The role of corporate philanthropy in family firm succession: A social outreach perspective ☆

Yue Pan [a], Ruoyu Weng [b], Nianhang Xu [c,*], Kam C. Chan [d]

[a] *School of Economics, Xiamen University, Xiamen 361005, China*
[b] *The Wang Yanan Institute for Studies in Economics, Xiamen University, Xiamen 361005, China*
[c] *School of Business, Renmin University of China, Beijing 100872, China*
[d] *Gordon Ford College of Business, Western Kentucky University, Bowling Green, KY 42101, USA*

ARTICLE INFO

ABSTRACT

We propose and test a social outreach hypothesis of family firm succession. We argue that family firms proactively engage in social outreach activities as a strategy to ensure smooth succession. We focus on corporate philanthropy (CP), a social outreach activity, in a family firm succession to test our hypothesis. The results show that family firms engage in a strategy of using more CP in connection to family firm succession, especially when the successor is from the second generation. The findings are robust to alternative specifications of CP activities, various sub-sample analyses, using a difference-in-differences analysis, a two-stage least square approach, strategic choice on timing of succession, and accounting for the successor's education and experience of working for the family firm before succession. We document that despite generally poorer performance after succession, a family firm with a second-generation CEO that engages in CP exhibits better market and accounting performance relative to other types of transitions, suggesting a strategy in which CP reduces the magnitude of poor performance after succession.

© 2018 Elsevier B.V. All rights reserved.

1. Introduction

Family firms make up a significant part of their respective economies. Anderson and Reeb (2003) show that 35% of Standard & Poor's 500 firms are family owned in the US. The proportion of family ownership among public firms rises to 67% in East Asian countries (Claessens et al., 2000). These firms are an integral part of an economy and their success contributes to the economic development of their countries. The most important feature of family firms is their control by founders and/or their family members.

Burkart et al. (2003) note that the largest challenge for family firms is succession, especially those between genera-

tions. Ibrahim et al. (2001) report that only approximately 30% and 15% family firm transfers are successful in first-second and second-third generation successions, respectively. Bennedsen et al. (2015) show that among the 217 largest family firm succession cases in Hong Kong, Singapore, and Taiwan, the firm value, on average, dropped approximately 60% after the next generation took over compared to the average firm value in their respective first generations. Bennedsen and Fan (2014) and Bennedsen et al. (2015) attribute the family firm succession challenge to the fact that the success of a family firm typically hinges on the founder's (or family members') specialized assets, such as political connections, informal relations with outside stakeholders, or the firm's reputation. These assets are intangible. It is common that the most important asset to a family firm is the founder herself. When family firm succession occurs, the values of specialized assets often dissipate because the founder fades out of the firm. In addition, the successor does not have a high visibility relative to the founder. Therefore, the market generally perceives the uncertainty of the succession and leads to a firm value decrease.

The family firm succession literature has several focuses, including the choice of family members vis-à-vis professional managers and the impact on firm value (Morck et al., 2000; Pérez-González, 2006; Chang and Shim, 2015; Jaskiewicz et al., 2016), the operation and financial policy continuum (Amore et al., 2011), and spe-

cialized asset preservation in the succession (Bennedsen and Fan, 2014; Bennedsen et al., 2015; Xu et al., 2015). However, few studies examine the social outreach behavior of a family firm during the succession process. Engaging in social outreach activities is a strategy that can preserve a family firm's specialized assets and enhance the successor's visibility, such as its social image and social networks, and improve or build new relational and reputational capital. Hence, these social outreach activities can ease the transition challenges,[1] especially those involving generational transfers. We argue that to preserve or enhance a family firm's performance during the succession and raise the visibility of the successor, a family firm uses social outreach activity as a strategy to enhance its chance of success in the transfer. As explained later, the strategy is particular useful when the transfer is between generations. We examine the social outreach hypothesis of family firm succession using a sample of Chinese family firms.

The transfer cost and business road map hypothesis of Bennedsen and Fan (2014) and Bennedsen et al. (2015) presented part of the conceptual framework that was used to develop our hypothesis. Bennedsen and Fan (2014) and Bennedsen et al. (2015) suggest that the transfer of specialized assets between generations is critically important during the succession process. The authors contend that specialized assets are intangible and firmly tied to the founder (or the current family member CEO) of the family firm. Given the nature of intangible assets, it is costly to transfer these assets between individuals. A successful family firm generational transfer requires lowering the transfer cost of specialized assets so that the successor can seize a significant portion of the value of these specialized assets. In Bennedsen et al. (2015), a family firm faces a road map in which the firm needs to organize the specialized assets and overcome roadblocks to ensure a successful succession. The transfer cost and family road map hypothesis indicate the importance of specialized assets and the cost associated with the generational transfer in the family firm succession. In addition to the specialized assets argument, the strategic CP literature (e.g., Sánchez, 2000; Saiia et al., 2003; Zhang et al., 2010a, 2010b; Wang and Qian, 2011) suggests that CP can raise the visibility of a firm. Knowing a potential challenge in the family firm succession, we argue that the successor will use CP to preserve the value of specialized asset as well as raise her visibility, i.e., the successor conducts social outreach activities to smooth family firm transition. Both specialized asset preservation and visibility are channels of our proposed social outreach hypothesis.

