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LEADERSHIP SUCCESSION AND FIRM PERFORMANCE IN AN EMERGING ECONOMY: SUCCESSOR ORIGIN, RELATIONAL EMBEDDEDNESS, AND LEGITIMACY

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We examine how leadership transition affects firm performance in emerging economies. Building upon the social embeddedness and neo-institutional perspectives, we argue for the importance of alignment between successor origin and social context for firm performance. We suggest that as a baseline outside successors enhance firm profitability because of the large-scale and rapid changes in emerging markets. However, this outsider premium is reduced in firms embedded in family and business group relationships, where family and inside successors can better access network resources. But the outsider premium is amplified in firms embedded in a mature market-based logic, such as high tech or foreign invested firms, because the perceived legitimacy of outsiders facilitates resource acquisition. Our arguments are supported through the analysis of Taiwanese listed firms between 1996 and 2005. Copyright © 2012 John Wiley & Sons, Ltd.

INTRODUCTION

How does leadership transition affect firm performance in emerging economies? Studies of executive turnover in China and Eastern Europe have suggested that, compared with developed markets, differences in the performance effects of leadership change may be related to the different contexts presented by emerging markets (Peng, Buck, and Filatotchev, 2003). Current studies, however, mainly engage agency theory and focus on the role of privatized ownership and managerial incentives (Claessens and Djankov, 1999; Kato and Long, 2006). What is less explored is how the important social contexts in emerging economies such as family and business group relationships and the coexistence of emerging and mature market-based institutional logics shape the performance effects of leadership change.

Our study examines the relationship between successor origin and the performance impact of leadership change with a particular focus on how such a relationship is influenced by social context in emerging markets. Studies of mature markets suggest that inside and outside successors not only bring different types of knowledge and skill but also vary in their access to network resources and in the way they are perceived by stakeholders (Thornton and Ocasio, 1999; Cao, Maruping, and Takeuchi, 2006). These variations affect the extent to which firms are able to adapt and routines are disrupted, resulting in different organizational outcomes (Kesner and Sebora, 1994). However, while recent studies have increasingly considered the role of organizational contexts such as power and learning (e.g., Shen and Cannella, 2002; Zhang and Rajagopalan, 2004), the way in which social context affects the performance impact of

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successor origin has been less examined. Emerging economies, with their heterogeneous social contexts, offer an opportunity to extend the literature on successor origin and firm performance.

Drawing upon the social embeddedness perspective (Granovetter, 1985) and the neo-institutional analysis of organizations (Meyer and Rowan, 1977; Powell and DiMaggio, 1991), we build and test a theory of the alignment between successor origin and social context. Social relationships and institutional logic—defined as the organizing principles that guide the action of individuals and firms (Thornton and Ocasio, 2009)—are two key dimensions of the social context in which firms are embedded and succession takes place (Dacin, Ventresca, and Beal, 1999). The new leaders' networks and legitimacy conferred by stakeholders play a crucial role in helping firms access resources such as materials, labor, capital, and alliance partners (Aldrich and Fiol, 1994; Uzzi, 1996), especially in emerging economies where weak market infrastructures can lead to acute information asymmetry and high transaction costs. Successors who are well connected and perceived as legitimate may be more effective in acquiring resources, minimizing transaction costs, and thus facilitating firm performance.

In a general emerging market context of deregulation and intensified competition, we posit as a baseline that outside successors will be more performance enhancing for the firm. In such a context an insider's firm-specific knowledge and experience—accumulated in different market conditions—will be less important than in the pre-deregulation era. Conversely, the 'change orientation' and fresh knowledge of outsiders will be more valuable.

We then turn our attention to the varying social contexts in which firms operate. Specifically, family and business group relationships permeate business activity for some firms, and the institutional logic of mature markets has come to prevail in some sectors due to globalization (Granovetter, 1995; Useem, 1998). We posit that for firms embedded in such social relationships, family and insider successors will be at an advantage in accessing network resources, thus reducing the outsider premium. We also propose that in an organizational field dominated by a mature market-based logic, stakeholders may view succession by an outsider as a sign of the firm's commitment to professional management. Whereas the appointment of a family successor may invite a legitimacy discount (Deephouse, 1999; Zuckerman, 1999), outside successors may facilitate resource acquisition due to their perceived legitimacy (Dacin, Oliver, and Roy, 2007), amplifying the outsider premium. We test our arguments on all publicly listed firms between 1996 and 2005 in the emerging market of Taiwan. This offers an ideal setting because it displays the features that characterize many emerging economies (Luo and Chung, 2005; Brookfield, 2010).

Our study contributes to the literature on leadership succession. First, we add to the small but burgeoning body of research on leadership change in emerging markets by developing a framework to understand how the social contexts of emerging markets shape the performance impact of leadership succession. We focus on prominent features of emerging markets that have been overlooked in previous research and we demonstrate their impact through a rigorous longitudinal research design that includes cases of non-succession. Second, our study enhances understanding of the role of social context in leadership succession research by showing the importance of the alignment between successor origin and social context. We thus respond to calls for a better understanding of the role of social context in shaping the performance consequences of leadership succession (Day and Lord, 1988; Kesner and Sebora, 1994; Giambatista, Rowe, and Riaz, 2005). Third, we extend the institutional logic argument to the performance consequences of succession (Thornton and Ocasio, 1999) by suggesting that the legitimacy of new leaders and the resource benefits of such legitimacy are contingent on the prevailing institutional logic.

SUCCESSORS' RELATIONAL EMBEDDEDNESS, LEGITIMACY, AND FIRM PERFORMANCE IN EMERGING ECONOMIES

The strategic management perspective on leadership suggests that leadership affects firm performance because leaders have significant influence over company policies (Hambrick and Mason, 1984). The more latitude a leader is given, the greater his or her impact on firm operation and profitability (Hambrick and Finkelstein, 1987).

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In emerging markets, leaders are likely to possess high levels of latitude given weak market regulations, the fast pace and multidimensional nature of change, and the absence of a 'template' for success (Eisenhardt, 1989; Newman, 2000). They thus hold sway over firm performance.

A change of leadership with significant latitude and impact is likely to affect firm performance. Prior research has identified multiple mechanisms through which this occurs, including the successors' skills, experience and adaptability to change, their access to network resources, disruption to organizational routines, and the response of key stakeholders (Kesner and Sebora, 1994; Giambatista *et al*., 2005). Successors appointed from outside the family are considered to enhance the firm's human capital as they are selected from a larger pool of candidates (Bennedsen *et al*., 2007). New leaders may be better able to adapt to change in turbulent environments (Tushman and Rosenkopf, 1996). In contrast, successors promoted from within the organization are argued to have better access to internal network resources that are critical for the leadership transition process (Cao *et al*., 2006). Insiders possess more firm-specific knowledge, which ensures less disruption when they initiate strategic change (Zhang and Rajagopalan, 2010). They are less likely to be seen as contenders for power and thus pose less threat to existing coalitions, thereby facilitating the transition (Shen and Cannella, 2002). Leadership change can also be used to convey a firm's commitment to redress wrongdoing under previous leadership, and help gain legitimacy and support from targeted stakeholders (Arthaud-Day, Certo, and Dalton, 2006).

Despite the compelling mechanisms linking leadership change to firm outcomes, there is little consensus on the performance impact of leadership change or on the influence of outside vs. inside successors. The social context may provide important contingencies determining whether and how leadership change affects performance (Kesner and Sebora, 1994; Giambatista *et al*., 2005).

