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Confucianism, successor choice, and firm performance in family firms: Evidence from China

Abstract

This study examines the nexus between Confucianism, the choice of the leadership successor, and firm performance in family firms in China. It provides original evidence that firm founders who are deeply influenced by Confucianism have a higher likelihood of choosing a family member or a *guanxi*-connected nonfamily member as the successor. Moreover, family/*guanxi*-connected successors have a positive effect on firm performance compared with their counterparts outside of the family/*guanxi* circle. One underlying reason is that, affected by Confucianism, only the family/*guanxi*-connected successors can acquire the founder's specialized assets via pre-succession internal managerial experience, which, in turn, enables them to outperform other successors.

Section 1 Introduction

Family firms have been one of the most important forms of economic organizations across the globe thanks to the great contributions they have made to the worldwide economic development and employment.¹ Researchers suggest that the leadership succession is crucial for family firms, because the aging of the firm founders makes the leadership transition inevitable, and the leaders' dominant role in the business makes the successor vital to the firm's survival and development after the succession (Bennedsen et al., 2007). When it is the time to "*pass on the baton*", family firm founders often struggle to choose their family members or nonfamily agents as their successors (Lee et al., 2003). As such, the choice of the successor has received extensive attention in prior studies, some of which investigate the determinants of the choice of a family/nonfamily successor (e.g., Ansari et al., 2014; Bennedsen et al., 2015, Cao et al., 2015), and others explore the various economic outcomes associated with different successors (e.g., Pérez-González, 2006; Bennedsen et al., 2007; Amore et al., 2011). The vast majority of studies are based on western and developed economies, e.g., the US and European markets. Research on family businesses in emerging economies, e.g., China, is limited. However, we contend that the successor decision of Chinese family firms deserves more attention for the following reasons.

¹ In Western Europe, such as the UK, family firms represent over 65% of the enterprises and contribute to more than 30% of the GDP. In East Asia, such as Singapore, family businesses occupy almost 90% of the enterprises and are responsible for more than half of the country's workforce (Sharma & Chua, 2013). Even in the US, where a dispersed ownership structure is prevalent, family firms still generate about 65% of the GDP and 62% of the labor force (Astrachan & Melissa, 2003).

First, China's economy has developed dramatically since the implementation of the Reform and Opening policy in 1978, making China the largest emerging market and the second-largest economy in the world (Wong, 2014). The emergence and growth of private enterprises, mainly in the form of family businesses², is one of the major contributors to the rapid development of the Chinese economy, contributing more than 60% of the GDP, half of the tax revenues, and 90% of the new employment (Huang, 2010).³ More specifically, unlike family businesses with a history of more than 100 years in many developed countries, family firms in China have just started to emerge since the 1980s, before which the state-owned enterprises (SOEs) were the dominant type of business organizations (Qin & Wang, 2012). Compared to SOEs, family firms are younger, smaller, and lack government support. The young family firms in China have always been managed by the founder, who is now close to retirement. In other words, the first leadership transition is forthcoming for many family firms in China. Given the vital role of family firms in the Chinese economy, the successor decision is crucial to not only the firm *per se* but also China's economic growth. Therefore, research on the decision is clearly important.

² In China, 90% of the private enterprises are family businesses (Qin & Wang, 2010).

³ China was a centrally-planned economy, and thus private enterprises were not permitted until 1978, since when China has begun to transform to a market-based socialist economy (Anderson et al., 2003). As a result, private enterprises are much younger and smaller than SOEs in China. Moreover, in China, the government dominates the majority of economic resources, most of which, therefore, often flow into SOEs rather than private enterprises (Allen et al., 2005). Nevertheless, private enterprises have performed much better than the SOEs and play an increasingly important role in driving China's economic development (Jiang et al., 2020).

Second, China's cultural environment differs markedly from the developed countries where most previous studies are conducted. As such, the successor choice and its economic consequences may be distinctive from what has been observed in developed countries. More specifically, there is a long-held view that one's cultural values provide the foundation for his/her cognitions and behavior (Schwartz et al., 2012). China, as one of the ancient civilizations, its traditional culture has exerted profound influence on Chinese people's everyday lives. Confucianism has been widely recognized as the core of the Chinese cultural system. It is not a religion but rather an ideology guiding people for proper behavior (Yan & Sorenson, 2006). Confucius advocates collectivism and familism, which are in sharp contrast to the individualistic cultures prevalent in many western countries (Hofstede, 1991). As such, Chinese family firm founders' successor decision-making and the successors' performance afterward may be different from their counterparts in the western context. Moreover, although Confucian values are woven into the very fabric of Chinese society, the degrees to which Chinese people are affected may vary across regions, education levels, or life experiences (Park & Luo, 2001). Taken together, it is interesting to investigate whether Confucianism influences the successor choice in Chinese family firms, and ultimately the economic outcome of the succession.

Based on a sample of 348 Chairman/CEO successions in publicly listed family firms in China during 2003-2014, our empirical evidence shows that the founders located in regions strongly affected by Confucianism are more likely to choose family members or nonfamily members having a *guanxi* with them as successors.⁴ In addition, the founders with overseas work/study

⁴ *Guanxi* is a Chinese indigenous construct referring to the direct particularistic relations between two or more individuals. Those relations are highly informal and personal, and the

experience are more likely to appoint successors who are not family members and without a *guanxi*. We believe that the overseas experience makes the founders less influenced by Confucian values. These findings suggest that Confucianism plays an important role in the successor choice.

Moreover, we report that family/*guanxi*-connected successors have a significant and positive impact on firm performance compared with other successors. We further demonstrate one underlying reason: affected by Confucianism, family/*guanxi*-connected successors can acquire the founder's personal specialized assets (e.g., his/her tacit knowledge and personal connections) thanks to pre-succession internal managerial experience. But other successors cannot. The acquisition of specialized assets enables family/*guanxi*-connected successors to outperform other successors.

Our study makes four contributions to the empirical and theoretical literature as well as the practice. First, it enriches the literature on the effect of culture on family firms and the financial relevance of family firm succession. We provide compelling evidence that Confucianism is not only an important determinant of the successor choice in family firms but also moderates the impact of the successor choice on firm performance. Given that many family businesses in China are about to experience their first leadership transition, our findings may be a timely help for investors to anticipate the successor and his/her future performance based on the firm's publicly available information. It is worth mentioning that previous studies conducted in western and developed settings widely observe that family successors have a negative effect on firm

parties in the relations are bounded by an implicit psychological contract to follow social norms such as reciprocity, mutual trust, and mutual obligations (Chen et al., 2013).

performance compared with their nonfamily counterparts (e.g., Pérez-González, 2006; Bennesen et al., 2007; Cucculelli & Micucci, 2008). On the contrary, we find that, in China's cultural context, family successors turn to be beneficial to firm performance. A unique type of nonfamily successors, i.e. those *guanxi*-connected with the founder, are also conducive to firm performance. As such, our study helps investors to predict and evaluate family firm successor choice more accurately. We expect that our research findings can be generalized to family firms in other Asian countries where Confucianism prevails, such as Singapore, Japan, and Korea (Yan & Sorenson, 2006).

Second, unlike prior studies focusing on family/nonfamily successors only, our paper sheds initial light on the importance of *guanxi*-connected successors. This provides a novel research direction, to explore family firms' stakeholders who are *guanxi*-connected with the founder. We also propose comprehensive criteria for identifying *guanxi*-connected nonfamily members, which may be useful in future research.

Third, we provide an innovative theoretical perspective regarding managers' work experience. Most extant studies of the impact of managers' work experience (e.g., Baysinger & Hoskisson, 1990; Goll et al., 2001) are based on upper echelon theory, suggesting that managers' demographics (including age, education, and experience) are good proxies for their knowledge base and competences (Hambrick & Mason, 1984). Our study is the first to propose that family firm successors' pre-succession internal experience helps their acquisition of the founder's specialized assets, as long as successors are highly trusted by the founder, such as those in the family/*guanxi* circle.

Finally, we provide novel insights into managers' overseas experience through a cultural perspective. Previous studies are mostly based on human capital or social capital theories and

thus focus on the economic implications of returnees' advanced knowledge, distinctive skills, and international network (e.g., Filatotchev et al., 2009; Liu et al., 2010). Our research is among the first to examine returnees by looking into their cultural beliefs. Our finding on the impact of family firm founders' overseas experience suggests that it will be fruitful to explore returnee entrepreneurs' or managers' behavior, decision-making, or economic impact from the cultural viewpoint.

The remainder of this study is organized as follows. Section 2 reviews the literature. Section 3 develops the hypotheses. Section 4 describes the data and methods. Section 5 provides the empirical results, and Section 6 concludes.

Section 2 Literature review

There is voluminous attention to the connection between national culture and family firms. For instance, Bertrand and Schoar (2006) study the relationship between generalized trust and the prevalence of family businesses across countries, finding that countries featured with high social trust have a low fraction of family firms. Some recent studies, focusing on historically-driven social trust, observe similar findings. For example, Amore (2017), in the setting of Italy, finds that firms headquartered in cities that were free city-states during the Middle Ages are less likely to be family businesses. The author attributes this finding to the fact that those cities have a high social trust driven by the history, which increases the modern firms' likelihood of opening-up the ownership to nonfamily members. Similarly, Pierce and Snyder (2019), in the context of African countries, show that modern firms in countries that suffered high historical slave extraction have a high concentration of ownership, because the historical slave trade causes a low social trust in those countries. Miller et al. (2017), also in the context of Italy, investigate the impact of family

logics and document that family-intensive governance is more prevalent in regions where family logics predominate, i.e. regions embracing family-related identities and values.⁵

There is also some related literature on Chinese culture, but most of it is theoretical research. For example, Lee (1996) contends that Chinese cultural traditions shape the four key features of Chinese family firms that are distinctive from their western counterparts, including human-centeredness, family-centeredness, centralization of power, and small size. Zhang and Ma (2009) argue that the Chinese traditional culture impedes the adoption of professional management in family businesses. Yan and Sorenson (2006) focus on Confucianism and suggest that Confucian principles help to reduce the potential resistance to intergenerational succession in family firms from the founder, the potential successor, other family members, nonfamily members, and outside organizations. Overall, the extant literature has recognized the importance of national culture in driving the prevalence of family ownership and shaping the organizational and management features of family businesses. However, research on the potential role of culture in driving the successor choice and ultimately its financial outcomes is lacking. Moreover, some studies explore the role of institutional factors holding constant cultural norms. For example, Amit et al. (2015) argue that China's cultural homogeneity provides a good research laboratory to investigate the impact of institutional efficiency on family firms, and find that family firms are more prevalent and outperform their nonfamily peers in high-efficiency regions. However, contrary to the cultural homogeneity discussed by Amit et al., Park and Luo (2001) and Du (2016) find that the influence of Chinese culture on Chinese firms varies across regions.