Our social outreach hypothesis advances the work of Bennedsen and Fan (2014) and Bennedsen et al. (2015) and the related strategic CP literature. A strategy of engaging in social outreach activities raises the profile of the firm, attracts positive publicity, and helps the successor to enhance her visibility. All else being equal, these social outreach activities help the successor keep or enhance the relational and reputational capital (one of the most important specialized assets) established by the founder as well as let the successor to be more visible in the business community. Therefore, we posit that family firms proactively implement social outreach activities to encourage the successor to preserve or enhance the values of these specialized assets and enhance her personal visibility. Social outreach activities are particular useful during the first year of the new successor so that the family firm can facilitate a smooth transition. That is, social outreach activities make two contributions in a family firm succes-

sion. First, it helps to lower the transfer cost of specialized assets. Second, it enhances the successor to be more visible in the business community. Both channels can lead to a smoother family firm generational transfer. Our hypothesis is also consistent with the strategic CP literature. We note that visibility and preservation of specialized assets are not mutually exclusive. They both contribute positively to the family firm succession. Dyck et al. (2008) show that visibility and reputation are related. When the family firm or the successor has high visibility, the reputation cost to the firm is high. Our social outreach hypothesis describes how a family firm uses CP to smooth a family firm succession. The CP can help to raise the visibility of the successor and the family firm as well as helping the successor to preserve a founder's specialized assets.

To test the social outreach hypothesis, we use corporate philanthropy (CP) to quantify a family firm's social outreach activities and examine the role of CP in a family firm succession. CP is a direct and quantifiable social outreach activity. In sum, CP can help the newly appointed CEO preserve the values of specialized assets from the founder or earlier generations and raise the visibility of the successor. Overall, CP activity is a good social outreach strategy and is helpful in a family firm succession. Hence, the social outreach hypothesis predicts that (a) family firms with succession engage in more CP than those without succession, especially for firms with second-generation succession; (b) ceteris paribus, a family firm's level of CP is positively correlated with its future performance due to better preservation of the value of specialized assets.

There are three different forms of successions among first-generation family firms: (a) the founder transfers control to an outside professional manager; (b) the founder transfers control to another first-generation family member, such as a brother, sister, or spouse; and (c) the founder transfers control to a second-generation member. Among the three forms of successions, we argue that the transfer from the first to second generation, in particular, requires more assistance for the preservation of relational and reputational capital to maintain the value of specialized assets and bring visibility because the second generation is usually younger and more inexperienced relative to a professional manager or a first-generation family member; thus, her own relational and reputational capital is weaker than those in other types of transfers. Thus, if a family firm does nothing, the value destruction for specialized assets is highest for the second-generation succession among the three forms of successions. Similarly, the second generation needs more help to raise her visibility. Thus, CP is a natural tool to do so. Therefore, the social outreach hypothesis also predicts that the use of social outreach activity as a strategy is the most popular for the second-generation successions.

We use a sample of Chinese firms from 2004 to 2013 to test the social outreach hypothesis.

The Chinese environment offers a powerful setting for our investigation for three reasons. First, family firms do not have a long history in modern China. Many Chinese family firm founders started their businesses in the 1980s and 1990s after economic reform was implemented in the 1980s. A significant portion of these successful founders began to conduct family firm succession transitions from 2004 to 2013. Hence, we see a good mix of family firm successions and no successions. Moreover, firms engaged in succession transitions shift control from founders to professional managers and to other first-generation family members or second-generation members. Unlike other countries, few cases of multi-generation successions in China have been seen. Second, for first to second generation succession, the one-child policy in China leaves the founder with no choice but transfer control to a single heir (Xu et al., 2015). Infighting among different heirs seldom occurs. Therefore, the Chinese samples do not have the complications of value destruction due to conflicts among second-generation fam-

---

[1] For instance, De Vries and Miller (1984) contend that, due to age and experience differences, second-generation successors and founders may have a tense relationship. Smith and Amoako-Adu (1999) suggest that the market casts doubt on the ability of the second generation in family firms. Hence, the stock price reacts negatively when succession announcements are made.

ily members during the succession process (Bertrand et al., 2008); thus, we have a clean sample. Third, firms are required to report their CP activities in China; thus, we have an objective measure of social outreach activities. We compare the CP levels around family succession to conduct our analysis.

Our findings suggest that family firms with any type of succession engage in more CP than other family firms without succession. When comparing the three types of successions, we find that a second-generation CEO engages in more CP in $t+1$ than the other two types of successions (when t is the year in which the succession occurs). The findings are robust to alternative specifications of CP activities, various sub-sample analyses, using a difference-in-differences analysis, a two-stage least square approach, strategic choice on timing of succession, and accounting for the successor's education and experience of working for the family firm before succession. In addition, we find that when a family firm has more specialized assets (such as having a political-connected, socially active founder, or has a strong reputation) and when it has less visibility in year t, it engages in more CP in year $t+1$ when conducting a second-generation succession in t. Furthermore, we document that after succession, a family firm, on average, experiences a drop in performance, which is consistent with the literature. However, a second-generation CEO family firm, on average, is able to alleviate the magnitude of the performance drop relative to firms with other types of succession when it engages in more CP in the succession process. Overall, we show that family firms use CP activities as a strategy to smooth the transition and that they are successful in using this type of strategy by mitigating the drop in their post-succession performance.