We develop a framework to consider how social contexts in emerging economies shape the performance impact of successors of different origin. First, rapid and large-scale changes in the general emerging market environment make the competencies of outside successors more valuable to firm performance. Second, from this baseline, we argue that the alignment between successor origin and the specific social context in which firms are embedded benefits post-succession firm performance. Preexisting social relationships and the mature market-based institutional logic are of unique importance in emerging markets, which are often characterized by the institutional voids and the accelerating pace of globalization. Institutional voids, defined as a lack of market-based institutions such as intermediaries in the product, labor, and capital markets (e.g., credit rating agencies and stock analysts), give rise to problems of information asymmetry and contract enforcement (Khanna and Palepu, 1997). In the absence of strong, formal market-based institutions, informal institutions such as social relationships play a significant role in business operations (Peng and Luo, 2000). With the opening up of emerging markets and globalization, a mature market-based institutional logic has taken root in some sectors with the inflow of foreign capital, technology, and business models. Such logic has become the evaluative framework by which legitimacy in these sectors is defined, in stark contrast to the traditional institutional logic still dominant in the rest of society (Chung and Luo, 2008).

We build upon the social embeddedness perspective to argue for the importance of alignment between successor origin and social relationships. The social embeddedness perspective emphasizes the importance of prior social relationships in economic transactions (Granovetter, 1985). It holds that firms embedded in strong social networks operate uniquely with regard to information search, resource mobilization, and crisis management, and that these networks provide advantages to the embedded firm such as quality real-time information, joint problem solving and learning, as well as risk sharing and mutual assistance (Eisenhardt, 1989; Uzzi, 1996). The prevalence of family ties and business groups in emerging markets help firms to overcome the institutional voids (Khanna and Rivkin, 2001). Compared with outsiders, family and inside successors have better access to the information, knowledge, and resources embedded in the social relationships of family and business groups.

We also draw on the neo-institutional perspective to argue for the importance of alignment between successor origin and mature market-based institutional logic. The neo-institutional perspective draws attention to the shared assumptions,

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norms, and values in an organizational field (Powell and DiMaggio, 1991). The prevailing institutional logic shapes notions of what constitutes appropriate and effective practices (Ingram and Silverman, 2002). In turn, practices deemed legitimate bring tangible benefits to the organizations that adopt them since potential exchange partners feel they can trust these organizations (Deephouse, 1999). Regarding leadership succession, Thornton and Ocasio (1999) found that a shift in institutional logic in the higher education publishing industry changed the rationale behind executive turnover. Fligstein (1990) showed that changes in the logic of corporate control led to executives from different functional backgrounds (i.e., manufacturing, sales, finance) being viewed as qualified to lead. We extend these studies to examine the performance consequence of the alignment between institutional logic and successor origin.

The prevailing logic in high tech industries and among foreign institutional investors in emerging markets has been found to mirror the institutional logic of mature markets, which values professional management and transparency. The unique status of high tech industries, as seen in China, India, Taiwan, and South Korea (Miller *et al*., 2009), is due to governmental priorities to develop these industries by importing the mature market template, as well as to the migration of talent (Amsden and Chu, 2003; Saxenian, 2006). The globalization of financial markets has led to the diffusion of the shareholder-based logic held by U.S. institutional investors (Useem, 1998; Fiss and Zajac, 2004). In such contexts, successor origin that is aligned with the prevailing logic (e.g., a preference for outsiders) gains legitimacy, which in turn facilitates resource acquisition. In contrast, successor origins not aligned with this logic may come at an 'illegitimacy discount' for the firm since key stakeholders will challenge its legitimacy (Deephouse, 1999; Zuckerman, 1999; Heugens and Lander, 2009).

HYPOTHESES

Turbulence in emerging markets and successor origin

As a baseline, we first consider how the general context of the business environment in emerging markets affects the relative advantage of outside vs. inside succession. Where deregulation and privatization are implemented in a short time span, competition and uncertainties sharply intensify. Amid simultaneous, large-scale changes, firms are plunged into unprecedented circumstances where they can no longer rely on formerly successful practices and strategies (Hoskisson *et al*., 2000). Firm-specific knowledge accumulated under different conditions will decline in importance with the institutional transition (Newman, 2000). Moreover, since deregulation and privatization open up industries from which non- state-owned firms have previously been excluded, the fresh perspective and change orientation of outsiders are instrumental in enabling firms to capture these new opportunities. Studies suggest that whereas leadership change can be disruptive in stable environments, it may actually enhance performance in a turbulent environment because a new leader may be more capable of adapting to ongoing changes (Tushman and Rosenkopf, 1996; Haveman, Russo, and Meyer, 2001). A study by Bennedsen *et al*. (2007) found that outside successors contributed to firm profitability more than family successors, especially in fast-growing industries. Specific to emerging economies, Claessens and Djankov (1999) found that bringing in outside successors facilitated firm performance in the Czech Republic.

Inside successors possess more firm-specific knowledge than their outsider counterparts and may therefore fall into the 'competency trap' and be less willing or able to adapt to drastically changed market conditions. In contrast, outsiders—who often have acquired knowledge and experience in different fields—tend to bring new ideas and fresh perspectives to help firms cope with new challenges. The risk of adverse selection may be less severe in the relationship-based societies typical of emerging economies than in 'arm's-length' market-based societies. Although firms typically know more about a candidate from within the firm than from outside (Zajac, 1990), a fair amount of information can be gathered on outsiders because the search process will tap into informal and personal contacts (Bian, 1997). Therefore, as a first and baseline hypothesis we propose the following. (Note: 'inside successor' denotes a nonfamily inside successor.)

Hypothesis 1: In emerging markets, leadership succession by outsiders is associated with higher subsequent firm profitability than succession by family members and insiders.

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Relational embeddedness of successors of different origin

Family firms

Family firms are the dominant governance structure in many emerging economies (Claessens, Djankov, and Lang, 2000). The family exerts control by having the largest shareholding in the ownership structure—family members may own shares directly or through other firms under their control (La Porta, Lopez-de-Silanes, and Shleifer, 1999). Family relationships foster strong ties based on identity and trust; they help transmit critical and subtle information and bypass formal bureaucratic lines, resulting in high quality and speedy decision making (Adler and Kwon, 2002). Family successors are part of a network created by blood ties, marriage, as well as interactions since childhood. Family relationships also influence interorganizational relationships such as strategic alliances and external resource acquisition as family members tend to generate the firm's initial network structure, and family firms tend to have external networks that hinge upon family executives (Anderson, Jack, and Dodd, 2005). These intra- and interorganizational relationships facilitate the task of family successors. Empirical evidence shows that executive ties to family in Ghana provide the embedded organization with access to internal and external resources that enhance firm performance (Acquaah, 2007).

In contrast, such social ties and network resources are not available to outside successors. Indeed, even inside successors who have worked for the firm for many years may not be able to access some of these resources owing to the exclusive nature of family ties. While information and network building are indispensable during the initial leadership transition (Kotter, 1999), outsiders' access to critical information and resources is limited due to a lack of trust and sense of common identity in firms with high family involvement.

We hence suggest that the social context of family relationship provides important contingency for the outsider premium we have posited. Since the alignment between family successor origin and high family involvement in business gives the family successor a clear advantage in accessing network resources, the outsider premium may be reduced in these family firms (as compared with firms with low family involvement). Nevertheless, based on prior research that suggests the advantage of outsiders in fast-changing environments and given the important benefits outsiders can bring to family firms to better capture the new opportunities offered by deregulation and privatization, we expect that in family firms the outsider premium may not be completely offset by the performance gains from the alignment between family successor origin and family involvement.

> *Hypothesis 2: The performance premium of outside vs. family successors is lower in firms with high family involvement than in firms with low family involvement.*

Business groups

We now consider the other pervasive network structure in emerging economies, business groups. Each group consists of a set of legally independent firms bound together by multiple and stable interfirm ties. The ties range from formal economic arrangements—such as equity cross-holdings and interlocking directorates—to informal social links based on family and friendship (Granovetter, 1995). Business groups provide valuable information and resources for member firms, which rely on one another and on group-level strategic decision making to achieve their goals (Chang and Hong, 2000).