⁵ Miller et al. (2017) define a logic as a socially-constructed set of cultural symbols and practices, i.e. assumptions, values, and beliefs.

Another stream of the literature studies the impact of successor choice on firm performance. As previously mentioned, the majority of the studies are conducted in western and developed contexts, observing overwhelming evidence that family successors are negatively related to firm performance relative to nonfamily successors (e.g., Smith & Amoako-Adu, 1999; Pérez-González, 2006; Bennedsen et al., 2007; Bertrand et al., 2008; Cucculelli & Micucci, 2008). For instance, Pérez-González (2006) documents that, in US family firms, family successors have a negative effect on the firm's OROA and market-to-book ratio, and only nonfamily successions are related to positive stock market reactions. Cucculelli and Micucci's (2008) research on Italian family firms shows that family successions are negatively related to the firm's ROS and ROA. To the best of our knowledge, Xu et al.'s (2015) study is the only one hitherto in China setting. Contrary to the above evidence, they find that second-generation CEOs, chairpersons, or board members generate higher OROS and OROA than their peers. They attribute this finding to the fact that the second generation lowers the principal-agent cost between the shareholders and managers. One of our research findings, i.e. family successors are conducive to firm performance, is consistent with their evidence. However, different from them, we also demonstrate that nonfamily successors who are *guanxi*-connected with the founder are beneficial to firm performance. We further identify an underlying reason for our findings, i.e. Confucianism makes the founder's specialized assets acquirable only to family and *guanxi*-connected successors, enabling them to outperform their nonfamily and non-*guanxi*-connected peers.

Section 3 Hypothesis development

3.1 Confucianism and successor choice

As the most influential philosophy in Chinese history, Confucianism has exerted a strong impact on the management styles and decision-making in Chinese family firms (Yan & Sorenson, 2006). Familism is a key element of Confucianism. It advocates family-centeredness and family-orientation, as well as loyalty, strong commitment, and contribution to the family. As a result, family business founders strongly influenced by familism are very likely to consider the business as a family property that will be bequeathed to the descendants, to keep family ownership and control over the business, and to provide family members with good positions in the business as a means of taking care of them (Zhang & Ma, 2009). This increases the founders' likelihood of choosing a family successor.

Apart from familism, *guanxi* culture is also an important part of Confucianism. *Guanxi* is a Chinese indigenous construct, defined as the direct particularistic relations between two or more persons. Those relations are highly informal and personal, and the parties in the relations are bounded by an implicit psychological contract to follow social norms such as reciprocity, mutual trust, and mutual obligations (Chen et al., 2013). Affected by such a culture, Chinese people, more or less, have a clear in-/out-group concept. They normally have a high degree of particular trust in a limited group of people based on kinship or *guanxi*⁶, yet their trust towards other “out-group” members tends to be low (Fukuyama, 1995). As such, the founders deeply affected by *guanxi* culture are very likely to positively view, favorably treat, and deeply trust nonfamily members who have a *guanxi* with them (Tsui & Farh, 1997). Thus, apart from family members, the founders are also likely to choose a nonfamily member *guanxi*-connected with them as the

⁶ Kinship is also a type of *guanxi* and is, in fact, the most important *guanxi* for the Chinese (Tsang, 1998).

successor. However, for those who do not have a *guanxi*, the founders may hold conservative views on or discriminate against them. This may further enhance the founders' preference for a family or *guanxi*-connected successor.

Confucius used to travel to various places to promote his philosophy. Because of his profound impact in the Chinese history, those places where he had lived for a long time to accept students and to spread his theory have become nationally famous monuments, usually called Confucian centers (Du, 2015). China is a large country with more than 20 provinces and hundreds of cities, yet only nine cities have a Confucian center.⁷ Family firms headquartered in those cities should be surrounded by a strong Confucianism atmosphere. Hence, the founders of those firms, compared with their counterparts located in other regions, are expected to be much more deeply edified by Confucianism, and thus more likely to select a family member or a *guanxi*-connected person as the successor. The above discussion leads to our first hypothesis:

H1: Firms headquartered in cities with a Confucian center are more likely to appoint a successor who is the founder's family member or a nonfamily member having a *guanxi* with the founder.

3.2 Founder's overseas experience and successor choice

Hambrick and Mason (1984) suggest that managers' past experience shapes their cognitions, values, and beliefs. Schuetz (1945) suggests that "home-comers" are not likely to adapt into their home environment because they return with different values and ideology. In this sense, we contend that the founders who are "returnees" from overseas may be less affected by

⁷ Those cities are Qufu in Shandong province, Chengdu in Sichuan province, Luoyang in Henan province, Sanming and Longyan in Fujian province, Dongtai in Jiangsu province, Ningbo and Shaoxing in Zhejiang province, and Linchuan in Jiangxi province (Du, 2015).

Confucianism than their local counterparts who have always lived in China. As a result, the returnees are less likely to base their successor choices on kinship or *guanxi* relative to their local counterparts. Instead, because Chinese returnee founders' overseas experience is normally obtained in western and developed countries where individualism prevails, the founders may be influenced by individualistic cultures to some extent.⁸ Hence, their successor decisions are more likely to be based only on candidates' competences and corporate rules (Hofstede, 1991).⁹ This increases the likelihood of professional agents who do not have a *guanxi* with the founder being appointed as the successor. Therefore, we posit that:

H2: If the founder has studied or worked overseas, it is less likely that the successor will be the founder's family member or a nonfamily member having a *guanxi* with the founder.

3.3 Successor choice and firm performance

According to the resource-based view, every firm is a unique bundle of tangible and intangible resources. A firm's valuable resources are often intangible and imperfectly imitable for other companies, thus shaping the firm's competitive advantages and being crucial to the firm's

⁸ Among the sampled founders with overseas experience, 90% have the experience in developed countries including the US, the UK, Canada, and Australia. According to Hofstede (1991), these countries are featured with highly individualist cultures.

⁹ According to Hofstede (1991), the key difference between individualistic and collectivistic societies in terms of hiring and promotion decisions is, in individualistic societies, the decisions are normally based on skills and rules only, yet in collectivistic societies, the decisions take employees' in-group into account. The Chinese society, as Hofstede argues, is among the most collectivist.

sustained profitability and development (Barney, 1991). In a family business, the most valuable resources are mainly derived from the original owner-manager, i.e. the founder, and referred to as the founder's specialized assets, often defined as his/her tacit knowledge and personal connections (Lee et al., 2003; Bennedsen et al., 2015). As such, researchers suggest that the successor's inheritance of the founder's specialized assets is vital to firm performance after the succession (Fan et al., 2012; Xu et al., 2015). However, because the founder's valuable specialized assets are typically individual-specific and private, the founder is more likely to transfer them to people he/she highly trusts (Hansen, 1999). The founders affected by Confucianism have deep trust only towards family and *guanxi*-connected nonfamily members, and such trust is often associated with positive affection and favoritism (Bedford, 2011). As such, we contend that the founder is more likely to transfer his/her specialized assets to a successor who is his/her family member or having a *guanxi* with him/her. The successor, in turn, is likely to utilize the specialized assets to improve firm performance in order to reciprocate the trust and favor from the founder. On the other hand, for a successor outside of the family and *guanxi* circle, the founder may treat him/her cautiously and be reluctant to share personal specialized assets with him/her, due to the lack of the affect-based trust and emotional bond as well as the potential appropriation risk¹⁰. Based on the above discussion, we hypothesize that:

H3a: Family or *guanxi*-connected successors have a positive impact on firm performance, relative to nonfamily successors without *guanxi*.

¹⁰ The risk that the successor may betray the family firm after acquiring the specialized assets or utilize the assets to command a high premium in compensation (Lee et al., 2003).

However, family or *guanxi*-connected successors may be incompetent given that their appointments may be based on nepotism or *guanxi* only. The appointment of successors who are neither the founder's family members nor *guanxi*-connected, on the contrary, is likely to be fully driven by the successors' superior leadership and managerial skills. As such, we propose the following competing hypothesis :

H3b: Family or *guanxi*-connected successors have a negative impact on firm performance, relative to nonfamily successors without *guanxi*.

3.4 Successor's acquisition of specialized assets and firm performance

We propose that successors' pre-succession internal managerial experience can be highly related to their acquisition of the founder's specialized assets for the following reasons. Firstly, the resource-based view suggests that the time spent together between the source of the assets (the founder) and the recipient (the successor) is a key antecedent of the acquisition, because the longer time the successor spends with the founder, the longer time and more opportunities the successor may have to get exposed to the founder's tacit knowledge and personal connections(Hansen, 1999). In this respect, being a director/top manager in the firm before the succession can largely increase the successor's time with the founder.

Second, the founder's tacit knowledge is normally embedded in situations where it appears and is developed, and thus is highly context-specific (Cabrera-Suárez et al., 2001). In this regard, the shared work experience with the founder provides the opportunity for the successor to capture the nuances of the founder's tacit knowledge across different contexts, which contributes to the successor's attainment of the knowledge.

Third, researchers suggest that the only way to absorb tacit knowledge is through observation and practice (Polanyi & Sen, 2009). In this respect, working in the firm as a director/top manager

enables the successor to not only observe the founder but also practice the observed knowledge in different managerial and decisional processes, which, in turn, can greatly help the successor to internalize the tacit knowledge. Moreover, the internal managerial experience may provide the successor with the opportunity to have direct contact with the founder's business connections, to build a good relationship with them, and, in turn, to transfer them into the successor's own network resources.