We make three contributions to the literature. First, we support the social outreach hypothesis of family firm succession, complementing the framework of the transfer cost and family road map hypothesis in Bennedsen and Fan (2014) and Bennedsen et al. (2015) and visibility explanation embedded in the strategic CP literature. Family firms, on average, raise their CP levels in the family succession process, especially from first- to second-generation succession, to preserve the value of specialized assets. Most importantly, we document that family firms that engaged in more CP in a succession perform better than those engaging in less CP. Second, we document that CP plays a role in family firm succession. Our findings complement the literature on the role of political connections (Xu et al., 2015), specialized assets (Bennedsen and Fan, 2014; Bennedsen et al., 2015), and young heirs (Cao et al., 2015) in family firm succession. CP is helpful in driving a successful intergeneration transfer of family firms. Third, we document that aside from the marketing and "feel good" reasons behind CP, family succession plays a role in a firm's CP decisions, supporting the view that CP is part of a broader corporate strategy to enhance the performance of a family firm after succession and that it improves the shareholder value of a family firm.

2. Literature review and hypothesis development

There are two strands of literature related to our study. We discuss them below.

2.1. Strategic corporate philanthropy

A voluminous portion of the literature studies CP. Gautier and Pache (2015) provide a detailed review on CP in general while Feliu and Botero (2016) specifically review family firm CP. Hence, we focus on studies taking CP as part of a broad corporate strategy and not discussing the altruistic view of CP (e.g., Liket and Simaens, 2015). In the body of strategic CP literature, studies suggest that CP can help a family firm educate family members on

management and responsibilities as well as the practice of professional skills required in the business world (Breeze, 2009; Eichenberger and Johnson, 2013; Ward, 2009), help the transfer of social capital between generations (Breeze, 2009; Schwass and Lief, 2008), and build up reputational and moral capital (Campopiano et al., 2014; Cruz et al., 2014).

From a political perspective, Sánchez (2000) documents that Salvadoran firms engage in CP to build their political networks. Similarly, Wang and Qian (2011) report that Chinese firms use CP to enhance their socio-political legitimacy. Saiia et al. (2003) conduct a survey on managers in charge of CP, and the respondents suggest that CP serves a strategic purpose in addition to fulfilling the corporate social responsibility (CSR) function of their firms.

Brammer and Millington (2006) contend that CP is visible due to media coverage and, hence, a firm naturally uses CP to present a positive image of the firm. Consistent with the positive image notion, Zhang et al. (2010a) document that after corporate donations to earthquake victims, many Chinese firms advertised more to strengthen the impact of their positive image. Zhang et al. (2010b) find that the number of donations is positively correlated with the competitiveness of the industry in which the firm belongs—presumably, the firm uses CP as a competition tool. Godfrey (2005) summarizes the strategic use of CP in a firm. Essentially, CP produces reputational capital for the firm from the lens of stakeholders. In addition, the reputational capital reinforces a firm's relationship-based intangible assets. Accordingly, CP contributes to a firm in building up shareholder wealth. Feliu and Botero (2016) summarize that CP in family firms can include family identity; legacy; wealth benefits; and political, reputational, moral, and educational motives, among others. Overall, CP produces intangibles to a firm and it can raise the visibility of a family firm successor.

2.2. Family firm succession and performance

Family firms significantly contribute to the economy, and their succession is important to a country as well as to the family. Within this strand of literature, there are several clusters based on the different drivers of success or failure of a family firm succession. The first cluster of literature generally reports the impact of outside professional vs. family member successors on family firm succession. McConaughy et al. (1998) report that in a sample of US family firms, the continuous control of a family firm by the founding family after the succession is more efficient and the firm value is higher than for a non-family control firm. Smith and Amoako-Adu (1999), however, find that the market reacts unfavorably when a family firm announces a family member successor. Similarly, using a sample of Canadian firms, Morck et al. (2000) suggest that the accounting performance is lower for firms with second-generation control after succession relative to comparable firms. Pérez-González (2006) documents that in succession announcements of family firms, only an outside professional CEO appointment yields positive abnormal returns in the US. With the exception of McConaughy et al. (1998), the literature concludes that, in general, family firm value decreases substantially after successions.

The second cluster studies the operation and financial policy continuum after succession. For instance, Amore et al. (2011) report that outside professional CEO succession leads to a significant increase of debt usage in Italy. Bach and Serrano-Velarde (2015) document that a family member succession incurs 20% lower wage growth and 25% less job separation relative to an outside CEO.

The third cluster examines the role of specialized assets in the family firm succession. For instance, Xu et al. (2015) suggest that family firms with second-generation involvement perform better than those without involvement. The authors posit that family

firms with second-generation involvement are able to reduce the value dissipation of specialized assets (political connections) in the succession process.