In a business group network, family and inside successors have better access to the group's information and resources than those from outside the group. Business groups tend to be diversified and possess tacit information across industries. Owing to a common identity, mutual trust, and routine interactions, inside and family successors will be more at ease in gathering information available within the group (Khanna and Yafeh, 2005). Business group networks may also serve as internal markets for member firms, thereby helping to overcome the problem of limited market intermediaries and high transaction costs. Empirical evidence suggests that inside and family leaders have better access to internal market resources (Luo and Chung, 2005), and that the internal markets of business groups in Chile and India improve affiliates' profitability (Khanna and Palepu, 2000a, 2000b). In addition, inside and family successors are better placed to participate in group-level strategic decision making and to influence group-level resource allocation to the benefit of their own firms.

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Since the alignment between family/inside successor origin and the social context of business group relationship gives such successors a clear advantage in accessing group resources, the outsider premium may be reduced in group-affiliated firms (as compared with stand-alone firms). Nevertheless, similar to the reasoning above, given the important benefits of outsiders, we expect that in group-affiliated firms the outsider premium may not be completely offset by the performance gains from the alignment between family/inside successor origin and business group relationship.

Hypothesis 3: The performance premium of outside vs. family and inside successors is lower in firms affiliated with business groups than in stand-alone firms.

Mature market-based institutional logic and legitimacy of successors of different origin

High tech industries

In many emerging markets, high tech industries are influenced by the institutional logic imported from Silicon Valley (Saxenian, 2006; Miller *et al*., 2009), which values innovation, achievement, and professional management (Saxenian, 1994). Accordingly, leadership succession is guided by meritocracy and performance rather than particularistic relationships. Some 40 percent of the companies located in the Science Park of Hsinchu (Taiwan) in 1999, for example, were started by U.S.-educated engineers, many of whom had considerable experience in Silicon Valley (Saxenian and Hsu, 2001). The value placed on innovation, rooted in Silicon Valley, channels attention to issues related to problem solving and to solutions centered on diverse perspectives and learning (Thornton and Ocasio, 1999). In such an organizational field, outside and inside successors may be viewed as more legitimate than family successors. Inside successors are usually promoted for their achievements, while outside successors are legitimized by their professional excellence, fresh perspectives, and accepted notions of job mobility in the institutional logic of Silicon Valley high tech industries. In contrast, family successors may be viewed as having made it to the top through particularistic relationships; the fact that they come from a restricted pool prompts concerns about quality and the firm's commitment to professional management.

The legitimacy of successors can help firms overcome the obstacles created by institutional voids. Organizational legitimacy helps to 'attract resources of higher quality at favorable terms' (Heugens and Lander, 2009: 64), especially in a context of uncertainty and information asymmetry (Higgins and Gulati, 2006). We posit that as suppliers, creditors, employees, and partners in an industry share the same institutional logic (Porac *et al*., 1995), the appointment of a nonfamily successor will allay their concerns about the firm's future, thereby yielding advantages in resource acquisition. First, legitimate successors can broaden the range of suppliers of factors of production and attract high quality suppliers. For instance, in the labor market, the new leader's legitimacy will enhance the firm's image as a good employer, thus attracting high quality employees (Dacin *et al*., 2007). Potential alliance partners can feel assured that the focal firm has the capacity and the connections with Silicon Valley to contribute to the partnership, and this can help the focal firm obtain valued partners. Kim and Higgins (2007) observed that certain leadership backgrounds bestowed legitimacy on young biotech firms and attracted established alliance partners. In the capital markets, banks may be more willing to fund the initiatives of firms with legitimate new leaders (Deeds, Mang, and Frendson, 2004; Higgins and Gulati, 2006). Second, the new leader's legitimacy enhances the firm's ability to obtain resources on favorable terms. Deephouse (1999: 153) argues that 'an exchange partner may accept less favorable contract terms from a legitimate firm' because of the benefit of enhanced social standing by working with a legitimate firm and the lower risk premium associated with legitimacy. In sum, legitimate successor origin enables firms to increase the quality and lower the cost of resource supplies, and hence contributes to firm profitability.

A case in point is Acer, whose founder, Mr. Sten Shih, barred his family from working for the company (*Economist*, 1996, 2000). In 2005, Mr. Shih passed the top position to a veteran executive (Jeng-tang Wang) who had helped Acer establish its brand in Europe (*Common Wealth*, 2005), a move that won praise from suppliers, customers, and investors, and enhanced Acer's reputation in the labor market. Compared with other industries, nonfamily successors in high tech industries are—thanks to their perceived legitimacy—likely to enhance key stakeholder confidence, garner

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resources, and ensure superior post-succession performance.

Hypothesis 4: The performance premium of outside and inside successors (as opposed to family successors) is greater for high tech firms than for firms in other industries.

Foreign institutional investment

Since foreign institutional investors (most of who are based in the United States or in the United Kingdom) follow the institutional logic of shareholder-based governance (Useem, 1996), they may view family and inside successors as less legitimate than outsiders. The shareholder model emphasizes professional management, transparency, and shareholder rights. Family succession is believed to run counter to these principles and compromise the interests of outside investors. As Useem noted, '[I]nvestors are also mindful of the presence of two fourth-generation descendants, cousins Edsel B. Ford II and William C. Ford Jr., in the upper-middle ranks. . .. "Edsel and Bill Ford have the right last name," observes [one business] writer, "but do they have the right stuff?"' (1996: 159). Luo, Chung, and Sobczak (2009) found that U.S. investors avoided Taiwanese firms with high family ownership and a family chief executive.

Succession by nonfamily insiders is also viewed with suspicion in light of the information asymmetry, weak legal protection of shareholders, and ineffective market for corporate control. Inside succession is likely to be associated with nontransparency, higher monitoring costs, and a greater propensity for insider trading or tunnelling (Khanna and Palepu, 1998). In contrast, an outside successor is more congruent with the logic of foreign institutional investors, who thus feel more assured that strategic decisions will be based on corporate rather than family or personal interests, and that the firm will be guided by the principles of professional management.

Outside successors' legitimacy in the eyes of these investors can contribute to firm performance for the following reasons. First, it enhances investors' resource commitment. Dacin *et al*. suggest that when firms gain legitimacy from investors, 'investors are more likely to support the continuation of the business activity, thus making it more feasible to accomplish the firm's future goals, obtain extra funding or investment for the firm's purposes, and therefore increase the likelihood of success' (2007: 182). An example of the withdrawal of support by foreign investors in the case of a family successor occurred when Mr. Junzhe Chen, the son-in-law of the founder, was appointed CFO of the China Trust Bank. Infuriated, CitiBank subsequently withdrew a significant chunk of its investment, seeing Mr. Chen as the designated successor and the family's attempt to gain more control. Mr. Chen complained that despite his professional experience at Goldman Sachs, the only thing CitiBank considered was the family tie (*Business Weekly*, 2004).

Second, as family and other inside successors operate under a different institutional logic—the logic of family governance—they are more likely to experience conflict with foreign investors than an outsider. Studies have found different strategic preferences between U.S. institutional investors and inside/family executives in areas such as downsizing and divestiture (Ahmadjian and Robinson, 2001; Chung and Luo, 2008). Even when objective information suggested the need for divestiture, family leaders still resisted this decision because of concerns for family identity and control (Yuen and Hamilton, 1993). We suggest that outside successors, who have less attachment to the organization's history and family interests, will be more amenable to the preferences of foreign institutional investors. This may result in quicker strategic decision making to capture business opportunities. The ability to make fast strategic decisions has been found to be instrumental to firm performance in rapidly changing environments (Eisenhardt, 1989), which characterize emerging economies.

Hypothesis 5: The performance premium of outside successors (as opposed to family and inside successors) is greater for firms with high levels of foreign institutional ownership than for firms with low levels of such ownership.