Taken together, we contend that successors' pre-succession managerial experience within the firm is an appropriate proxy for their acquisition of the founders' specialized assets. However, this proxy, based on our development of H3a, may be applicable only to successors who are the founder's family members or having a *guanxi* with the founder. For successors neither family-related nor *guanxi*-connected with the founder, the founder *per se* may be unwilling to share the specialized assets with them. As a result, the founder may provide the successor with limited opportunities to observe him/her and limited access to his/her personal connections. As such, the successor's pre-succession internal experience may contribute much less to his/her acquisition of the specialized assets compared with his/her family or *guanxi*-connected counterparts. Moreover, because the assets are crucial to good firm performance, we propose the following hypothesis:

H4a: Family or *guanxi*-connected successors' pre-succession internal managerial experience has a stronger positive effect on the post-succession firm performance, compared with other successors' corresponding experience.

We also investigate the possibility that family or *guanxi*-connected successors' pre-succession internal experience does not relate to their acquisition of the founder's specialized assets.

In that case, the benefits of the experience to successors would be different. More specifically, even if the experience would not contribute to acquiring the founder-specific assets, it can still

help the successors obtain the firm-specific knowledge and resources¹¹ (Baysinger & Hoskisson, 1990). In addition, the internal experience enables successors to familiarize themselves with the business, to build relationships within the firm, and to gain credibility in the firm (Cabrera-Suárez et al., 2001). All these benefits may also contribute to the successors' performance after the succession and are accessible to all types of successors instead of only those blood-tied or *guanxi*-connected with the founder. However, considering that nonfamily successors without a *guanxi* are more likely to be appointed because of competence relative to family or *guanxi*-connected successors, the former may be more capable of making use of the above gains from the internal experience to improve firm performance than the latter. Thus, we also develop the following hypothesis incompatible with H4a:

H4b: Family or *guanxi*-connected successors' pre-succession internal managerial experience has a weaker positive effect on the post-succession firm performance, compared with other successors' corresponding experience.

Section 4 Data and methods

4.1 Data collection

Following the extant literature regarding Chinese family businesses (e.g., Xu et al., 2015), we define family firms as private enterprises whose ultimate owner is either an individual or a family and holds the largest ownership stake. We focus on successions to the Board Chair or the

¹¹ The firm-specific assets, e.g., internal and external statistics, product descriptions, or certain expertise, are often explicit and formalized by systematized language or code, and thus are easy for successors to obtain through internal experience.

CEO positions, with the predecessor being the founder of the firm.¹² Our sample consists of 348 Board Chair or CEO succession cases in Chinese family firms listed on the Shanghai or Shenzhen Stock Exchanges during 2003-2014.¹³ However, we collect financial data for the period 2000–2017 for our difference-in-differences (DID) analysis of H3a/b and H4a/b.¹⁴ Family membership is identified through reading successors’ biographies in CSMAR and cross-checking with the firms’ prospectuses, annual reports, and *Baidu*, i.e. the most popular search engine in China. We define a *guanxi*-connected successor in the next section. Data regarding the founders’ and successors’ backgrounds are either from CSMAR or manually collected by reading the biographies and cross-checking with *Baidu.com* and *Finance.sina.com.cn*. Firms’ financial data is obtained from CSMAR.

4.2 The identification of a *guanxi*-connected nonfamily successor

As previously stated, *guanxi* are personal, informal, and particularistic relationships between individuals. As such, it is, in fact, unobservable for researchers. To solve this issue, we suggest several criteria for identifying whether a nonfamily successor has a *guanxi* with the founder. First, they have a pre-existing “*guanxi* base”. *Guanxi* bases are the commonalities of two persons

¹² If a family firm has the transitions of both the Board Chair and the CEO at the same time, they are counted as two cases.

¹³ Although we consider the successions to both the Board Chair and the CEO positions, the majority of our sampled successions are CEO successions. Only 35 cases are Board Chair successions.

¹⁴ It is worth mentioning that the number of observations for each regression model varies due to missing values of certain variables.

in terms of their origins or identities, such as being relatives, colleagues, or sharing the same natal origin (Chen et al., 2013). Researchers suggest that the most prevalent *guanxi* bases in the Chinese society refer to kinship, clanship (sharing the same surname), origin (from the same birthplace or native place), alumni, neighbors, colleagues, and the teacher-student relationship (Chen & Chen, 2004).¹⁵ More specifically, kinship is the most important *guanxi* for the Chinese because China is a family-oriented country (Tsang, 1998). Sharing the same surname is a common *guanxi* base because Chinese people believe that those with the same surname descend from a common ancestor of that surname and thus are from the same extended family (Feng & Yan, 2012; Tan et al., forthcoming). For the other commonalities, researchers contend that they can trigger the potential *guanxi* parties' reminiscence of the past, making them recall and discover some common events, similar experiences, or mutual acquaintances. This helps expand and enrich the parties' sharedness, enhance their communication, and increase their level of intimacy, thus contributing to the development of an informal and personal *guanxi* between them (Chen et al., 2013).

¹⁵ The first three *guanxi* bases are categorized as blood bases as they are predetermined by blood or birth; the others are defined as social bases as they are developed later in life and through social interaction or experience. It is worth noting that most *guanxi* bases are different from the demographic traits studied in the Western context, such as age, gender, and race. More specifically, the commonalities which can be viewed as *guanxi* bases are generally limited in specific social settings with clear social or even physical boundaries, such as a city, a school, or a workplace. However, demographic commonalities are anchored in demographic criteria, which can cut across organizational and institutional boundaries (Chen & Chen, 2004).

Second, we propose that successors joining the business at its start-up stage are *guanxi*-connected with the founder. This is because China's cultural context makes those entering the firm at that early stage normally either the founder's good friends or recommended by the founder's relatives or friends (Yan & Sorenson, 2006). As such, those successors should also be seen as having a *guanxi* with the founder. Moreover, the start-up stage has been widely recognized as the most difficult and uncertain period for an enterprise (e.g., Adizes, 1988). During this period, entrepreneurs have numerous arduous tasks to finish, e.g., seeking investments and clients, building reputation and business networks, and setting up a qualified top management team. In addition, the start-up phase is also the riskiest stage, as any mistakes in this stage directly threaten the survival of the business. In this regard, employees joining the family firm at its start-up stage are those who accompany the founder to get over the most difficult time and help the founder to set up the business from scratch to success. As such, the founder normally has a special affection and a very high level of trust towards those persons. Hence, their *guanxi* should be intimate or even family-like.

We also view successors who are directors or top managers in more than one company controlled by the founder as having a *guanxi*. As previously discussed, the founders in China tend to have a relatively low degree of trust towards general nonfamily members due to the familism culture (Zhang & Ma, 2009). In addition, the founders' stewardship sense to the firm is usually strong due to their deep emotional attachment to the firm (Liu et al., 2012). Moreover, their family wealth is normally highly correlated with the firm's interests (Villalonga & Amit, 2006). Taken together, if the founder is willing to appoint a nonfamily member as a top executive in more than one family company, the founder should have great trust in that person, in

terms of not only his/her capability but also allegiance to the founder's family. Such trust, given China's cultural background, is unlikely to be established without a long-term and close *guanxi*. Based on the above criteria and the availability of the founders and successors' background information, we define a nonfamily successor as having a *guanxi* with the founder if the successor has one of the following identities:

- (1) Sharing the same surname with the founder;
- (2) Sharing the same birthplace or native place (the same province) with the founder;
- (3) Graduating from the same college or university as the founder;
- (4) Being the founder's former colleague before the start-up of the family firm;
- (5) Acting as a director or a top manager in more than one company controlled by the founder before the succession;
- (6) Joining the family firm at its start-up stage, i.e. the first three years after the setting-up of the company.¹⁶

4.3 Research design

¹⁶ In China, the first three years of an enterprise are widely regarded as the most difficult and uncertain stage by regulators and researchers (e.g., China Securities Regulatory Commission, 2015). Moreover, the State Administration for Industry and Commerce of China (2013) provides a report regarding the survival time of Chinese enterprises, showing that the third year after the start-up of the enterprises has the highest mortality rate. This suggests that the first three years are indeed the riskiest period for most Chinese enterprises.

We use the following three regression models to test the above hypotheses. Model (1) is a probit model for H1 and H2. Models (2) and (3) are designed for the DID analysis of H3a/H3b and H4a/H4b, respectively.

$$\text{Probit}(\text{FamilyOrGuanxi}_{i,t}) = \alpha + \beta_1 \text{Confucian center}_i + \beta_2 \text{Returnee founder}_i + \beta_3 \text{Control variables}_{i,t-1} + \text{Industry}_{i,t} + \text{Year}_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$\text{Performance difference}_{i,t} = \alpha + \beta_1 \text{FamilyOrGuanxi}_{i,t} + \beta_2 \text{Control variables}_{i,t-1} + \text{Industry}_{i,t} + \text{Year}_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$\text{Performance difference}_{i,t} = \alpha + \beta_1 \text{FamilyOrGuanxi}_{i,t} + \beta_2 \text{Internal experience}_{i,t} + \beta_3 \text{FamilyOrGuanxi} * \text{Internal experience}_{i,t} + \beta_4 \text{Control variables}_{i,t-1} + \text{Industry}_{i,t} + \text{Year}_{i,t} + \varepsilon_{i,t} \quad (3)$$

In these models, t indicates the succession year. *FamilyOrGuanxi* equals one if the successor is the founder's family member by blood/marriage or a nonfamily member having a *guanxi* with the founder, and it equals zero if the successor is a nonfamily member without a *guanxi*. We define a nonfamily successor as having a *guanxi* if he/she has one of the aforementioned six identities.

The design of Models (2) and (3) follows Pérez-González (2006) and Bennedsen et al. (2007), where the dependent variable, *Performance difference*, denotes the difference in firm performance between the post-succession and pre-succession period. This variable is calculated as the two-year average OROS (ROA) after the succession minus the two-year average OROS (ROA) before the succession (Cucculelli & Micucci, 2008; Xu et al., 2015).¹⁷ OROS is the firm's operating return scaled by sales. ROA is the firm's return on assets.