The fourth cluster of literature is to theorize family firm succession, especially the value destruction in the succession process. Bennedsen and Fan (2014) and Bennedsen et al. (2015) propose a transfer cost and business road map hypothesis. The authors provide an exploratory analysis to show that the family firm succession choice is correlated with variables proxied for family specialized assets. The authors suggest two perspectives. First, family firm founders own specialized assets, such as their political connections, unique relations with outside stakeholders, and reputation. These specialized assets are intangible and critical to the success of family firms. In the process of succession, the value of these assets decreases drastically if the family firms do not execute "correct" strategies to preserve the value of specialized assets. Typically, family firms may not have done enough to do so and, thus, the firm value drops after the succession. Second, Bennedsen and Fan (2014) and Bennedsen et al. (2015) perceive family business succession as a family business road map. The authors contend that family members manage their firms because they are able to make contributions that non-family members cannot provide (and specialized assets are one of the key elements). A family business road map organizes various specialized assets and identifies roadblocks that challenge family firm success.

Kammerlander et al. (2015) propose a model of "fit" to family firm success. The authors argue that a fit is required to integrate family-influenced goals, resources, and governance for the family firm to be successful through generational transfer. This is a general theory of family firm succession.

2.3. Hypothesis development

Taking the two apparently unrelated bodies of literature above, we draw two conclusions. First, CP can build a firm's reputational and relational capital. While the capital is intangible, it is useful for enhancing the value of a family firm. CP brings visibility to a firm and the CEO. Therefore, CP can enhance the visibility of a family firm successor so as to smooth the succession. Second, the transfer cost and business road map theory in Bennedsen and Fan (2014) and Bennedsen et al. (2015) suggest that the value destruction in family firms during succession is, in part, due to value dissipation in specialized assets that are associated with the family founder. To be successful in a family firm, a family needs to organize a correct strategy to navigate the family firm roadmap in a succession. The model of fit in Kammerlander et al. (2015) suggests that in a family firm succession, the firm needs to prepare resources to achieve a smooth succession.

In combining these conceptual underpinnings, we propose a social outreach hypothesis. Our hypothesis suggests that family firms use CP activities to build the successor's personal image to enhance her visibility. These CP activities allow the new family firm CEO to significantly enhance her reputational capital. In addition, CP can preserve the value of specialized assets left by the founder. CP activities are part of the "correct" strategy in Bennedsen et al.'s (2015) family firm roadmap. Our testable hypothesis represents an extension of those in Bennedsen and Fan (2014) and Bennedsen et al. (2015), strategic CP literature (e.g., Feliu and Botero, 2016), and meets the "fit" element in the model in Kammerlander et al. (2015).

If our hypothesis is valid, we should see CP increases during a family firm succession relative to firms without successions due to the need to engage in more CP spending to preserve the value of specialized assets from the founder. Along the strategic CP literature, the successor can engage in more CP to freshly build and enhances her own reputation and develops new network using

CP. The new CEO's own reputation and network can improve her visibility. Essentially, visibility of second-generation creates favorable environment for the success of the second-generation. Overall, both preservation of specialized assets and develop visibility arguments suggest that the use of CP to enhance the family firm succession.

Given the three forms of successions (founder to outside professional manager, founder to another first-generation family member, and founder to second-generation family member), which type of successor needs more help from CP? Let us first consider first-generation vs. second-generation successors. In general, we expect that, in terms of age, number of years involved in family firms before succession, and the age difference between founders and successors, first-generation successors are in better positions than those of second-generation successors.[2] Therefore, the motivation to make significant more CP for a first-generation successor is weaker relative to a second-generation successor because first-generation successors have already had large endowments in relational and reputational capital.

When comparing professional manager and second-generation successors, we postulate that the founder, on average, is able to identify a professional manager with good relational reputational capital to minimize the dissipation of specialized capital and the need to visibility enhancement because the founder has many choices from the professional manager labor market. In fact, Palacios et al. (2013) suggest that professional managers, on average, are better than family members in their general ability. On average, the selected professional manager to be the CEO of the family firm should have a priori better relational and reputational capital. Thus, the need for CP (whether it is due to preservation of specialized assets or visibility) is less for professional manager relative to the second-generation successor.

Overall, the second-generation successor uses more CP than the other forms of succession. Hence, our first testable hypothesis is:

H1. *Family firms with succession engage in more CP than those without succession, especially for firms with second-generation succession.*

H1 posits the relationship between CP activities and family firm successions. It does not address the timing of engaging in CP by the successors.

When will be the social outreach activities are particular useful? There are two possibilities. First, social outreach activities are particularly useful in preserving the value of specialized assets when the founder shifts control and the successor commences leadership, that is, the first year of the new succession is the most important in preserving the value of specialized assets to facilitate a smooth transition. It is because the successor, being a new CEO, faces a lot of uncertainty. Thus, specialized assets play a more important role in the first year of a new CEO. Hence, the critical time for generating CP is the first year after the succession. Nonetheless, it is still possible that CP continues to play a role in the succession after several years but the importance of CP for successors in years beyond $t+1$ should be less than that in $t+1$. Hence, it is a research question about the timing of making more CP during a succession. Second, it may take time to fully transfer the specialized assets. Thus, firms would engage in more CP during years before successions to preserve the value of specialized assets. In this case, the increased in CP begins before successions.