METHODS

Context, sample, and data sources

We test the above hypotheses in the context of Taiwan between 1996 and 2005. Immediately preceding this period, state enterprises were privatized and monopoly industries were deregulated. In the

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1980s, entry 'permits' were required in 42 industries (Chu, 2001), but within a decade industries such as banking, mass transportation, publishing, and telecommunication had been deregulated. With the removal of constraints such as high import tariffs, the inflow of foreign investment doubled. The summary Index of Economic Freedom rose from 5.2 to 6.5 in a couple of years (Fraser Institute, 1997), suggesting a significant increase in market competition. As is typical in emerging markets, however, the establishment of market structures in Taiwan has been fragmented and institutional voids have been conspicuous. The first professional headhunter, '104 Job Bank,' was not established until 1996 and headhunters for top executives came even later. Taiwan Rating—the first independent credit rating agency in Taiwan—was not launched until 1997. Regulations for mergers and acquisitions (M&A) were not enacted until 2002 (Tsai, 2002). At the end of 2003 there were just two investment banks in all of Taiwan. In sum, during the period 1996 to 2005, the removal of constraints on market competition and the institutional voids resulted in a turbulent and uncertain business environment.

Our sample comprises all publicly listed firms (except for those in the financial sector) on the Taiwan Stock Exchange (TSE). In total there are 4,636 firm-year observations, pertaining to 631 unique firms. Excluding cases with missing information, our final sample consists of 4,316 firm-year cases and 573 unique firms. Because in every year some firms are delisted and some are newly listed, our dataset is an unbalanced panel. The most powerful executive in a Taiwanese firm is the Chair of the board (*Tung Shih Chang* in Mandarin), a role similar to the combined chief executive officer (CEO) and chair of the board position in U.S. firms (in Taiwanese firms there is no functional separation between the two). Our research design includes firms that experienced chair succession and those that did not. It also includes, for firms experiencing leadership succession, information on both succession and non-succession years. Giambatista *et al.* (2005) point out that in succession research, many studies examine only succession events but do not address how different types of successors compare with non-succession in their performance impact.

We collected annual firm performance and other firm characteristics from the *TEJ* (*Taiwan Economic Journal*) electronic database, the most comprehensive database for listed companies in the Asian Pacific. For business group membership, we referred to the directories of Business Groups in Taiwan (BGT) compiled by Taipei's China Credit Information Service (CCIS) (Brookfield, 2010).

For chair succession and the origin of successors, we adopted a multisource strategy to search all relevant information for succession cases. We first identified board chair changes from the list of names provided by the *TEJ* database. There were 389 cases of succession during our observation period. We then searched various newspaper and magazine databases—for example, *United Daily, Business Weekly* (in Mandarin, *Shang Yeh Chou Kan*), *Fortune* (in Mandarin, *Tsai Hsun*)—to locate background information on both the chair transition event and the origin of the incoming chair. We also utilized information reported in various trade journals, court verdicts, and blogs of individual stock investors who closely follow the governance structure of firms in which they invest. In addition, our search strategy benefited from the first (perhaps only) online portal specializing in tracking people's career history (www.memo.com.tw). We located information on 368 of succession episodes.

Dependent variable

We used return on assets (ROA) as the dependent variable for firm performance because ROA is a well-understood and widely used accounting measure of operational performance (Zajac, 1990; Shen and Cannella, 2002). We did not use market valuation, which is often subject to forces beyond management control, since our study attempts to understand the impact of succession on a firm's profitability. There is, of course, a time lag before the performance effect of succession becomes evident. Given the usual time lag in emerging economies as well as fluctuations in firm performance (Gibson, 2003), we used the average ROA in the two years after the year of the succession. For non-succession cases, the dependent variable is also the average firm ROA in the subsequent two years.

Independent variables

We first used a dummy variable to indicate whether there was a change of chair in a given year, coded 1 if there was a change and 0 otherwise. We then used a series of dummy variables to indicate the

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origin of the incoming chair. A family successor was coded 1 if the incoming chair was related to the controlling family through marriage or family ties (and coded 0 otherwise). The term 'controlling family' refers to the family with the largest shareholding in a firm's ownership structure. Family members own company shares either directly or through other public and private firms that are *de facto* under their control. We consider the pyramid structure in ownership to calculate family shareholding by using the methodology developed by La Porta *et al*. (1999). In our sample, the controlling family owns, on average, 26 percent of the shares. In 95 percent of the cases coded as family successors, the successor was the son, younger brother, or spouse of the predecessor. A nonfamily inside successor was coded 1 only if a nonfamily executive who was currently an officer or a director of the focal firm was promoted to the position of chair. Note that family successor and nonfamily inside successors were coded as mutually exclusive. An outside successor was coded 1 only if an executive who was not an employee of the focal firm (or, for member firms of business groups, an employee of other affiliates in the same group) was hired to the chair position. Out of the 368 successions in our dataset, 111 were outside successors, 134 were internally promoted successors, and 123 were from controlling families.

To test the moderating effects in our hypotheses, we created interaction variables between these three types of successors and family ownership, business group membership, high tech industries (defined as the electronic and computer sectors), and foreign institutional ownership. Following Aiken and West (1991), we centered and standardized family and foreign institutional ownership in the interaction terms.

Control variables

We controlled for the industry average performance through the mean of the ROA of the same-industry firms (based on two-digit Standard Industrial Classification code) in the subsequent two years (Ballinger and Marcel, 2010). Previous research has shown that leadership succession has differing effects depending on an organization's size and stage of life (Haveman, 1993). Firm age was computed by subtracting from the data year the number of years elapsed since the firm was founded; firm size was measured by the logged values of annual firm sales, adjusted by the consumer price index. We also replaced annual sales with number of employees (logged) as a measure of firm size, and the results were largely unchanged. Firm diversification was measured by the number of different four-digit product lines in which a firm participated. We controlled firm resources through the debt-to-equity ratio and the research and development (R&D) ratio (expressed as expenditures to total sales) (Chatterjee and Wernerfelt, 1991). A firm's past performance is likely related to both leadership change and future performance change (Lubatkin *et al*., 1989). We consider this by using the selection model described later in the paper. Since including lagged dependent variables in fixed-effects models could produce biased estimates, we estimated the main model with and without the controls of previous year ROA and previous year industry average ROA. Our key results remained.

We controlled for ownership and governance through the percentage of shares owned by the controlling family (as explained above), foreign institutional investors, domestic institutional shareholders, independent directorship, and business group membership. Independent directorship was measured with a dummy variable to indicate whether a firm had at least one independent director on the board. Independent directors can guard against self-serving behavior by the controlling family (Anderson and Reeb, 2004) and may also affect firm performance by influencing firm strategies.[1] Note that Taiwanese law did not require public firms to appoint independent directors until 2006. Group membership was coded 1 only if a firm was a member of the top 100 business groups. The top 100 business groups collectively represented 2,419 member firms and contributed 85.4 percent of national gross domestic product in 2002 (Chung and Mahmood, 2006: 78). More than half of the ties that link member firms within a business group are family ties, and families are also the foundation for clear group boundaries (Hamilton and Biggart, 1988; Luo and Chung, 2005; cf. Khanna and Rivkin, 2006). Because we used fixed-effects models, both the main variable

[1] We used a dummy variable because 88 percent of cases did not have any independent directors and among those with independent directors, 92 percent had only one or two independent directors; when we replaced the dummy variable with the proportion of independent directors on the board, our results were largely unchanged.

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of group affiliates and the main variable of high tech industries were dropped from the models.

We used education and related work experience to control for the effects of leaders' human capital. We collected information about education from *The Manager Directory* in Taiwan (also published by CCIS). Educational level was measured as the highest degree earned (Zhang and Rajagopalan, 2010) and coded from 1 (primary school) to 7 (doctorate degree). We considered chairs as having related work experience if they had worked in the same industry during the two previous years (coded 1, or 0 otherwise) (Shen and Cannella, 2002; Zhang and Rajagopalan, 2004).