¹⁷ We have also employed an alternative time window from three years before the succession to

As to the independent variables, in Model (1), *Confucian center* equals one if the firm is headquartered in a city with a Confucian center and zero otherwise. *Returnee founder* equals one if the founder has studied or worked overseas before the succession and zero otherwise. In Model (3), *Internal experience* denotes the successor's pre-succession internal managerial experience and is calculated as the number of years the successor has worked as a director or a top manager in the firm till the succession year. *FamilyOrGuanxi*Internal experience* is the interaction term between *FamilyOrGuanxi* and *Internal experience*. *Control variables* represent a series of firm-, governance-, and family-level characteristics for the year before the succession which may have an impact on the successor decision or firm performance theoretically or empirically. More specifically, *Firm performance* is the firm's OROS (ROA) before the succession and is controlled for because firm performance after the succession may be affected by firm performance before the succession (Pérez-González, 2006).¹⁸ *Firm age* is the year since the firm has been founded and is controlled for because older firms are more likely to choose a nonfamily leader (Bøhren et al., 2019). Older firms also usually have better corporate governance mechanisms and thus may perform better (Claessens et al., 2002). *Firm size* is the natural logarithm of total assets and is considered because it may be difficult for small companies to hire competent outside professionals (Pérez-González, 2006). *Long-debt level* is the firm's long-term

three years after the succession. The relevant results are qualitatively similar to those obtained based on the above “two years ex-ante to two years ex-post” period. The results based on the alternative window are available upon request.

¹⁸ *OROS_{t-1}* is controlled for if the dependent variable is *OROS difference*, and *ROA_{t-1}* is controlled for if the dependent variable is *ROA difference*.

debt scaled by total assets and is controlled for because it is shown to have a positive relationship with a family succession (Bennedsen et al., 2015). *Sales growth*, a proxy for the firm's growth opportunities, is considered because larger growth opportunities may increase the likelihood of a family successor (Ansari et al., 2014) and are beneficial to long-term firm performance (Yoshikawa & Rasheed, 2010). The variable is measured as the difference in sales between year t-1 and year t-2 divided by sales in year t-2 (Liu & Xue, 2015). We also control for *Board ownership*, the percentage of shares held by directors, and *Board independence*, measured by the proportion of independent directors on the board. Prior studies suggest that directors with large ownership positions have a strong incentive to monitor the company and managers' behavior, and thus may be beneficial to firm performance (e.g., Mehran, 1995). A high percentage of independent directors are usually expected to be positively associated with the likelihood of a nonfamily successor and better firm performance (e.g., Mehran, 1995, Bocatto et al., 2010). *Family control*, the family's votes as a percentage of total votes outstanding in the firm is considered because it may increase the probability of family succession (Ansari et al., 2014).¹⁹ Apart from the above firm-, governance-, and family-level characteristics, we also control for the institutional environment of the firm because family firms in a high level of the institutional environment are more likely to choose a nonfamily successor (Burkart et al., 2003). We use Fan

¹⁹ We have also considered *Family ownership* and *Family divergence* as control variables. *Family ownership* is the percentage of all shares outstanding owned by the family. *Family divergence* is the difference between *Family control* and *Family ownership* to capture the family's excessive control over ownership. However, we have to exclude them in the regressions due to multicollinearity problems.

et al.'s (2011) index of the market development levels of Chinese provinces, a widely used proxy for the institutional environment and economic development level of Chinese provinces in prior research (e.g., Amit et al., 2015), to measure *Institutional environment*. The higher the index value of the firm's headquartered province, the better the institutional environment for the firm.²⁰ In addition, to control for industrial and temporal fixed effects, *Industry* denotes a set of industry dummies based on the industrial classification guide proposed by China Securities Regulatory Commission (CSRC), and *Year* is a vector of year dummies from 2003 to 2014. Finally, all continuous variables are winsorized at the 1% and 99% percentiles, and the clustering of standard errors at the firm level is applied to all regressions.

Section 5 Empirical results and discussion

5.1 Descriptive statistics

5.1.1 Industry and annual distributions of different successions

Table 1 reports the distribution of succession cases by industry (Panel A) and by year (Panel B). The total number of family, *guanxi*, and *non-guanxi* succession cases are 89, 150, and 109, respectively. Panel A shows that the vast majority of successions are distributed in the manufacturing sector, amounting to 86.52% (77 cases) of family successions, 70% (105 cases) of *guanxi* successions, and 72.48% (79 cases) of *non-guanxi* successions. This is not surprising as

²⁰ Fan et al.'s (2011) index considers the following factors: (1) the relationship between the local government and market; (2) the development of the private sector; (3) the development of product markets; (4) the development of factor markets, i.e. the labor market, the financial market, and the foreign direct investment market; (5) the development of market intermediaries and the legal environment.

manufacturing is the largest industry in China. Panel B indicates that the number of successions increases smoothly as time goes on, from only four cases in 2003 to 74 cases in 2013, which is also the peak during the sample period. The number then decreases slightly in 2014, with 49 successions. In addition, *guanxi*-connected successors are more favorable than their family and *non-guanxi* counterparts in most of the years.

[Insert Table 1 about here]

5.1.2 Summary statistics

Table 2 reports the summary statistics of the variables. It shows that, among the 348 sample succession cases, 68.7% of the successors are the firm founder's family members or nonfamily members having a *guanxi* with the founder, 24.7% of the sample firms are headquartered in cities with a Confucian center, and 8% of the founders have studied or worked overseas before the succession. In addition, the average OROS (ROA) for the sample firms one year before the succession is 0.084 (0.042), indicating that the firms are generally profitable prior to the succession. However, the mean of the difference in OROS (ROA) of the firms between their post-succession and pre-succession period is -0.065 (-0.011), suggesting that on average firm performance declines after the succession. Moreover, successors' average internal managerial experience before the succession is 3.3 years.

As to the other control variables, Table 2 shows that the average firm age is roughly 11 years. The average firm size before the succession, i.e. the natural logarithm of total asset, is 21.14. The long-term debt level is very low with a mean of 2.9%. The firms are growing before the succession, with a mean sales growth rate of 55.5% in the year preceding the succession. Directors in the firms, on average, hold 22% of the ownership, and 36.8% of them are independent directors. The average family control for the year before the succession is 40.9%.

The average institutional environment of the firm, i.e. the value of the provincial market development level based on Fan et al.'s (2011) index, is 9.42.

[Insert Table 2 about here]

5.1.3 Comparison between *family/guanxi* and *non-guanxi* successions

Table 3 compares the successions having a family or *guanxi*-connected successor with those having a nonfamily successor without a *guanxi*. The table shows that the *family/guanxi* succession group has a significantly higher percentage of firms located in cities with a Confucian center and a significantly lower percentage of returnee founders, consistent with H1 and H2, respectively. In addition, both succession groups experience decreases in firm performance around the succession, indicated as a decline in OROS (ROA) of 4.7 (0.6) percentage points for the *family/guanxi* succession group and a decline in OROS (ROA) of 10.6 (2.1) percentage points for the *non-guanxi* succession group. However, the resulting difference-in-differences, i.e. 0.059 (0.015) for OROS (ROA) significant at the 5% (10%) level, suggest that although the firms undergo decreases in firm performance, those with a family or *guanxi*-connected successor outperform those with a nonfamily successor not *guanxi*-connected significantly after the succession. This accords with H3a. Table 3 also indicates that family or *guanxi*-connected successors, on average, have worked as a director or a top manager significantly longer in the firm before the succession than nonfamily successors without a *guanxi*. Moreover, the two groups of firms are comparable before the succession in most of the control variables, except *Firm size* and *Long-debt level*. The results suggest that family or *guanxi*-connected successors are more likely to be appointed in firms larger and having a higher long-term debt level.

[Insert Table 3 about here]

5.1.4 Correlation analysis

Table 4 presents the correlation matrix for the variables. It shows that *Confucian center* is significantly and positively related to *FamilyOrGuanxi*, and *Returnee founder* is significantly and negatively related to *FamilyOrGuanxi*, providing further support for H1 and H2, respectively. Moreover, *FamilyOrGuanxi* is significantly and positively associated with *OROS (ROA) difference*, in line with H3a. Furthermore, the independent variables included in the regression models do not have a high pairwise correlation.

[Insert Table 4 about here]

5.2 Baseline regression results

5.2.1 Confucian center, founder's overseas experience, and successor choice

Table 5 reports the results from Model (1), where Column (1) provides the estimated coefficients on the independent variables, and Column (2) presents the corresponding marginal effects. Column (1) shows that *Confucian center* is significantly and positively related to *FamiyOrGuanxi* at the 1% level, and Column (2) further indicates that firms located in cities with a Confucian center are 21% more likely to choose a family or *guanxi*-connected successor, relative to those headquartered in cities without a Confucian center. This confirms H1. In addition, *Returnee founder* is significantly and negatively associated with *FamiyOrGuanxi* at the 1% level, and the corresponding marginal effect suggests that the founders with overseas experience are 30% less likely to appoint a family or *guanxi*-connected successor. This supports H2.²¹ These findings confirm that the Chinese traditional culture, particularly Confucianism, is

²¹ We have estimated the regression for *Confucian center* and *Returnee founder* separately before including them in one regression. The results are statistically similar to that in Table 5.

indeed an important determinant of family business founders' successor choice, i.e., making them more likely to choose a family member or a person having a *guanxi* with them as the successor.

As to the control variables, most of them are not determinants of the firm's successor choice.

This is in line with some previous studies (e.g., Pérez-González, 2006, Ansari et al., 2014). *Firm size*, interestingly, is significantly and positively associated with the probability of a family/*guanxi*-connected successor.

We further investigate whether the main finding in Columns (1) and (2) is derived only from one type of the successors or both. To this end, we estimate a multinomial logistic regression with the dependent variable equaling three if the successor is the founder's family member, two if the successor is a *guanxi*-connected nonfamily member, and one if the successor is a nonfamily member without a *guanxi*.

Columns (3) and (4) of Table 5 present the regression results, where the base case is the successions with a nonfamily successor without a *guanxi*. In Column (3), the comparison is between family successions and non-*guanxi* successions, whereas in Column (4), it is between nonfamily successions with a *guanxi*-connected successor and those non-*guanxi* successions. As expected, the coefficient on *Confucian center* is significantly positive, while that on *Returnee founder* is significantly negative in both columns. This suggests that the founders deeply impacted by Confucianism, i.e. those located in a city with a Confucian center and those without overseas work or study experience, are indeed more likely to appoint a family successor and a *guanxi*-connected successor. This further supports our H1 and H2.