---

[2] Our sample summary statistics shows that, the means of first-generation successors in their age when succession occurs, number of years involved in the family firm before succession, and the age difference between founders and successors are 47.7, 6.7, and 1.9 years, respectively. The same means are 39.4, 2.2, and 18.0, respectively, for the second-generation successors. The differences are statistically significant at the 1% level.

In addition, among the three types of successions, we contend that the second-generation succession needs the more help relative to the other two types of successions based on similar arguments that support *H1*. However, we cannot rule out that professional managers and other first-generation successors can also use the help of CP to smooth their transitions. It remains a research question. Hence, our second testable hypothesis has two alternatives:

H2A. *Family firms engage in more CP one year after succession, especially when firms with second-generation succession*

H2B. *Family firms engage in more CP before succession, especially when firms with second-generation succession*

We examine *H1* and *H2* (*H2A* or *H2B*) with a sample of Chinese family firms. In addition, we compare the financial performance of these family firms to see if the CP helps their performance. As a corollary of *H1* and *H2*, we expect the financial performance of a second-generation succession family firm to demonstrate better performance than those of other family firm successions.

3. Sample selection, data, and methods

3.1. Sample selection and data

We follow Anderson and Reeb (2003) to classify a firm as a family firm if the founder or any family member is the largest shareholder with at least a 10% ownership of the firm and she or a family member is also a member of the board of directors. Based on all publicly traded firms in the A-share market in China during 2004–2013, we select only family firms.

We begin in 2004 because it was the first year in which CP data were available. In the process, we exclude (a) financial firms; (b) special treatment firms (firms with financial irregularities)[3]; and (c) firms with incomplete financial information. Our final sample has 3574 firm-years from 885 family firms, of which 1778 of firm-years had changes in the CEO position. Once a firm is include in the sample, it remains in the sample throughout 2005–2013. Thus, our sample does not suffer from survivorship bias. Due to the nature of young family firms in China, the founders all remain as the chairman of the board in our samples after new CEO appointments. In addition, we conduct additional analyses on samples include special treatment and/or regulated firms for robustness.

We obtain our CP data from the China Stock Market and Accounting Research (CSMAR) database. For our study, we use cash donation as our CP. To account for the impact of firm scale, we take the ratio of cash donations to total revenue as our primary measure of CP.[4]

The change in CEO information is from the corporate governance module of CSMAR. Given the young family firm history, any succession, if any, is between the founder and professional managers, other first-generation family members, or second-generation family members. We manually checked the founder-second-generation family member, founder-other first-generation family member, or founder-professional manager rela-

tionship when there is a change in CEO using internet search engines. We winsorize our data at the 1% and 99% levels.

3.3. Research design

To examine the social outreach hypothesis of family firm succession, we use two testing strategies. First, we compare CP among family firms with different types of succession modes and firms without successions across all years for a general examination. Specifically, we examine a family firm (a) with a new CEO without a specific type of succession (hereafter Type 1 succession), (b) with a new CEO who is from the first or second generation (hereafter Type 2 succession), and (c) with a new CEO who is from the second-generation (hereafter Type 3 succession). For this testing strategy, Type 1 succession captures the effect of only any new CEOs, Type 2 succession captures the specific effect of first- and second-generation CEOs (non-professional manager CEOs), and Type 3 succession shows only the effect of second-generation succession on CP.

For the first testing strategy, the base model is:

$$DONATE_{i,t} = \alpha_0 + \alpha_1 TYPE1_i \ (or \ TYPE2_i \ or \ TYPE3_i)$$
$$+ \sum \alpha_j CONTROL_{i,t} + \epsilon_{i,t} \tag{1}$$

where $DONATE_{i,t}$ is the corporate philanthropy of the *i*th firm in year *t*, which is the ratio of corporate donations to the total revenue in the same year; $TYPE1_i$, $TYPE2_i$, and $TYPE3_i$ are dummy variables with a value of 1 for the *i*th firm with (a) a new CEO during the sample period, (b) a new CEO during the sample period who is a first- or second-generation family member, and (c) a new CEO during the sample period who is a second-generation family member, respectively. We pool all firm-years together and disregard the timing of successions and CP to conduct the analysis when using Eq. (1). The objective of this analysis is to compare the CP activities for family firms with and without succession.

For the second testing strategy, we focus only on family firms with CEO changes. That is, we confine our analysis to family firms with successions and examine the CP level around successions in $t-1$, t, and $t+1$. The unit of observation is across each firm. We need a family firm with CP measures one year before the succession, in the year of succession, and the year after the succession. The base model is:

$$DONATE_{i,t} = \beta_0 + \beta_1 TYPE3_i * AFTER_i + \beta_2 TYPE3_i * CURRENT_i$$
$$+ \beta_3 TYPE3_i * BEFORE_i + \beta_4 AFTER_i + \beta_5 CURRENT_i$$
$$+ \beta_6 BEFORE_i + \sum \beta_j CONTROL_i + \emptyset_i \tag{2}$$

where $AFTER_i$, $CURRENT_i$, and $BEFORE_i$ are dummy variables with a value of 1 if it is 1 year after succession, the year of succession, and 1 year before the CEO change, respectively.