It is important to consider the circumstances under which succession occurred. We controlled for three types of situations: M&A, a government recommendation of a new appointment, and demotion or resignation due to unsatisfactory performance. The last category may be underestimated given that such cases are rarely reported in the press. Compared with other situations prompting succession (such as retirement), these three types represent involuntary departures and may affect successor origin and firm performance. Finally, we controlled for industry instability, as measured by the three-year moving average of total sales until the prior year (Dess and Beard, 1984), and also for general environment via year dummies (Tushman and Rosenkopf, 1996).

Correction for endogeneity

Previous research has suggested that poor performance is likely to trigger leadership succession (Giambatista *et al*., 2005). Moreover, it is plausible that firms largely controlled by a family are less likely to hand over the crown (Gibson, 2003). These scenarios may cloud the argument about the performance consequences of succession because of the self-selection of firms into succession. We therefore employed the Heckman selection model, a two-stage procedure that corrects for self-selection bias in regression analysis (Heckman, 1979). In the first equation we used a repeated event history model to predict the succession event with covariates that included (among others) the firm's previous year's ROA, the previous year's industry average ROA, family ownership, percentage of family members on the board, and number of prior leadership successions. We then used the inverse Mills ratio to transform the index function into a hazard rate and included the estimated rate (λ) in a second-stage regression model (Van De Ven and Van Praag, 1981).[2]

Model specification

Our study examines 10 years of time-varying data on 573 listed firms. We conducted a fixed-effects pooled time-series regression analysis using the STATA command 'xtreg fe.' A fixed-effects model focuses on within-firm variation over time, so the coefficients are not biased by time-invariant firm heterogeneity. The fixed-effects model is suitable because our goal is to ascertain the effect of an intervention (leadership succession) and our cases do not constitute a random sample of a population (Hsiao, 1985). We conducted a Hausman test, which indicated a significant difference in the coefficients of the random- and fixed-effects models ($p < 0.001$). The fixed-effects model shows how, as a specific firm experiences a leadership transition, its performance changes from prior performance when we control for changes in other characteristics such as size, level of diversification, and investment.

RESULTS

Table 1 presents descriptive statistics for the variables used in our analysis.[3] Table 2 presents findings about the effects of leadership succession on firm performance.

In Table 2, we first estimated Model 1 with control variables and the dummy variable indicating the event of leader change. In comparison, Model 2 includes three variables distinguishing the origin of the new chairs instead. Although chair succession in general does not

[2] We tried different functional forms (e.g., logit and probit) for the first-stage model and then incorporated their respective parameters into the second-stage regression; the results were substantively the same.

[3] Note that all three types of succession are negatively related to post-succession performance, with outside succession having the largest negative effect. However, these correlation coefficients primarily reflect between-firm differences. When we examined the correlation between outside succession and (industry-adjusted) firm performance in the current year, next year, and year after next, the respective correlation coefficients were −0.15, −0.09, and −0.06. In contrast, the change in the size of such coefficients for family succession was less than 0.002. The patterns suggest the improvement of post-succession performance over time for outside succession.

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Table 1. Means, standard deviations, and correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1 Firm average ROA of next two years	3.99	8.42										
2 Industry average ROA (mean of next two years)	4.05	3.28	0.26*									
3 Industry instability	0.16	0.07	−0.01	−0.18*								
4 Firm age	26.46	11.32	−0.08*	−0.17*	0.33*							
5 Total sales (logged)	15.20	1.29	0.22*	0.12*	0.03	0.002						
6 Product diversification	4.21	2.49	−0.04*	−0.02	0.16*	0.18*	0.10*					
7 Family ownership	26.06	16.36	0.10*	−0.06*	0.16*	0.08*	−0.06*	0.06*				
8 Foreign institutional ownership	6.16	10.55	0.22*	0.11*	0.001	−0.04*	0.34*	0.03	−0.05*			
9 Domestic institutional ownership	29.02	19.20	0.09*	−0.08*	0.11*	0.001	0.11*	0.03*	0.40*	−0.08*		
10 Independent directors	0.03	0.09	0.13*	0.06*	−0.20*	−0.17*	0.02	−0.10*	0.03*	0.05*	−0.05*	
11 R&D expenditure	1.83	3.44	0.09*	0.19*	−0.27*	−0.30*	−0.04*	−0.03	−0.12*	0.10*	−0.14*	0.19*
12 Debt/equity ratio	0.91	1.77	−0.16*	−0.10*	−0.01	0.02	−0.07*	−0.01	−0.03*	−0.07*	0.01	−0.02
13 Chair education	4.64	1.38	0.02	0.14*	−0.13*	−0.06*	0.04*	−0.08*	−0.12*	0.10*	0.01	0.07*
14 Chair industry-specific experience	0.94	0.24	0.09*	−0.04*	−0.05*	0.03*	0.08*	0.01	−0.01	0.04*	−0.08*	0.06*
15 Mergers and Acquisitions	0.01	0.11	−0.11*	−0.01	−0.01	−0.01	−0.06*	−0.02	−0.06*	−0.01	−0.01	−0.02
16 Political appointment	0.01	0.08	0.003	0.03	0.04*	0.09*	0.06*	−0.01	0.06*	−0.03	0.12*	−0.03
17 Resign or demote due to low performance	0.002	0.04	−0.03	−0.01	−0.02	−0.01	−0.02	0.01	−0.01	−0.02	0.02	0.00
18 High-tech industries	0.36	0.48	0.08*	0.41	−0.55*	−0.52*	0.61*	−0.16*	−0.18*	0.09*	−0.14*	0.28*
19 Group-affiliated firm	0.81	0.39	−0.04*	−0.05*	0.13*	0.14*	0.27*	0.12*	−0.003	0.07*	0.24*	−0.19*
20 Heckman value	1.52	0.34	0.42*	0.12*	−0.28*	−0.21*	0.32*	−0.09*	0.004	0.18*	−0.10*	0.40*
21 Leadership change with family successor	0.03	0.16	−0.05*	−0.05*	0.06*	0.07*	−0.02	0.04*	0.02	−0.02	0.01	−0.02
22 Leadership change with inside successor	0.03	0.17	−0.04*	0.0004	−0.01	−0.03	−0.03	−0.01	−0.03*	0.02	0.01	−0.003
23 Leadership change with outside successor	0.02	0.15	−0.08*	0.01	0.01	0.03	−0.03*	−0.01	−0.02	−0.03*	0.07*	−0.03*

Variables	11	12	13	14	15	16	17	18	19	20	21	22
12 Debt/equity ratio	−0.07*											
13 Chair education	0.16*	−0.01										
14 Chair industry-specific experience	0.06*	−0.12*	−0.03									
15 Mergers and Acquisitions	−0.01	0.08*	0.002	−0.29*								
16 Political appointment	−0.04*	0.02	0.05*	−0.18*	−0.01							
17 Resign or demote due to low performance	−0.01	0.003	−0.005	−0.08*	−0.005	−0.003						
18 High-tech industries	0.40*	−0.05*	0.22*	0.20	0.02	−0.05*	0.02					
19 Group-affiliated firm	−0.10*	−0.01	−0.03	−0.04*	0.03	0.02	0.01	−0.13*				
20 Heckman value	0.19*	−0.16*	0.05*	0.18*	−0.14*	−0.02	−0.03	0.31*	−0.38*			
21 Leadership change with family successor	−0.01	0.02	0.05*	−0.02	−0.02	−0.01	−0.01	−0.06*	0.03	−0.06*		
22 Leadership change with inside successor	−0.003	0.08*	0.04*	−0.15*	0.01	−0.01	0.18*	0.03	0.04*	−0.05*	−0.03	
23 Leadership change with outside successor	−0.03	0.07*	0.04*	−0.38*	0.71*	0.53*	0.07*	−0.01	0.03	−0.13*	−0.03	−0.03

* significant at <0.05; N = 4, 316.

affect post-succession firm performance, outside succession shows a positive effect ($p < 0.01$) compared with non-succession. With a likelihood ratio test, Model 2 shows a significant improvement over the model with only control variables (model not shown here; $\chi^2 = 10.26$, $df = 3$, $p < 0.05$). To test our interaction hypotheses, Models 3–6 add the variables for interaction between the three types of successors and family ownership, group membership, high tech industries, and foreign institutional ownership. Model 7, the full model, includes all the interaction variables and improves overall model fit significantly over Model 2 ($\chi^2 = 55.33$, $df = 12$, $p < 0.001$). The within-group R2 is equal to 0.15. The inverse Mills ratio is significant ($p < 0.05$), suggesting the importance of controlling for endogeneity.