We also explore whether the results are different between family and *guanxi*-connected nonfamily members in terms of their likelihood of being the successor. For this purpose, we

estimate the regression only for the subsample of family and *guanxi*-connected successors. Column (5) of Table 5 reports the result, where the dependent variable equals one if the successor is the founder's family member and zero if the successor is a *guanxi*-connected nonfamily member. The coefficient on *Confucian center* is significant and positive, suggesting that the founders deeply affected by Confucianism are more likely to choose a family member as the successor, relative to a nonfamily candidate with a *guanxi*. This finding may imply that the familism culture is more influential than the *guanxi* culture in Chinese society. This is in line with Fukuyama (1995), who contends that the essence of Chinese Confucianism is familism and thus Chinese people usually give the family priority over any other sorts of social relationships. Moreover, Column (5) shows that *Returnee founder* is insignificantly related to the probability of a family succession. This is probably because the returnee founders less affected by Confucianism are less impacted by both the familism and *guanxi* cultures. As a result, the founders may treat family and *guanxi*-connected nonfamily members equally instead of favoring either party, which explains the insignificant relationship between *Returnee founder* and *Family*.

[Insert Table 5 about here]

5.2.2 Successor choice and firm performance

Table 6 presents the results from Model (2). Column (1) indicates that *FamilyOrGuanxi* is significantly and positively related to *OROS difference* at the 5% level.²² This suggests that family and *guanxi*-connected successions are associated with higher firm performance afterward,

²² For brevity, we only report the regressions with firm performance measured by OROS in this study. However, the equivalent regressions for firm performance measured by ROA suggest qualitatively similar results.

in line with H3a. Column (2) separates family successors from *guanxi*-connected successors, where *Family* equals one if the successor is the founder's family member and zero otherwise, and *Guanxi* equals one if the successor is a *guanxi*-connected nonfamily member and zero otherwise. The results show that the coefficients on both *Family* and *Guanxi* are significant and positive, providing further support for H3a. As previously discussed, we attribute these findings to the impact of Confucianism, i.e. Confucianism makes the founder's personal specialized assets, which are vital to good firm performance, acquirable only to family and *guanxi*-connected successors.

[Insert Table 6 about here]

5.2.3 Successor's pre-succession internal managerial experience and firm performance

Table 7 reports the results for H4a/b. We first conduct a preliminary test by splitting the sample into the *Family/Guanxi* group, i.e. firms with a family/*guanxi*-connected successor, and the *Non-guanxi* group, i.e. firms with a nonfamily successor not *guanxi*-connected. We estimate the relationship between the successors' pre-succession internal managerial experience and firm performance across the two groups and present the results in Panel A. Panel A indicates that *Internal experience* is positively associated with *OROS difference* in both groups, yet the relevant coefficient is much greater and significant only in the *Family/Guanxi* group. This suggests that successors' internal managerial experience before the succession has a positive effect on firm performance after the succession, yet the impact of the experience of family/*guanxi*-connected successors is much stronger than that of other successors.

This finding provides preliminary support for H4a.

Panel B of Table 7 reports the results from Model (3). We start by presenting the results without the interaction term *FamilyOrGuanxi*Internal experience* in Column (1). It shows that the

coefficient on *FamilyOrGuanxi* turns to be insignificant once we control for *Internal experience*. *Internal experience*, however, is significantly and positively related to *OROS difference*. This result implies that family/*guanxi*-connected successors' pre-succession internal managerial experience is the factor that drives their positive impact on firm performance relative to other successors.

Column (2), in turn, shows the results with the interaction term, *FamilyOrGuanxi*Internal experience*, the coefficient on which is significant and positive at the 5% level. This finding and Panel A jointly confirm our H4a. Column (3) separates family successors from *guanxi*-connected successors and shows that *Family*Internal experience* and *Guanxi*Internal experience* are both significant and positive, further supporting H4a.

Moreover, the above results collectively confirm our theoretical underpinning to H3a and H4a, i.e. family/*guanxi*-connected successors' pre-succession internal managerial experience is highly related to their acquisition of the founder's specialized assets, but the same experience of other successors is not. The acquisition of the specialized assets, in turn, enables family/*guanxi*-connected successors to perform better than other successors.

[Insert Table 7 about here]²³

²³ We also adjust our firm performance measures, OROS and ROA, using industry-matched benchmarks, i.e. the median OROS (ROA) of the relevant industry and year, to control for aggregate changes in firm performance due to industry trends (Bennedsen et al., 2007). All firms listed on the Shanghai or Shenzhen Stock Exchanges are adopted for the calculation of the medians. The relevant results are untabulated but similar to the preceding findings in statistical terms.

5.3 Robustness checks

5.3.1 The extension of the baseline models

In this section, we extend Models (1) to (3) by including another array of pre-succession firm-level, industrial level, and succession-specific variables that may affect the successor choice or firm performance but are rarely considered in prior studies, to explore whether our findings are robust. The variables are *Dividend payout*, *Interest coverage*, *Nonfamily ownership*, *Industrial competition*, *Founder age*, *Early succession*, *Retire*, and *Post-succession founder*. The definitions of these variables are described in Appendix A. The results based on the extended regression models are untabulated but statistically similar to the preceding findings drawn from the baseline models, and thus further support our hypotheses.

5.3.2 Endogeneity

5.3.2.1 Confucian center, founder's overseas experience, and successor choice

There exists a concern that our results for H1 and H2 are driven by some factors not captured by the model yet affecting both the independent and dependent variables. For example, the founder's overseas experience may be determined by omitted individual factors, e.g., the founder's ability, which may have an impact on the successor decision. We employ the instrumental variables approach to mitigate such concern. First, for the independent variable *Confucian center*, i.e. a dummy equal to one if the firm is located in a city with a Confucian center and zero otherwise, we contend that it is exogenous in the regression. More specifically, the value of this variable depends on two factors, the cities having a Confucian center and whether the family firm is located right in one of those cities. Hence, the prerequisite for *Confucian center* to be potentially endogenous is that there exists a variable that can significantly affect the above two factors and the founder's successor selection simultaneously. However, this

is unlikely to happen because the determinant of the locations of Confucian centers is Confucius' living places thousands of years ago. The determinant of the location of the firm, however, is usually the labor costs, populations, tax, and transport in the city or the province (Du, 2015). In addition, none of these determinants seems to have a significant impact on the firm founder's choice of a family or *guanxi*-connected successor.

Second, for *Returnee founder*, the instrument is *Returnee-preferential policy*. This variable equals one if the local government in the firm's headquartered province has launched a returnee-preferential policy, i.e. a policy offering various benefits and privileges to overseas Chinese talents to encourage them to return to China, before the foundation of the firm, and equals zero otherwise.²⁴ The rationale for this variable is that such a policy may attract overseas Chinese to settle in the province to start their own business, i.e. increasing the family business founder's likelihood of being a returnee. We thus expect that *Returnee-preferential policy* is positively related to *Returnee founder*. However, such a policy is unlikely to directly affect the identity of the successor, i.e. whether he/she is the founder's family member, *guanxi*-connected with the founder, or not *guanxi*-connected with the founder.

Table 8 presents the results from the instrumental variables approach. Column (1) shows that *Returnee-preferential policy* is indeed significantly and positively related to *Returnee founder*. More importantly, in the second-stage analysis (Column (2)), *Predicted (Returnee founder)*, the variable with the predicted values of *Returnee founder* from the first-stage regression, is significantly and negatively associated with *FamilyOrGuanxi*. This confirms our finding. Moreover, the first-stage F-statistic is highly significant (at the 1% level) and greater than both Staiger and Stock's (1997) rule of thumb, ten, and the maximum critical value for the F-statistic

²⁴ The data for *Returnee-preferential policy* is obtained from Giannetti et al. (2015).

provided by Stock and Yogo (2005). This suggests that *Returnee-preferential policy* is not a weak instrument. We also report the p-value for the Durbin-Wu-Hausman endogeneity test for the two-stage regression, indicating that *Returnee founder*, in fact, is exogenous in the regression (Durbin, 1954; Wu, 1973; Hausman, 1978). This further confirms the validity and reliability of our finding.

[Insert Table 8 about here]

5.3.2.2 Successor choice and firm performance

As to our finding for H3, i.e. family/*guanxi*-connected successors have a significant and positive impact on firm performance, we contend that it is unlikely to be driven by omitted factors. This is because our results for H4 have already confirmed that family/*guanxi*-connected successors' internal managerial experience before the succession is the factor that drives their significant and positive impact on firm performance after the succession.

In addition, the DID analysis approach employed, focusing on the within-firm variation in firm performance around the succession, also helps to reduce endogeneity concerns. More specifically, it helps to provide an estimate of the impact on performance that is not affected by possible time-invariant characteristics that might jointly affect the firm performance and the successor decision (Pérez-González, 2006; Bennis et al., 2007).

5.4 Additional analysis

5.4.1 Confucian center, founder's overseas experience, and successor choice

5.4.1.1 Confucius temples

Apart from the nine Confucian centers, China also has 52 nationally famous Confucius temples located in different provinces (Du, 2015). Thus, we use *Confucius temple*, measured as the number of the nationally well-known Confucius temples in the firm's headquartered province, as

an alternative proxy for the degree of the founder being influenced by Confucianism. Table 9 presents the result, showing that *Confucius temple* is significantly and positively associated with *FamilyOrGuanxi*, qualitatively similar to our result for *Confucian center*.

5.4.1.2 The type of overseas experience

Based on the development of H2, we posit that the founders with overseas work experience are more deeply affected by individualistic cultures and thus more likely to choose a nonfamily successor without a *guanxi*, compared with those having overseas study experience only or those without any experience abroad. The rationale is that, first, the founders with overseas work experience are likely to have a longer experience abroad. This is because study used to be the major route for Chinese people to go and live abroad legally due to the visa issue (Duan & Hou, 2015). As such, for most Chinese, having study experience in a foreign country is a prerequisite for working in that country. One with longer living experience in a foreign country is likely to be affected by the culture in that country more deeply. Second, the work experience necessitates one to adapt to the local corporate culture, management style, and to interact with the local colleagues, which may deepen the impact of the local culture and norms on him/her. We use *Overseas type* to test our posit. *Overseas type* is an ordinal variable equal to two if the founder has overseas work experience; one if the founder's overseas experience is pure study experience; and zero if the founder does not have any work/study experience abroad. Table 9 documents that *Overseas type* is significantly and negatively related to *FamilyOrGuanxi*, confirming the posit aforementioned.