If *H1* is valid, we expect α_1 to be positive in Eq. (1), indicating that family firms with Type 1, 2, or 3 successions engage in more CP than family firms without new CEOs. In addition, we expect the magnitude of α_1 to be the largest for a Type 3 succession. Similarly, if *H2* is valid, we expect β_1 to be positive in Eq. (2), showing that a firm with a Type 3 succession engages in more CP than other successions one year after the succession.

The control variables in both Eqs. (1) and (2) follow Anderson and Reeb (2003), Liu et al. (2015) and Cahan et al. (2015) including firm size (*SIZE*), financial leverage (*LEV*), profitability (*ROA*), stock return volatility (*VOL*), growth (*GROW*), largest shareholder ownership (*CR1*), CEO and chairman and CEO duality (*DUAL*), cash (*CASH*), and firm age (*FIRMAGE*). In addition, we account for the gender and age of the CEO (*CEOGENDER* and *CEOAGE*) and chairman (*CHAIRGENDER* and *CHAIRAGE*) as well as their education levels (*CEOEDU* and *CHAIREDU*). Considering the impact of religiosity (e.g., Du et al., 2014) on CP and the altruistic charac-

---

[3] These firms have negative earnings in two consecutive years. On April 22, 1998, the Shenzhen Stock Exchange announced that it labeled these firms as "special treatment" firms.

[4] The literature has used different definitions of CP. While FASB defines CP as the total of cash and in-kind donations, Chinese firms primarily make cash donations. This is one of the advantages using Chinese data. In addition, Brammer and Millington (2005) show that cash donation is more effective than in-kind donation to enhance reputation. Therefore, using only cash donation can capture the impact of CP. In fact, several recent Chinese CP studies, such as Wang et al. (2008) and Wang and Qian (2011), also use cash donations to proxy CP. In a US setting, Porter and Kramer (2006) use cash donation to capture CP.

Table 1
Major variable definitions.
Table 1 defines all variables in the paper.

Variables	Symbols	definitions
Dependent variables	*DONATE (in one-tenth of %)*	Corporate philanthropy level; the ratio of corporate donations to total revenue.
	A_DONATE (in one-tenth of %)	Industry-adjusted corporate philanthropy level; the ratio of corporate donations to total revenue minus the industry average.
Other interest variable	*DONATE$*	Corporate donation amount in thousands of renminbi.
Firm performance	*SUB*	Government subsidy = subsidies / total asset.
	FIN	Financing convenience = long-term debt/ total asset.
	BHR	Buy and hold return = (stock price - last year stock price + dividend) / last year stock price.
	TQ	Tobin's q = market value / (total asset - intangible asset – goodwill).
	ROA	return on assets; net income divided by total assets
Explanatory variables	*TYPE1*	A dummy variable with a value of 1 if the firm has a new CEO; otherwise zero. The new CEOs include professional managers, other first-generation family members, and second-generation family members.
	TYPE2	A dummy variable with a value of 1 if the firm has a new CEO and she is a family member (from the first or second generation); otherwise zero.
	TYPE3	A dummy variable with a value of 1 if the firm has a new CEO and he is a second-generation family member; otherwise zero.
	BEFORE	A dummy variable with a value of 1 if it is one year before which a firm has a new CEO; otherwise zero.
	CURRENT	A dummy variable with a value of 1 if it is the same year in which a firm has a new CEO; otherwise zero.
	AFTER	A dummy variable with a value of 1 if it is one year after which a firm has a new CEO; otherwise zero.
	POST	A dummy variable with a value of 1 if it is in the post-succession period; otherwise zero.
	OVERSEA	A firm-level dummy variable with a value of 1 if the second generation has the experience of studying abroad; otherwise zero.
	SECONDEDU	A firm-level variable measuring the level of education of the second generation. Below college degree equals to 1; College degree equals to 2; Bachelor degree equals to 3; Master degree equals to 4; PhD degree equals to 5.
	ENTER	A firm-level variable equals to the length of time from second generation entering the business before being the CEO.
	PC	A dummy variable that is equal to 1 if the family firm founder is a former government official, a former military officer, a member of the Committee of the Chinese People's Political Consultative Conference (CPPCC), or a member of the National Congress of the Communist Party of China (NCCPC); otherwise zero.
	CHAMBER	A dummy variable with a value of 1 if the founder is the leader of one or more chambers of commerce; otherwise zero.
	REPUTATION	When a family firm's revenue is in the top 25% of the industry in which it belongs, we classify the firm as having a high reputation (REPUTATION = 1); otherwise, REPUTATION = 0.
	MEDIA	The total number of news about the family firm reported in major media outlets when the second-generation succession was announced.
	SIZE	logarithm of total asset.
	LEV	Ratio of liabilities to assets.
	VOL	Annualized variance of daily stock returns over fiscal year.
	GROW	Growth rate of the operating income.
	DUAL	A dummy variable with a value of 1 if the chairman and CEO is the same person; otherwise zero.
	CR1	Share ownership of the largest shareholder.
	CASH	Cash ratio; ratio of cash to total assets.
	MEMBER	The ratio of number of family members to the total number of directors, supervisors, and senior management.
	FIRMAGE	Firm age.
	CEOGENDER	CEO's gender with a value of 1 for male and zero for female.
	CEOAGE	CEO's age.
	CEOEDU	CEO's level of education; below college degree equals to 1; College degree equals to 2; Bachelor degree equals to 3; Master degree equals to 4; PhD degree equals to 5.
	CHAIRGENDER	Chairman's gender with a value of 1 for male and zero for female.
	CHAIRAGE	Chairman's age.
	CHAIREDU	Chairman's level of education; below college degree equals to 1; College degree equals to 2; Bachelor degree equals to 3; Master degree equals to 4; PhD degree equals to 5.
	CHARITY	A dummy variable with a value of 1 if the chairman is in the Forbes' list of charities; otherwise zero.
	RELIGION	A firm-level variable representing the religious atmosphere of the area that the company locates in. Measured by the number of religious sites within 200 km of the firm's headquarter.