Hypothesis 1 predicts that outside successors are associated with higher post-succession firm profitability than family or inside successors. In Model 2, firms experiencing leadership change with outside successors subsequently perform better than without change, whereas firms experiencing a change of chair with inside or family successors do not subsequently perform differently. Using a Wald test, we find that the coefficient for outside successors is significantly larger than coefficients for family and inside successors ($p < 0.001$). This suggests that outside succession is associated with higher post-succession firm profitability than inside or family succession; hence Hypothesis 1 is supported.

Hypothesis 2 predicts that the performance premium of outside vs. family succession is reduced in firms with high family involvement. In Model 7, the interaction between family ownership and outside succession is negative ($p < 0.1$). This suggests that as family ownership increases, the performance benefit of outside succession (vs. non-succession) is reduced. The interaction between family ownership and inside succession is also negative ($p < 0.1$), but that between family ownership and family successor is positive (although not significant). Wald tests show that the coefficient for the interactions with outside or inside succession is significantly lower ($p < 0.05$) than that for the interaction with family succession. As illustrated in Figure 1, in high family ownership firms (high and low family ownership values are taken at one standard deviation above and below the mean), outside and inside succession are both associated with lower performance than the respective successions occurring in low family ownership firms; whereas family succession is associated with slightly better performance in high family ownership firms. The performance premium of outsider vs. family succession is much smaller in high family ownership firms than in low family ownership firms (1.53 vs. 4.77 units of ROA). Thus, Hypothesis 2 is supported. The performance gain of inside vs. family successor is also significantly reduced in high family ownership firms, which confirms the exclusivity of family networks. Nevertheless, in largely family-owned firms, outside succession is still associated with better post-succession profitability than family succession. This means that the outsider premium is not completely offset by the gains from the alignment between family successor origin and family involvement.

Hypothesis 3 predicts that the performance premium of outside successors vs. inside and family successors is weaker in group-affiliated firms than in stand-alone firms. In Model 7, the interaction between business group affiliation and outsiders and that between group affiliation and insiders are both negative but insignificant; the interaction with family successors, however, is positive ($p < 0.01$). As a result of the benefit of family successors in group-affiliated firms, the relative premium of outside vs. family successors is reduced in such a context. Wald tests suggest that the coefficient for the interaction with family successors is significantly larger than that for the interaction with outside successors ($p < 0.01$). Contrary to our expectations, insiders do not share the same benefit as family successors in group member firms, possibly because of the importance of family-based networks among affiliated firms. As illustrated in Figure 2, the performance premium of outsiders vs. family is reduced from 9.71 to 2.48 when the setting is changed from a stand-alone firm to an affiliated firm, but no similar reduction is observed for the performance premium of outsiders vs. insiders. Thus Hypothesis 3 is partially supported.

In accordance with Hypothesis 4, which predicts even better firm performance for outside and inside successors than for family successors in high tech industries, the interaction terms between both outside and inside successors and high tech industries are positive (Model 7, $p < 0.01$). In contrast, the interaction between family successors and high tech industries is negative (though insignificant). The coefficient for the interaction with outside or

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Table 2. Fixed effects models predicting the effect of leadership succession on firm performance, publicly listed firms in Taiwan, 1996–2005

	Model 1		Model 2		Model 3		Model 4	
Industry average ROA (mean of next two years)	0.86***	(0.04)	0.86***	(0.04)	0.86***	(0.04)	0.86***	(0.04)
Industry instability	−6.45	(4.71)	−6.31	(4.70)	−6.46	(4.70)	−6.61	(4.70)
Firm age	−0.06	(0.04)	−0.07	(0.04)	−0.07	(0.04)	−0.07	(0.04)
Total sales (logged)	−1.10***	(0.21)	−1.09***	(0.21)	−1.06***	(0.21)	−1.06***	(0.21)
Product diversification	−0.13†	(0.08)	−0.13†	(0.08)	−0.13	(0.08)	−0.13†	(0.08)
Family ownership	−0.02†	(0.01)	−0.02†	(0.01)	−0.02	(0.01)	−0.02†	(0.01)
Foreign institutional ownership	−0.02†	(0.01)	−0.02†	(0.01)	−0.02	(0.01)	−0.02†	(0.01)
Domestic institutional ownership	0.01	(0.01)	0.02	(0.01)	0.01	(0.01)	0.01	(0.01)
Independent directors	1.05**	(0.40)	1.04**	(0.40)	1.00*	(0.40)	1.06**	(0.40)
R&D expenditure	−0.25***	(0.05)	−0.25***	(0.05)	−0.25***	(0.05)	−0.25***	(0.05)
Debt/equity ratio	0.002	(0.05)	0.01	(0.05)	0.01	(0.05)	0.002	(0.05)
Chair education	−0.42**	(0.16)	−0.42**	(0.16)	−0.40*	(0.16)	−0.43**	(0.16)
Chair industry-specific experience	0.41	(0.39)	0.55	(0.39)	0.53	(0.40)	0.60	(0.39)
Mergers and Acquisitions	−0.17	(0.83)	−3.17*	(1.38)	−3.19*	(1.38)	−2.97*	(1.38)
Political appointment	−1.22	(1.15)	−4.26**	(1.60)	−3.24†	(1.71)	−4.08*	(1.60)
Resign or demote due to low performance	4.81*	(1.94)	4.22*	(1.96)	4.26*	(1.96)	4.15*	(1.97)
Millsratio correction								
Likelihood of succession	−0.95*	(0.48)	−0.91*	(0.48)	−0.94*	(0.48)	−0.98*	(0.48)
Independent variables								
Leadership change	0.41	(0.35)						
Leadership change with family successor			0.19	(0.49)	0.09	(0.49)	−3.34*	(1.37)
Leadership change with inside successor			0.24	(0.49)	0.07	(0.50)	2.98*	(1.46)
Leadership change with outside successor			3.63**	(1.23)	3.24**	(1.24)	6.37**	(1.99)
Leadership change with family successor × Family ownership					0.72	(0.48)		
Leadership change with inside successor × Family ownership					−0.99*	(0.46)		
Leadership change with outside successor × Family ownership					−0.90†	(0.55)		
Leadership change with family successor × Group affiliate							4.04**	(1.46)
Leadership change with inside successor × Group affiliate							−3.02*	(1.54)
Leadership change with outside successor × Group affiliate							−3.20†	(1.82)
Leadership change with family successor × High-tech industry								
Leadership change with inside successor × High-tech industry								
Leadership change with outside successor × High-tech industry								
Leadership change with family successor × Foreign institutional ownership								
Leadership change with inside successor × Foreign institutional ownership								
Leadership change with outside successor × Foreign institutional ownership								
Constant	24.29***	(3.45)	23.93***	(3.45)	23.37	(3.45)	23.61***	(3.45)
R^2 (within)	0.1402		0.1420		0.1441		0.1453	
Likelihood-ratio test vs. Model 2					11.00**		16.82***	
Degrees of freedom					3		3	

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Table 2. (*Continued*)