[Insert Table 9 about here]

5.4.2 Successor choice, pre-succession internal experience, and firm performance

5.4.2.1 Is Confucianism indeed an underlying reason?

As previously discussed, we attribute our findings for H3 and H4 to the impact of Confucianism. To further examine the validity of our perspective, we divide the sample into firms headquartered in a province with or without a Confucian center and estimate the regressions across the two groups.²⁵ Table 10 reports the results. Columns (1) and (3) indicate that our prior finding for H3, family/*guanxi*-connected successors have a significant and positive impact on firm performance compared with other successors, only exists in firms located in the regions strongly affected by Confucianism. Columns (2) and (4) show that our preceding finding for H4, i.e. family/*guanxi*-connected successors' pre-succession internal managerial experience has a significantly stronger positive impact on firm performance relative to other successors' corresponding experience, also only exists in firms surrounded by a strong Confucianism atmosphere.

The above results confirm that Confucianism is indeed an underlying reason for our findings, i.e. family/*guanxi*-connected successors perform better than other successors indeed because Confucianism only enables the former to acquire the founder's specialized assets through the pre-succession internal managerial experience.

[Insert Table 10 about here]

Section 6 Conclusion

We explore the relationship between Confucianism, successor choice, and firm performance in family firms in China. Confucianism is the most influential cultural belief in the Chinese history.

²⁵ We base the division of the sample on the firm's headquartered province instead of the firm's headquartered city because the grouping based on the latter cannot provide us with sufficient observations in the group having a Confucian center to conduct the regression estimation.

The importance of entrepreneurs' cultural beliefs in shaping their behavior, decisions, and the efficiency of business has long been emphasized (e.g., Zapalska & Edwards, 2001). The leadership succession has now become one of the most important decisions for family firms in China. However, research examining the influence of Confucianism on the successor decision of Chinese family firms, particularly empirical investigations, is very limited. Our study fills this gap. We document that the founders strongly influenced by Confucian values are more likely to choose a family or *guanxi*-connected nonfamily successor. We use whether the firm is headquartered in a city with a Confucian center and whether the founder is a returnee to proxy for the founder's degree of being affected by Confucian values. Moreover, we find that family/*guanxi*-connected successors have a significant and positive influence on firm performance relative to other successors, and one reason for this is that Confucianism only enables the former to obtain the founder's specialized assets, through pre-succession internal managerial experience. Successors outside of the family/*guanxi* circle, however, may not be able to acquire the assets through the same experience. The acquisition of the assets enables family/*guanxi*-connected successors to outperform other successors after the succession. Our findings are consistent with our proposed hypotheses and are robust to different methods to control for endogeneity and to alternative proxies for Confucianism and firm performance. Our paper contributes to the literature on culture and family firms. We are the first to demonstrate that Confucianism not only is an important driving force of the successor choice but also shapes the effect of the successor choice on firm performance after the succession. Our research findings are different from previous studies undertaken in western and developed contexts and can be instructive for family firms in other Asian countries affected by Confucianism. Our theoretical arguments and research findings may also apply to nonfamily

private enterprises in China and other countries where Confucian values prevail. Our study is also the first to highlight the role of *guanxi*-connected successors in family firms and provides original evidence for their economic impact. Innovative criteria for defining such successors are also provided for future studies. Moreover, we suggest two novel theoretical viewpoints on firm managers' internal experience and overseas experience. First, managers' internal experience may contribute to acquiring the firm leader's specialized assets. Second, managers' overseas experience may alter their cultural values. These two viewpoints may be instructive for future research on managers in other forms of business organizations. Finally, our study offers important practical contributions. It helps the (potential) investors or business partners of family firms to predict the successor and the post-succession performance more accurately. Our research also contributes to the sustainable development of family firms, which are vital to the economy of many countries, given the crucial role of family businesses in the worldwide economy.

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Table 1—Industry and annual distributions of different successions

This table presents the distribution of succession cases across industries in Panel A and years in Panel B. The classification of industries is based on the guide provided by CSRC. Successions are classified into three types, family successions, *guanxi* successions, and non-*guanxi* successions. The numbers of each type of successions in each industry and each year are respectively presented in Panels A and B, with the proportions (%) in each group shown in the parentheses.

Panel A: Succession distribution by industry				
Industry	Family successions (1)	Guanxi successions (2)	Non-guanxi successions (3)	All successions (4)
Agriculture	4 (4.49)	6 (4)	0 (0)	10 (2.87)
Mining	0 (0)	5 (3.33)	2 (1.83)	7 (2.01)
Manufacturing	77 (86.52)	105 (70)	79 (72.48)	261 (75)
Energy	0 (0)	1 (0.67)	0 (0)	1 (0.29)
Construction	2 (2.25)	6 (4)	4 (3.67)	12 (3.45)
Wholesale and retail	0 (0)	4 (2.67)	2 (1.83)	6 (1.72)
Transport, storage and postal service	1 (1.12)	1 (0.67)	0 (0)	2 (0.57)
Information technology	0 (0)	10 (6.67)	13 (11.93)	23 (6.61)
Real estate	3 (3.37)	7 (4.67)	5 (4.59)	15 (4.31)
Leasing and commercial service	1 (1.12)	0 (0)	1 (0.92)	2 (0.57)
Scientific research service	0 (0)	0 (0)	1 (0.92)	1 (0.29)
Environment and public facility	0 (0)	0 (0)	1 (0.92)	1 (0.29)
Culture, sports and entertainment	0 (0)	1 (0.67)	0 (0)	1 (0.29)
Comprehensive industry	1 (1.12)	4 (2.67)	1 (0.92)	6 (1.72)
Total	89 (100)	150 (100)	109 (100)	348 (100)
Panel B: Succession distribution by year				
Year	Family successions (1)	Guanxi successions (2)	Non-guanxi successions (3)	All successions (4)
2003	1 (1.12)	2 (1.33)	1 (0.92)	4 (1.15)
2004	1 (1.12)	3 (2)	1 (0.92)	5 (1.44)
2005	2 (2.25)	5 (3.33)	6 (5.5)	13 (3.74)
2006	1 (1.12)	4 (2.67)	5 (4.59)	10 (2.87)
2007	2 (2.25)	12 (8)	5 (4.59)	19 (5.46)
2008	12 (13.48)	8 (5.33)	3 (2.75)	23 (6.61)
2009	4 (4.49)	9 (6)	4 (3.67)	17 (4.89)
2010	7 (7.87)	11 (7.33)	12 (11.01)	30 (8.62)
2011	12 (13.48)	22 (14.67)	17 (15.6)	51 (14.66)
2012	16 (17.98)	19 (12.67)	18 (16.51)	53 (15.23)
2013	19 (21.35)	32 (21.33)	23 (21.1)	74 (21.26)
2014	12 (13.48)	23 (15.33)	14 (12.84)	49 (14.08)
Total	89 (100)	150 (100)	109 (100)	348 (100)

Table 2—Summary statistics

This table provides summary statistics of variables. *FamilyOrGuanxi* equals one if the successor is the founder's family member or a nonfamily member having a *guanxi* with the founder, and it equals zero if the successor is a nonfamily member without a *guanxi*. *Confucian center* is equal to one if the firm is headquartered in a city with a Confucian center and zero otherwise. *Returnee founder* is also a dummy variable equal to one if the founder has worked or studied overseas before the succession and zero otherwise. *OROS (ROA) difference* is the two-year average OROS (ROA) after the succession minus the two-year average OROS (ROA) before the succession. *Internal experience* is the number of years the successor has worked in the firm as a director/top manager till the succession year. Control variables are defined in Appendix A. The statistics in the table are provided after winsorizing all continuous variables at the 1% and 99% percentiles.

Variables	N	Mean	Std	Median	Min	Max
FamilyOrGuanxi _t	348	0.687	0.464	1	0	1
Confucian center	348	0.247	0.432	0	0	1
Returnee founder	348	0.080	0.272	0	0	1
OROS difference	347	-0.065	0.211	-0.026	-1.148	0.394
ROA difference	295	-0.011	0.069	-0.013	-0.275	0.296
OROS _{t-1}	348	0.084	0.205	0.092	-1.177	0.546
ROA _{t-1}	295	0.042	0.070	0.044	-0.349	0.223
Internal experience _t	347	3.305	4.174	1	0	20
Firm age _{t-1}	348	11.351	5.057	11	3	25
Ln(total assets) _{t-1}	348	21.144	0.890	21.120	19.291	23.833
Long-debt level _{t-1}	348	0.029	0.054	0	0	0.310
Sales growth _{t-1}	318	0.555	2.190	0.148	-0.832	18.393
Board ownership _{t-1}	335	0.220	0.239	0.113	0	0.698
Board independence _{t-1}	342	0.368	0.051	0.333	0.333	0.571
Family control _{t-1}	343	0.409	0.163	0.390	0.145	0.806
Institutional environment _{t-1}	348	9.419	1.857	9.870	4.820	11.800

Table 3—Comparison between family/*guanxi* and non-*guanxi* successions

This table reports the mean comparisons between firms with a family/*guanxi*-connected successor and those with a nonfamily successor not having a *guanxi*. All variables are defined in Appendix A. Column (A) reports the means of the variables for family/*guanxi* succession firms, and Column (B) lists the means for the non-*guanxi* succession group. Column “Mean difference” reports the results of the difference in means t-test for each variable.

