2.600</td>
<td>3.887</td>
</tr>
</tbody>
</table>

All odd ratios are significant at the .001 level unless indicated.

The results in Table 3 should be interpreted in the following way. When the reported odds are close to one we are detecting little difference. So, for example, in the case of the CEO vs. the VC directors the CEO was 15.87 times more likely to have Mainland China only work experience and 80%
less probability of having U.S. work experience. This supports Proposition 4B, which hypothesized that VC independent directors are characterized as having more U.S. experience than non-VC directors. Proposition 5A hypothesized that VC directors and CFOs would resemble each other, while Proposition 5B hypothesized that CEOs, non-VC directors, and the remaining TMT would also resemble each other and this also receives some support.

**Discussion and Conclusion**

Chinese firms operate in a legal environment which is widely perceived to not meet Western governance standards. We explored the following question: As CEGFs listings on U.S. markets became more routine and understood would they have more flexibility with regard to the backgrounds of the TMT and BoD? This is interesting because U.S. investors have only a limited ability to monitor and discipline their Chinese agents. Rather, they must rely upon cues to convince themselves that their agents will act in their interest. The literature has suggested that cues such as the composition and experience of the TMT and BoD signal to investors the appropriateness of firms as investments. We showed that the increasing cumulative number of Chinese IPOs was accompanied by a general decrease in the U.S. experience of both TMT and BoD members. However, the extent and types of the changes differed by TMT function and BoD member affiliation. To be specific, the proportion of CFOs and VC directors with U.S. experience decreased much more slowly than did that of the other directors, executives, and, especially the CEO.

There is an enormous literature on TMTs and BoDs, but it seldom accounts for the functions of the various constituent groups. Because of the cross-national nature of these IPOs and the difficulty foreign investors experience in monitoring the firm, together with the fact that the firm’s businesses are in China and therefore need managers deeply immersed in that market, there are contradictory forces
that need to be represented on the TMT and BoD. This paper is one of the first to examine the different credentials and experience of these different constituent groups and theorize regarding their particular roles in signaling legitimacy to investors. This extends and deepens the analysis by Chen et al. (2008) and suggests that more can be done with the information contained in IPO prospectuses.

Through the comparison between the Early Team and the IPO Team, the study finds that individuals joining the enterprises one year prior to listing are more likely to have the U.S. experience. This operates as a signal to investors that the firm accepts U.S. management values and thus will act on their behalf. Despite the addition of individuals prior to the IPO the majority of the TMT members, including the CEO, have been with the firm two years or longer. A high percentage of the firms in our sample retained a founder and while previous scholars have seen this as a positive sign for a firm’s legitimacy, in the Chinese environment, it may be due to the relative lack of power investors have as a result of the complicated ownership structure.

We contribute to financial market research by showing how firms from “illegitimate” environments manage this presumably fatal handicap by attracting personnel with biographies signaling compliance with Western norms. These firms have managed that handicap and pose a real world challenge to mainstream financial and legal thought exemplified by Black and Gilson (1998), which suggests that CEGF IPOs should gain little traction in U.S. markets. This challenge is even more noteworthy as, since 1999, China has had greater success in listing startups on U.S. markets than any other nation.

While not the direct topic of our study, this paper has relevance to the discussion of the role of returnees in the Chinese entrepreneurial environment. Some have attributed to returnees a critical role in driving the rise of Chinese high-technology entrepreneurial activity (see, for example, Saxenian 2008). In another case, Batjargal (2007) found overseas experience to be an advantage for a population of 94
Internet startups, while Haiyang Li et al. (2012) found that for firms formed in the Zhongguancun Science Park in Beijing, on average firms with a returnee leader actually underperform those with a local leader. In terms of the source of the early entrepreneurs in China’s IT industry, Kenney et al. (2013) found returnees to not be significant, but that in 1990 era Internet startups, returnees were more evident. This research indicates that, even in the case of Chinese firms listed on U.S. markets, over time returnees became less significant as founders, CEOs, and managers. Their importance increased only for CFOs and venture capitalists, as they replaced individuals with no Chinese experience. In effect, these U.S.-educated Chinese became the intermediaries between managements that were increasingly “purely” Chinese. This observation provides significant new insight into the returnee phenomenon and suggests that this literature should move beyond anecdotes and snowball sampling-based, individual interview observations.