	Model 5		Model 6		Model 7	
Industry average ROA (mean of next two years)	0.86***	(0.04)	0.86***	(0.04)	0.86***	(0.04)
Industry instability	−6.52	(4.69)	−6.39	(4.71)	−7.00	(4.69)
Firm age	−0.07	(0.04)	−0.06	(0.04)	−0.06	(0.04)
Total sales (logged)	−1.10***	(0.21)	−1.08***	(0.21)	−1.04***	(0.21)
Product diversification	−0.14†	(0.08)	−0.13†	(0.08)	−0.13†	(0.08)
Family ownership	−0.02†	(0.01)	−0.03*	(0.01)	−0.02†	(0.01)
Foreign institutional ownership	−0.02	(0.01)	−0.03†	(0.01)	−0.03†	(0.01)
Domestic institutional ownership	0.01	(0.01)	0.02	(0.01)	0.02	(0.01)
Independent directors	0.94*	(0.40)	1.05**	(0.40)	0.96*	(0.40)
R&D expenditure	−0.24***	(0.05)	−0.25***	(0.05)	−0.26***	(0.05)
Debt/equity ratio	0.02	(0.05)	0.01	(0.05)	0.01	(0.05)
Chair education	−0.41**	(0.16)	−0.44**	(0.16)	−0.43**	(0.16)
Chair industry-specific experience	0.53	(0.39)	0.51	(0.40)	0.47	(0.40)
Mergers and Acquisitions	−3.24*	(1.38)	−3.36*	(1.38)	−3.50*	(1.39)
Political appointment	−2.79†	(1.69)	−4.22**	(1.60)	−1.27	(1.80)
Resign or demote due to low performance	3.58†	(1.96)	4.32*	(1.97)	3.71†	(1.98)
Millsratio correction						
Likelihood of succession	−0.77†	(0.47)	−0.99*	(0.48)	−0.96*	(0.48)
Independent variables						
Leadership change						
Leadership change with family successor	0.63	(0.54)	0.16	(0.49)	−3.08*	(1.45)
Leadership change with inside successor	−0.96	(0.63)	0.23	(0.49)	0.81	(1.60)
Leadership change with outside successor	1.87	(1.38)	3.87**	(1.24)	3.51	(2.25)
Leadership change with family successor × Family ownership					0.69	(0.49)
Leadership change with inside successor × Family ownership					−0.77†	(0.47)
Leadership change with outside successor × Family ownership					−1.14†	(0.62)
Leadership change with family successor × Group affiliate					3.96**	(1.49)
Leadership change with inside successor × Group affiliate					−1.94	(1.58)
Leadership change with outside successor × Group affiliate					−1.98	(1.91)
Leadership change with family successor × High-tech industry	−2.39*	(1.22)			−1.73	(1.24)
Leadership change with inside successor × High-tech industry	2.89**	(0.96)			2.51**	(0.98)
Leadership change with outside successor × High-tech industry	4.08**	(1.30)			4.16**	(1.34)
Leadership change with family successor × Foreign institutional ownership			−0.43	(0.55)	−0.38	(0.56)
Leadership change with inside successor × Foreign institutional ownership			0.05	(0.42)	0.04	(0.42)
Leadership change with outside successor × Foreign institutional ownership			1.08†	(0.63)	1.98**	(0.68)
Constant	23.94***	(3.44)	24.01***	(3.45)	23.34***	(3.45)
R^2 (within)	0.1472		0.1428		0.1529	
Likelihood-ratio test vs. Model 2	26.33***		4.23		55.33***	
Degrees of freedom	3		3		12	

Note: Number of observations = 4,316, Number of firms = 573. † $P < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, two-tailed tests. Year dummies included.

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inside successors is larger than for the interaction with family successors ($p < 0.05$). The performance premium of outside and inside succession relative to family succession is greater in high tech industries than in other industries. Hypothesis 4 is supported, as illustrated in Figure 3.

Hypothesis 5 predicts a higher performance premium for outside vs. inside and family successors in firms with high foreign institutional ownership. In Model 7, the interaction between foreign institutional ownership and outside succession is positive ($p < 0.01$). Interactions with the other types of successors are not significant. The coefficient for the interaction with an outside successor is larger than for the interaction with family or inside successors ($p < 0.05$). Therefore Hypothesis 5 is supported, as illustrated in Figure 4.

Regarding control variables, industry average ROA is positively related to firm-level performance ($p < 0.001$). As firms grow larger, ROA declines (Model 7, $p < 0.001$). Diversification is negatively related to performance ($p < 0.1$). Increase in family ownership and foreign institutional ownership is related to lower firm performance ($p < 0.1$). Having independent directors is related to better performance ($p < 0.05$). An increase in R&D is related to performance decline ($p < 0.001$), possibly because it diverts resources away from short-term improvement. Chair education is negatively related to firm performance ($p < 0.01$), consistent with Zhang and Rajagopalan

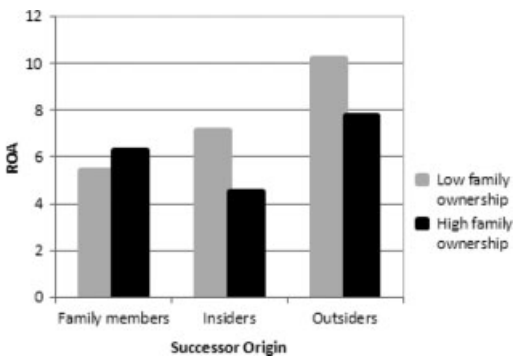

Figure 1. Relationship between successor origin and firm performance for firms with low and high family ownership

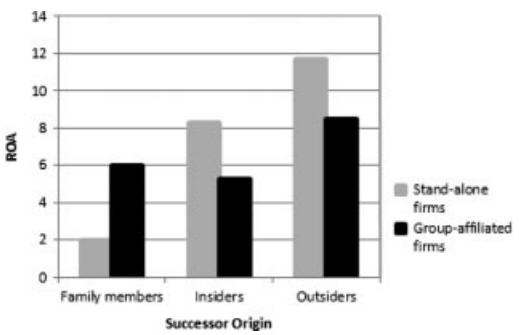

Figure 2. Relationship between successor origin and firm performance for affiliated firms and non-affected firms

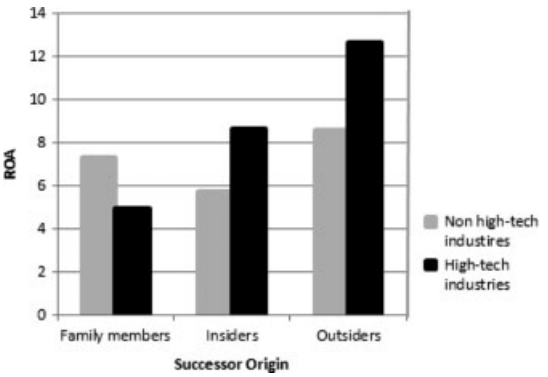

Figure 3. Relationship between successor origin and firm performance for firms in high-tech industries and firms in other industries

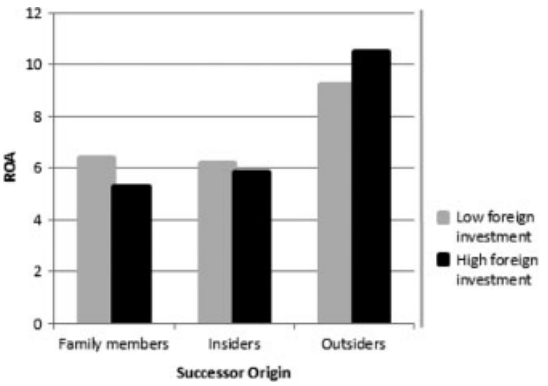

Figure 4. Relationship between successor origin and firm performance for firms with low and high foreign institutional ownership

Note: Figures 1–4 are based on coefficients from Models 3–6 respectively. We calculated the predicted ROA by constraining all variables to their sample means (dummy variables took the majority value, for example, independent directorship took the value of 0), except for moderating variables and the three variables for successor origin. Family ownership took the values of one standard deviation above and below the mean. Foreign institutional ownership took the values of 0 (the minimum possible value) and one standard deviation above the mean.