	Family/ <i>guanxi</i> succession	Non- <i>guanxi</i> succession	Mean difference
Variables	(A)	(B)	(A-B)
Confucian center	0.314	0.101	0.213***
Returnee founder	0.038	0.174	-0.137***
OROS difference	-0.047	-0.106	0.059**
ROA difference	-0.006	-0.021	0.015*
Internal experience _t	4.155	1.440	2.714***
OROS _{t-1}	0.084	0.083	0.001
ROA _{t-1}	0.039	0.049	-0.010
Firm age _{t-1}	11.381	11.284	0.096
Ln(total assets) _{t-1}	21.232	20.952	0.280***
Long-debt level _{t-1}	0.032	0.021	0.011*
Sales growth _{t-1}	0.568	0.527	0.041
Board ownership _{t-1}	0.206	0.252	-0.046
Board independence _{t-1}	0.366	0.372	-0.006
Family control _{t-1}	0.414	0.398	0.016
Institutional environment _{t-1}	9.411	9.437	-0.026

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 4—Correlation matrix

This matrix reports the Pearson correlation coefficients for the dependent and independent variables. All variables are defined in Appendix A.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
FamilyOrGuanxi (1)	1														
Confucian center (2)	0.23***	1													
Returnee founder (3)	-0.18***	-0.09	1												
OROS difference (4)	0.13**	0.05	0.06	1											
ROA difference (5)	0.10*	0.04	0.04	0.66***	1										
Internal experience (6)	0.30***	0.12**	-0.11**	0.30***	0.37***	1									
OROS (7)	0	-0.13**	0.07	-0.16***	-0.25***	-0.23***	1								
Firm age (8)	0.01	0.03	-0.06	-0.02	0.03	0.03	-0.14***	1							
Firm size (9)	0.15***	0.02	0	-0.01	-0.07	0.01	0.21***	0.22***	1						
Long-debt level (10)	0.10*	0.02	-0.09*	-0.04	0	-0.02	0	0.19***	0.30***	1					
Sales growth (11)	0.01	-0.05	0	0.03	-0.06	-0.04	0.07	0.20***	-0.03	0.03	1				
Board ownership (12)	-0.09	-0.08	0.05	-0.11**	-0.12**	-0.07	0.19***	-0.38***	-0.21***	-0.20***	-0.11*	1			
Independence (13)	-0.05	0.01	-0.06	-0.02	0	0.06	-0.09	0.06	-0.14***	-0.12**	0.01	0.13**	1		
Family control (14)	0.05	0.03	0.03	-0.03	-0.08	-0.02	0.21***	-0.17***	0.11**	-0.10*	0.04	0.25***	0.04	1	
Institutional environment (15)	-0.01	0.11**	-0.01	-0.01	-0.03	0.03	0.13**	-0.06	0.11**	-0.10*	-0.09	0.10*	0.02	0.10*	1

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 5—Confucian center, founder’s overseas experience, and successor choice

This table reports the results for H1 and H2. The dependent variable in Columns (1) and (2), *FamilyOrGuanxi*, equals one if the successor is the founder’s family member or a *guanxi*-connected nonfamily member and zero if the successor is a nonfamily member without a *guanxi*. Columns (3) and (4) presents the results of the multinomial logistic regression, where the base case is the non-*guanxi* successions. Column (5) compares family successions with *guanxi* successions, where the dependent variable is *Family*, a dummy equal to one if the successor is the founder’s family member and zero if the successor is a *guanxi*-connected nonfamily member. *Confucian center* is equal to one if the firm is headquartered in a city with a Confucian center and zero otherwise. *Returnee founder* is equal to one if the founder has worked or studied overseas before the succession and zero otherwise. The other variables are control variables, including a series of pre-succession firm-, governance-, and family-level characteristics and a set of industry and year dummies. ME stands for marginal effects. All variables are defined in Appendix A.

	FamilyOrGuanxi		Family VS Non-guanxi	Guanxi VS Non-guanxi	Family VS Guanxi
Variables	(1) Coef.	(2) ME	(3) Coef.	(4) Coef.	(5) Coef.
Confucian center	0.733*** (0.239)	0.210*** (0.066)	2.017*** (0.535)	0.897* (0.502)	0.787*** (0.235)
Returnee founder	-1.046*** (0.336)	-0.300*** (0.090)	-2.350** (0.923)	-1.594** (0.621)	-0.559 (0.562)
OROS _{t-1}	0.213 (0.497)	0.061 (0.142)	-0.906 (1.036)	0.564 (0.922)	-0.703 (0.696)
Firm age _{t-1}	-0.012 (0.021)	-0.003 (0.006)	-0.022 (0.047)	-0.027 (0.039)	-0.005 (0.025)
Firm size _{t-1}	0.215* (0.126)	0.061* (0.036)	0.260 (0.258)	0.340 (0.241)	-0.064 (0.133)
Long-debt level _{t-1}	0.985 (1.886)	0.282 (0.539)	1.828 (3.749)	1.826 (3.703)	-0.018 (1.735)
Sales growth _{t-1}	-0.025 (0.049)	-0.007 (0.014)	-0.008 (0.111)	-0.046 (0.100)	0.032 (0.039)
Board ownership _{t-1}	-0.631 (0.479)	-0.181 (0.135)	-1.299 (0.992)	-1.101 (0.897)	-0.176 (0.514)
Board independence _{t-1}	-0.245 (1.931)	-0.070 (0.553)	0.514 (3.983)	-0.751 (3.453)	0.612 (2.094)
Family control _{t-1}	0.164 (0.584)	0.047 (0.167)	0.827 (1.350)	0.048 (1.061)	0.690 (0.681)
Institutional environment _{t-1}	-0.001 (0.052)	-0.000 (0.015)	0.006 (0.111)	-0.003 (0.094)	-0.006 (0.058)
Industry & year dummies	Yes	Yes	Yes	Yes	Yes
Observations	301	301	301	301	210
Pseudo R ²	0.173		0.170	0.170	0.141

Firm-level clustered standard errors are shown in parentheses.

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 6—Successor choice and firm performance

This table presents the results for H3. The dependent variable, *OROS difference*, is the difference between the post-succession two-year average OROS and the pre-succession two-year average OROS. *FamilyOrGuanxi* equals one if the successor is the founder's family member or a *guanxi*-connected nonfamily member and equals zero if the successor is a nonfamily member without a *guanxi*. *Family* equals one if the successor is the founder's family member and zero otherwise. *Guanxi* equals one if the successor is a *guanxi*-connected nonfamily member and zero otherwise. The other variables are control variables defined in Appendix A.

Variables	OROS difference	
	(1) Coef.	(2) Coef.
FamilyOrGuanxi _t	0.050** (0.023)	
Family _t		0.053** (0.026)
Guanxi _t		0.048* (0.029)
OROS _{t-1}	-0.112 (0.167)	-0.111 (0.167)
Firm age _{t-1}	-0.003 (0.003)	-0.003 (0.003)
Firm size _{t-1}	0.029 (0.020)	0.029 (0.020)
Long-debt level _{t-1}	-0.256 (0.297)	-0.257 (0.297)
Sales growth _{t-1}	0.010** (0.004)	0.010** (0.004)
Board ownership _{t-1}	-0.062 (0.076)	-0.062 (0.077)
Board independence _{t-1}	0.049 (0.277)	0.048 (0.278)
Family control _{t-1}	0.054 (0.077)	0.053 (0.076)
Institutional environment _{t-1}	0.007 (0.008)	0.007 (0.009)
Industry & year dummies	Yes	Yes
Observations	300	300
R ²	0.200	0.200
Adj. R ²	0.104	0.101

Firm-level clustered standard errors are shown in parentheses.

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 7—Successor’s pre-succession internal managerial experience and firm performance

This table reports the results for H4. In Panel A, the sample is split into the *Family/Guanxi* group (firms with a family/*guanxi*-connected successor) and the *Non-guanxi* group (firms with a nonfamily successor not *guanxi*-connected). *Internal experience* is the number of years the successor has worked as a director/top manager in the firm till the succession year. In Panel B, *FamilyOrGuanxi*Internal experience* is the interaction term between *FamilyOrGuanxi* and *Internal experience*. *Family*Internal experience* is the interaction term for *Family* and *Internal experience*. *Guanxi*Internal experience* is the interaction term for *Guanxi* and *Internal experience*. *OROS difference*, *FamilyOrGuanxi*, *Family*, and *Guanxi* are defined the same as in Table 6. The other variables are control variables defined in Appendix A.

Panel A: Pre-succession internal experience and firm performance by succession groups		
Groups:	OROS difference	
	Family/Guanxi	Non-guanxi
	(1)	(2)
Variables	Coef.	Coef.
Internal experience _t	0.016*** (0.002)	0.001 (0.009)
OROS _{t-1}	-0.312** (0.128)	-0.006 (0.214)
Firm age _{t-1}	-0.001 (0.002)	-0.011* (0.006)
Firm size _{t-1}	0.042** (0.021)	-0.016 (0.041)
Long-debt level _{t-1}	-0.209 (0.314)	-0.230 (0.354)
Sales growth _{t-1}	0.012*** (0.004)	0.018* (0.011)
Board ownership _{t-1}	-0.048 (0.084)	-0.036 (0.120)
Board independence _{t-1}	0.481 (0.295)	-0.821** (0.346)
Family control _{t-1}	0.023 (0.077)	-0.025 (0.171)
Institutional environment _{t-1}	0.010 (0.009)	-0.006 (0.012)
Industry & year dummies	Yes	Yes
Observations	210	90
R ²	0.354	0.550
Adj. R ²	0.237	0.343

Panel B: Family/guanxi successors, pre-succession internal experience, firm performance			
	OROS difference		
Variables	(1) Coef.	(2) Coef.	(3) Coef.
FamilyOrGuanxi _t	0.016 (0.025)	-0.028 (0.030)	
Internal experience _t	0.013*** (0.002)	-0.011 (0.012)	-0.010 (0.012)
FamilyOrGuanxi*Internal experience _t		0.026** (0.013)	
Family _t			-0.022 (0.035)
Guanxi _t			-0.031 (0.045)
Family*Internal experience _t			0.027** (0.012)
Guanxi*Internal experience _t			0.026* (0.014)
OROS _{t-1}	-0.066 (0.166)	-0.123 (0.142)	-0.121 (0.142)
Firm age _{t-1}	-0.003 (0.003)	-0.003 (0.003)	-0.003 (0.003)
Firm size _{t-1}	0.027 (0.019)	0.027 (0.019)	0.027 (0.019)
Long-debt level _{t-1}	-0.213 (0.278)	-0.249 (0.276)	-0.246 (0.274)
Sales growth _{t-1}	0.011*** (0.004)	0.012*** (0.004)	0.012*** (0.004)
Board ownership _{t-1}	-0.047 (0.074)	-0.042 (0.074)	-0.041 (0.075)
Board independence _{t-1}	-0.000 (0.275)	0.021 (0.267)	0.019 (0.267)
Family control _{t-1}	0.038 (0.077)	0.031 (0.078)	0.029 (0.077)
Institutional environment _{t-1}	0.006 (0.008)	0.005 (0.008)	0.005 (0.008)
Industry & year dummies	Yes	Yes	Yes
Observations	300	300	300
R ²	0.247	0.268	0.268
Adj. R ²	0.154	0.174	0.168

Firm-level clustered standard errors are shown in parentheses.