CEGFs are particularly interesting because they suffer not only from the liability of newness, but also from being nearly the most “foreign” of possible firms. Here a social constructionist perspective on entrepreneurial firm formation would appear to be valuable (e.g., Downing 2005; Hargadon and Douglas 2001; Pollock and Rindova 2003). These startups overcame investors' concerns by demonstrating their legitimacy in two ways: First, they underwent a process by which they shaped themselves by recruiting organizations that already had legitimacy with U.S. investors. Second, these firms altered the composition of their TMT and BoD to indicate that they shared the values, experiences, and concerns of the institutional investors and would be captained by good agents. However, as CEGF IPOs became more routinized the mimetic isomorphism among the TMT, with the exception of the CFO, became less necessary. For the BoD, which more directly represents investors, the mimesis particularly among the VCs, who previous researchers have recognized have a role in certifying an IPO, remains strong.
This study has limitations. First, the firm population is small. Second, the use of the biographies in the prospectus provides only the information that the subject and firm deems important. In China, very often close friends or relatives will be placed on the firm’s board but this may not be disclosed in the prospectus. Those individuals appearing to be independent may not be. Also, there are still some methodological issues. Most often, the IPO literature on the legitimacy of a firm undertaking the IPO has been measured by a single organization that “lends” its credibility to the venture, be it the venture capitalists, the law firm, investment bankers, BoD, or TMT. However, we have no way of measuring which factor might be the most important. From the perspective of the institutional investor, a legitimate investment is more likely a gestalt where the investor not only examines financial statistics, but also evaluates all of the organizations and personnel involved. In this study, we examined a number of the actors that contribute to this gestalt. We would suggest that further IPO research adopt a more holistic perspective.

By examining the changes over time, we were able to capture the changing perception of the legitimacy of Chinese IPOs; a process that relaxed the need for personnel conformity as described by Scott (1987: 21). This was especially noticeable for the CEOs where institutional investors became more accepting of Chinese managers with no U.S. experience. This acceptance did not shift as quickly or dramatically for the CFOs as they must communicate with Western investors and financial analysts. While the Chinese managers are assumed to be the investors’ agents, one could hypothesize that managerial competence became of greater importance since the markets and nearly all employees of these firms were in China. However, investors did not appear to be as comfortable allowing their monitors of management, i.e., non-management board members and the CFO, to have only Mainland experience. This suggests that the foreign institutional investors desired representatives that were more likely to share their perspective. Though we did not follow the composition of the board after the public
offering, such an exercise would provide insight into how foreign institutional investors ensure that their interests continue to be protected in China particularly, as the early investors liquidate their equity positions.

By apportioning the BoD and TMT in terms of the history of their affiliation with the firm into early and late periods, we gained insight into how the firm was prepared for the U.S. listing. Here, the change in the composition of non-management board members who already had strong foreign characteristics was not significant, though the direction was as expected. In contrast, the change in management experience was significant particularly in terms of educational background. The managers brought on prior to the IPO assisted firms in sending a strong signal of accepting Western norms of management. This was particularly noticeable among CFOs. Put differently, investors would have another line of defense beyond monitoring by board members, they would have a cadre of managers, also. Our findings are a powerful vindication of our emphasis on the importance of legitimation in convincing institutional investors to invest. This suggests that these Chinese firms and their backers understood the importance of what DiMaggio and Powell (1983) termed “organizational mimesis” when raising money abroad, but over time as the legitimacy of CEGCs grew, the management teams had greater leeway in how they constituted themselves, though they continued window-dressing to create individual firm-level legitimacy.
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