(2010).[4] There is a strong negative effect ($p < 0.05$) of M&A on performance, which may reflect different motivations for M&A in emerging economies. For instance, many M&A are intended for 'back-door listing' by private firms seeking quick cash; these private owners have no incentive to improve the operational efficiency of the acquired firms. When the chair is changed for reasons of low performance, the subsequent firm performance improves ($p < 0.1$).

Further tests

The performance premium of nonfamily successors in high tech industries may be explained by the more rapid change in these industries, which may render firm-specific knowledge even less useful and so place family successors at a further disadvantage. We controlled for the interaction between industry instability and successor origin. Our results suggest that outsiders lead to even better performance in volatile environments, further supporting Hypothesis 1. More importantly, the interaction between high tech industries and successor origin remains substantively the same, suggesting that the even larger outsider premium in high tech industries cannot be explained solely by the greater instability of these industries.

We also attempt to control for more heterogeneities in leader and firm characteristics. We gathered information on leaders' foreign education and tenure as chair. We examined the role of firm quality since high quality firms are able to attract high caliber outsiders and also exhibit better performance. We used the yearly list of the top 100 most admired companies in Taiwan to proxy firm quality. Moreover, we considered the potential influence of the incumbent's identity and the firm's hiring history. For family succession, we compared cases where the incumbent was a family member vs. nonfamily. For outside succession, we compared cases where the firm had a history of hiring outsiders vs. not. Our main findings were robust to these additional tests.

The performance advantage of outsiders may still be due to regression to the mean. We tried to rule out this possibility by including lagged firm ROA. Our results show that poor past performance is associated with better performance improvement.[5] Nevertheless, above and beyond the pattern of regression to the mean, there is still a difference in performance effects between different successor origins and the contingency effects of social context. We also tried controlling for the moderating effect of poor performance through the interaction between outsiders and 'resign due to low performance.' Our hypotheses remained supported.

DISCUSSION

Our study aims to understand the link between successor origin and firm performance in emerging markets. Results show that outsiders on average are associated with higher post-succession profitability than inside and family successors. More importantly, our findings about how specific social contexts moderate the performance effects of successor origin are consistent with the arguments posited about network access and perceived legitimacy. Despite the fact that outsiders still outperform family successors in firms with high family ownership and in group-affiliated firms, the significantly reduced outsider premium suggests some misalignment between outside origin and preexisting strong social relationships in these social contexts. Yet outsiders and insiders outperform family successors even more in high tech industries, and the outsider premium is also magnified in foreign invested firms. Such an enhanced outsider premium suggests alignment between outside origin and the mature market-based institutional logic characterizing the respective social contexts.

Our finding on the performance premium of outside successors may be due to influences beyond meritocracy and competency (Bennedsen *et al.*, 2007). Compared with family successors, who possess more firm-specific knowledge and are more bound by existing organizational routines, outsiders bring fresh and diverse knowledge and

[4] This negative effect is partially due to the fact that the majority of cases where top leaders' education increased over time involved succession by family members (second generation), and family firms headed by second-generation leaders often perform less well than those headed by founders (e.g., Miller *et al.*, 2007).

[5] The lagged ROA has a positive effect on subsequent performance in the random-effects model. The difference between fixed- and random-effects models regarding this finding is analogous to Beck, Bruderl, and Woywode (2008), which found a negative effect of number of prior organizational changes on the future likelihood of organizational change through fixed-effects estimation but a positive effect through random-effects estimation. They endorsed the finding based on fixed-effects models for their better control of firm heterogeneity.

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perspectives, and may be more capable of initiating changes. The ability to initiate change is particularly important due to the large-scale institutional changes that gave rise to new opportunities, intense competition, and uncertainties in emerging economies. Our argument is in line with studies that have found performance benefits of leadership succession in turbulent environments (e.g., Tushman and Rosenkopf, 1996; Haveman *et al*., 2001), suggesting that the advantage of adaptability of outside successors outweighs the disruption typically associated with their appointment. Although our analysis controlled for some typical strategic actions such as divestiture and downsizing (through levels of diversification and employment), future research could focus on how the strategic actions taken by outsiders differ from those taken by family and inside successors (Hambrick and Mason, 1984) and thus shed further light on post-succession performance differences.

Our findings speak to the importance of family ties for business groups. Contrary to expectation, we found that only family successors (not insiders) were associated with better profitability compared with outside successors in group affiliates. This is consistent with studies that have shown the particular importance of family for business groups in East Asia (Hamilton and Biggart, 1988). However, these results should be treated with caution because we included only publicly listed group affiliates (which are the larger members of the group). Prior research suggests that group member firms do not benefit equally from sharing group resources, with large and well-performing members subsidizing small and weak affiliates (Lincoln, Gerlach, and Ahmadjian, 1996). Therefore, the inside successor advantage (as compared to outsiders) in accessing group networks may well be reduced in large member firms.

Although emerging economies provide us with a rare opportunity to investigate how social contexts moderate the performance effects of successor origin, they may also impose constraints on data analysis. Our institutional logic argument would suggest a positive shareholder reaction on the stock market to outside succession. However, given the less efficient stock markets due to problems such as information asymmetry, investor psychology, and weak minority-shareholder protection (see Demsetz and Villalonga, 2001), the stock market reaction to succession announcements may be muddier than in mature markets. Future studies may explore these succession outcomes with this caveat in mind.

CONCLUSION

Our study contributes to a better understanding of the way the unique social context of emerging markets shapes the performance outcomes of leadership succession. Our framework draws upon the social embeddedness and neo-institutional perspectives to enrich previous research on leadership succession in emerging markets that has been guided primarily by agency theory. Our study suggests that, given the weak market institutions, successors' access to social networks and the legitimacy conferred by important stakeholders are crucial to their ability to garner resources and support, which in turn benefits firm profitability. In addition, we enhance the methodological rigor of this research by using more precise measures of successor origin as well as a longitudinal research design that includes cases of non-succession. Our study thus sheds some light on the mixed findings on leadership change in transitional economies. For example, Claessens and Djankov (1999) found that outside successors improved performance in the Czech Republic, whereas Kato and Long (2006) reported that CEO turnover was inversely associated with profitability in China, and Peng *et al*. (2003) did not find significant effects for leadership change in Russia.

We also contribute to the research on leadership succession by emphasizing the importance of alignment between successor origin and social context. Recent studies have increasingly focused on how contexts such as power and politics, as well as organizational learning, alter the impact of leadership succession (Shen and Cannella, 2002; Zhang and Rajagopalan, 2004). Our study extends the investigation of organizational contexts to social contexts, answering the call to consider more boundary conditions (Day and Lord, 1988; Giambatista *et al*., 2005). These conditions may reconcile contradictory findings from prior research (Kesner and Sebora, 1994). More importantly, by demonstrating the importance of relational embeddedness and legitimacy for the performance impact of leadership succession, our study demonstrates a contingency approach to understanding the performance effects of succession, with a special emphasis on the contingency of social context.

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Our argument on how institutional logic shapes the performance effects of successor origin provides new insight into the legitimacy of leaders. While leadership change and leader background have been recognized as important for firm legitimacy (Higgins and Gulati, 2006; Arthaud-Day *et al*., 2006; Zhang and Wiersema, 2009), our study suggests that whether leaders gain legitimacy and hence contribute to firm performance is conditional on the prevailing institutional logic. Outside successors are granted more legitimacy by stakeholders who subscribe to the logic of professional management and shareholder-based governance. The economic benefit of successor legitimacy found in our study supports the claim made by Thornton and Ocasio (1999: 802) that the sources of leadership, 'its meaning, and its *consequences* are contingent on higher-order institutional logics' (emphasis added).

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