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 8—Two-stage regression analysis

This table provides the results for the two-stage regression analysis of H2. Column (1) reports the result for the first-stage regression. *Returnee-preferential policy* is the instrument for *Returnee Founder* and is a dummy variable equal to one if the government of the firm's headquartered province has launched a returnee-preferential policy before the foundation of the firm and zero otherwise. Column (2) presents the result for the second-stage regression. *Predicted (Returnee Founder)* is the predicted value of *Returnee Founder* from the first-stage regression. Control variables are the same as those in the baseline regression models and are defined in Appendix A.

	Returnee founder	FamilyOrGuanxi
	1 st Stage	2 nd Stage
Variables	(1) Coef.	(2) Coef.
Returnee-preferential policy	0.454*** (0.062)	
Predicted (Returnee founder)		-0.552** (0.233)
Confucian center	0.009 (0.035)	0.192*** (0.060)
OROS _{t-1}	0.001 (0.085)	0.080 (0.144)
Firm age _{t-1}	-0.004 (0.004)	-0.005 (0.006)
Firm size _{t-1}	0.005 (0.020)	0.060* (0.035)
Long-debt level _{t-1}	-0.386 (0.298)	0.221 (0.516)
Sales growth _{t-1}	-0.009 (0.007)	-0.004 (0.012)
Board ownership _{t-1}	-0.077 (0.077)	-0.195 (0.133)
Board independence _{t-1}	-0.124 (0.300)	-0.134 (0.513)
Family control _{t-1}	0.104 (0.101)	0.091 (0.172)
Institutional environment _{t-1}	-0.003 (0.009)	0.002 (0.015)
Industry & year dummies	Yes	Yes
Observations	301	301
1st Stage F-statistic	53.66***	
Stock-Yogo critical value for F-stat	16.38 (10% maximal size)	
Durbin-Wu-Hausman test p-value	0.551	

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 9—Confucius temples and the type of overseas experience

This table presents the results for Confucius temples and the type of the founder's overseas experience regarding their impact on the successor choice. *Confucius temple* is the number of the nationally well-known Confucius temples in the firm's headquartered province. *Overseas type* is an ordinal variable equal to two if the founder has overseas work experience; one if the founder's overseas experience is pure study experience; and zero if the founder does not have any work/study experience abroad. Control variables are defined in Appendix A.

Variables	FamilyOrGuanxi	
	(1) Coef.	(2) ME
Confucius temple	0.228*** (0.055)	0.065*** (0.015)
Overseas type	-0.568*** (0.207)	-0.162*** (0.057)
OROS _{t-1}	0.290 (0.489)	0.083 (0.140)
Firm age _{t-1}	-0.000 (0.022)	-0.000 (0.006)
Firm size _{t-1}	0.255** (0.126)	0.073** (0.035)
Long-debt level _{t-1}	0.894 (1.849)	0.255 (0.527)
Sales growth _{t-1}	-0.025 (0.047)	-0.007 (0.013)
Board ownership _{t-1}	-0.604 (0.478)	-0.172 (0.134)
Board independence _{t-1}	-0.437 (1.940)	-0.125 (0.555)
Family control _{t-1}	0.363 (0.590)	0.104 (0.168)
Institutional environment _{t-1}	0.011 (0.049)	0.003 (0.014)
Industry & year dummies	Yes	Yes
Observations	301	301
Pseudo R ²	0.172	

Firm-level clustered standard errors are shown in parentheses.

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Table 10—Confucianism, successor choice, pre-succession internal experience, and firm performance

This table reports the results for testing whether prior findings for H3 and H4 are indeed driven by Confucianism.

Firms in the “No Confucian center (Confucian center)” group are those headquartered in provinces without (with) a Confucian center. All variables are defined in Appendix A.

Groups:	OROS difference			
	No Confucian center	Confucian Center		
Variables	(1) Coef.	(2) Coef.	(3) Coef.	(4) Coef.
FamilyOrGuanxi _t	-0.009 (0.034)	-0.074 (0.045)	0.075** (0.032)	-0.058 (0.051)
Internal experience _t		0.012 (0.011)		-0.043* (0.023)
FamilyOrGuanxi*Internal experience _t		0.007 (0.011)		0.061** (0.024)
OROS _{t-1}	-0.316* (0.175)	-0.337** (0.151)	-0.082 (0.209)	-0.187 (0.175)
Firm age _{t-1}	-0.005 (0.005)	-0.006 (0.005)	-0.001 (0.004)	0.001 (0.003)
Firm size _{t-1}	0.068* (0.036)	0.059* (0.032)	0.003 (0.018)	0.003 (0.017)
Long-debt level _{t-1}	-0.681 (0.543)	-0.799* (0.459)	0.310 (0.247)	0.591** (0.298)
Sales growth _{t-1}	0.001 (0.009)	0.002 (0.007)	0.010** (0.005)	0.012** (0.005)
Board ownership _{t-1}	-0.088 (0.103)	-0.071 (0.101)	0.065 (0.089)	0.112 (0.084)
Board independence _{t-1}	-0.085 (0.337)	-0.100 (0.335)	-0.168 (0.314)	-0.132 (0.268)
Family control _{t-1}	0.032 (0.138)	-0.016 (0.131)	0.057 (0.094)	0.075 (0.088)
Institutional environment _{t-1}	-0.001 (0.012)	-0.004 (0.011)	0.004 (0.008)	0.001 (0.008)
Industry & year dummies	Yes	Yes	Yes	Yes
Observations	142	142	158	158
R ²	0.412	0.500	0.289	0.421
Adj. R ²	0.260	0.359	0.107	0.261

Firm-level clustered standard errors are shown in parentheses.

***, **, * denotes statistical significance at the 1%, 5% and 10% level (two-tailed test), respectively.

Appendix A —Definition of variables

Variable	Definition
<i>FamilyOrGuanxi</i>	An indicator equal to 1 if the successor is the founder's family member (by blood/marriage) or a nonfamily member having a <i>guanxi</i> with the founder, and 0 otherwise
<i>Family</i>	An indicator equal to 1 if the successor is the founder's family member, and 0 otherwise
<i>Guanxi</i>	An indicator equal to 1 if the successor is a <i>guanxi</i> -connected nonfamily member, and 0 otherwise
<i>Confucian center</i>	An indicator equal to 1 if the firm is headquartered in a city with a Confucian center, and 0 otherwise
<i>Confucius temple</i>	The number of Confucius temples in the firm's headquartered province
<i>Returnee founder</i>	An indicator equal to 1 if the founder has studied or worked overseas before the succession, and 0 otherwise
<i>Overseas type</i>	An ordinal variable equal to 2 if the founder has overseas work experience, 1 if the founder's overseas experience is pure study experience, and 0 if the founder does not have any overseas work/study experience
<i>OROS_{t-1}</i>	Operating income/sales in year t-1
<i>ROA_{t-1}</i>	Net income/total assets in year t-1
<i>OROS difference</i>	(Post-succession 2-year average OROS) - (pre-succession 2-year average OROS)
<i>ROA difference</i>	(Post-succession 2-year average ROA) - (pre-succession 2-year average ROA)
<i>Internal experience_t</i>	The number of years the successor has worked as a director/top manager in the firm till the succession year
<i>Firm age_{t-1}</i>	The number of years since the firm's founding year to year t-1
<i>Firm size_{t-1}</i>	The natural logarithm of total assets in year t-1

<i>Long-debt level</i> $t-1$	Long-term debt / total assets in year t-1, where long-term debt is the borrowing with a maturity of more than 1 year
<i>Sales growth</i> $t-1$	The difference in sales between year t-1 and year t-2 divided by sales in year t-2
<i>Board ownership</i> $t-1$	Directors' ownership / total shares outstanding in year t-1
<i>Board independence</i> $t-1$	The proportion of independent directors among the board directors in year t-1
<i>Family ownership</i> $t-1$	The number of shares held by the family as a percentage of total shares outstanding in year t-1. If the family controls the firm indirectly through a pyramid structure, it is calculated as the product of the family's ownership stakes along the control chain.
<i>Family control</i> $t-1$	The family's votes as a percentage of total votes outstanding in year t-1. If the family controls the firm through a pyramid structure, it is measured by the minimum voting stake along the control chain.
<i>Family divergence</i> $t-1$	The difference between <i>Family control</i> $t-1$ and <i>Family ownership</i> $t-1$
<i>Institutional environment</i> $t-1$	Fan et al.'s (2011) index of the comprehensive market development levels of Chinese provinces in year t-1. The higher the value of the index for the firm's headquartered province, the better the institutional environment for the firm
<i>Dividend payout</i> $t-1$	The dividend per share as a percentage of earnings per share in year t-1 (Ansari et al., 2014)
<i>Interest coverage</i> $t-1$	An indicator equals to 1 if the interest coverage ratio, calculated as earnings before interest and tax divided by the total interest payable on bonds and other contractual debt, is greater than 2 in year t-1, and 0 otherwise (Ansari et al., 2014)
<i>Nonfamily ownership</i> $t-1$	The number of shares held by nonfamily block-holders / total shares outstanding in year t-1, where block-holders are

	individuals or institutions holding at least 5% ownership (Villalonga & Amit, 2006)
<i>Industrial competition_{t-1}</i>	The Herfindahl index of the industry where the firm operates, calculated as $H = \sum_{i=1}^n S_i^2$, where S_i is the market share of firm i (firm's sales as a percentage of sales for the same industry), n is the number of firms in the industry (Ansari et al., 2014)
<i>Founder age_t</i>	The age of the founder in year t (Ansari et al., 2014)
<i>Early succession</i>	An indicator equal to 1 if the founder leaves the leadership position before 65, and 0 otherwise (Pérez-González, 2006)
<i>Retire</i>	An indicator equal to 1 if the founder is reported to leave due to “retirement”, and 0 otherwise (Pérez-González, 2006)
<i>Post-succession founder</i>	An indicator equal to 1 if the founder remains as a director or a top manager in the firm the year after the succession, and 0 otherwise
<i>Returnee-preferential policy</i>	An indicator equal to 1 if the local government in the firm's headquartered province has launched a returnee-preferential policy before the foundation of the firm, and 0 otherwise