ter of the CEO or chairman, we include the impact of religion (*RELIGION*) and whether the chairman of the family firm is on the China Forbes Charity list (*CHARITY*) in Eqs. (1) and (2). To account for the impact of family firm member involvement in the management and governance of the firm, we include a ratio of number of family members to the total number of directors, supervisors, and senior management in the firm (*MEMBER*). We also include year and industry fixed effects in Eqs. (1) and

(2). The detailed definitions of all variables are presented in Table 1.

4. Results and discussions

4.1. Descriptive statistics and graphical analysis

We present the descriptive statistics in Panel A of Table 2. Among the 3574 firm-years, 49.7%, 24.2%, and 10.6% of the sam-

Table 2
Descriptive statistics and corporate philanthropy by succession.
Panel A of Table 2 presents the descriptive statistics. Panel B compares CP by different succession types. Panel C presents the summary statistics of CP with different successions and classifications. *DONATE$* is expressed as thousands of RMB. Panel D shows the number of different types of successions. The definitions of variables are presented in Table 1. *** indicates 1% significance.

Panel A: Descriptive statistics

Variables	N	mean	std	min	25%	med	75%	max
TYPE1	3574	0.497	0.500	0	0	0	1	1
TYPE2	3574	0.242	0.428	0	0	0	0	1
TYPE3	3574	0.106	0.308	0	0	0	0	1
CURRENT	3574	0.130	0.336	0	0	0	0	1
DONATE$ (in thousand RMB)	3574	886.4	3012.7	0	0	120.0	576.3	81,300.0
DONATE (in one-tenth of 1%)	3574	0.579	1.306	0	0	0.132	0.578	21.929
SIZE	3574	9.208	0.386	8.429	8.940	9.156	9.424	10.700
LEV	3574	0.337	0.197	0.026	0.172	0.318	0.480	1.899
VOL	3574	0.484	0.183	0.233	0.365	0.442	0.541	1.254
ROA	3574	0.056	0.048	−0.310	0.029	0.053	0.081	0.311
GROW	3574	0.165	0.276	−0.370	0	0.105	0.282	1.280
DUAL	3574	0.382	0.486	0	0	0	1	1
CR1	3574	0.357	0.134	0.105	0.250	0.342	0.450	0.698
CASH	3574	0.376	0.199	0.000	0.225	0.341	0.502	0.869
MEMBER	3574	0.123	0.045	0.065	0.105	0.105	0.134	0.575
FIRMAGE	3574	10.715	4.130	3	8	10	13	26
CEOGENDER	3574	0.899	0.302	0	1	1	1	1
CEOAGE	3574	45.952	6.864	24	42	46	50	73
CEOEDU	3574	3.186	0.914	1	3	3	4	5
CHAIRGENDER	3574	0.951	0.216	0	1	1	1	1
CHAIRAGE	3574	50.396	7.758	29	45	49	56	84
CHAIREDU	3574	3.051	0.968	1	2	3	4	5
CHARITY	3574	0.015	0.123	0	0	0	0	1
RELIGION	3574	11.460	8.673	0	3	10	21	31
SUB_{t+2}	339	12.761	14.690	0	4	9	15	87
FIN_{t+2}	339	0.021	0.049	0	0	0	0.015	0.260
BHR_{t+2}	339	0.325	0.862	−0.816	−0.211	0.143	0.570	4.365
TQ_{t+2}	339	2.295	1.724	0.276	1.121	1.896	2.948	9.455
OVERSEA	320	0.151	0.359	0	0	0	0	1
SECONDEDU	320	2.713	0.928	1	2	2	4	5
ENTER	320	2.160	1.276	0	1	2	3	5
PC	320	0.330	0.471	0	0	0	1	1
CHAMBER	320	0.410	0.493	0	0	0	1	1
REPUTATION	320	0.160	0.368	0	0	0	0	1
MEDIA	320	4.690	13.709	0	0	1	3	80

Panel B: CP by succession

	Whole sample		CEO changed		Family CEO	
	CEO unchanged	CEO changed	Prof. manager	Family member	First generation	Second generation
N	1796	1778	913	865	487	378
DONATE (one-tenth of 1%)	0.470	0.689	0.536	0.851	0.647	1.114
t-statistics difference	−5.027***		−4.345***		−3.702***	
A_DONATE (one-tenth of 1%)	−0.094	0.094	−0.020	0.213	0.059	0.412
t-statistics difference	−4.354***		−3.233***		−2.806***	

Panel C: Descriptive statistics

	N	mean	std	min	25%	50%	75%	max
Type 3 succession (CP in $t+1$)								
DONATE$	58	2155.9	3308.3	0	100.7	704.0	2172.7	12,900.0
DONATE	58	1.829	2.707	0	0.075	0.876	2.092	12.004
Non-Type 3 succession (CP in $t+1$)								
DONATE$	293	1236.0	3844.2	0	1.0	170.0	750.0	40,700.0
DONATE	293	0.632	1.195	0	0.002	0.163	0.776	12.909
Full sample (includes both with and without successions)								
DONATE$	3574	886.4	3012.7	0	0.0	120.0	576.3	81,300.0
DONATE	3574	0.579	1.306	0	0.0	0.131	0.575	21.929
Non-second generation sample (includes only successions)								
DONATE$	1405	1065.0	4097.7	0	0.0	121.1	620.0	19,700.0
DONATE	1405	0.573	1.353	0	0.0	0.125	0.572	5.994
Second generation sample (includes only successions)								
DONATE$	382	1749.1	2859.1	0	51.2	510.0	1732.0	12,500.0
DONATE	382	1.130	2.0774	0	0.057	0.4091	1.229	10.667
Only firms made CP								
DONATE$	2661	1190.5	3439.4	0.4	74.0	270.7	977.0	81,300.0
DONATE	2661	0.778	1.462	0.000	0.083	0.283	0.834	21.929

Panel D: Composition of CEO successor

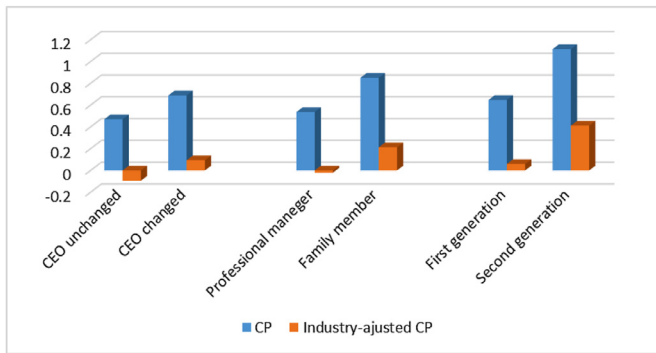| CEO successor	Professional manager	First generation	Second generation	Total
N	243(52.37%)	163(35.13%)	58(12.50%)	464 = 3574*0.130

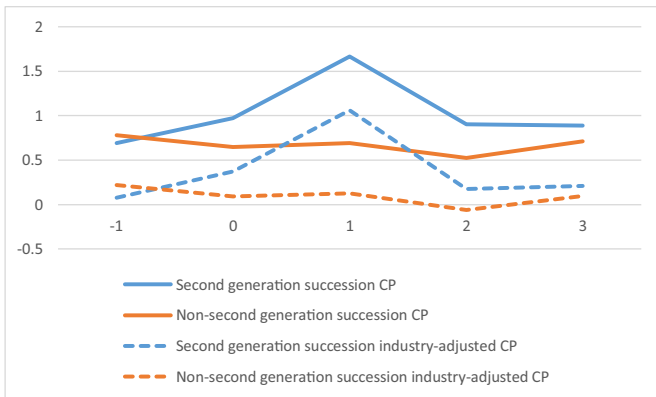**Fig. 1.** CEO succession and corporate philanthropy (CP).

Fig. 2. Second-generation vs. non-second generation new CEO corporate philanthropy (CP).

ples have a change in CEO in Type 1, 2, and 3 successions, respectively.[5] In addition, the mean of *DONATE* (corporate donation to revenue ratio) is 0.0579%. In terms of the dollar amount (*DONATE$*), the mean CP is approximately 886,400 RMB.

Panel B of Table 2 presents the non-industry-adjusted CP (*DONATE*) and industry-adjusted CP (*A_DONATE*) by different types of succession. For visualization, we present the CPs in Fig. 1. The figure shows the CP levels among different types of successions using *DONATE* and *A_DONATE*. Using *A_DONATE*, the industry-adjusted CP level is considerable higher for (a) family firms with Type 1 succession (0.0094%) relative to those without new CEOs (−0.0094%), (b) Type 2 succession (0.0213%) relative to only professional manager succession (−0.0020%), and (c) Type 3 succession (0.0412%) relative to only first generation succession (0.0059%). Among all six categories, the Type 3 succession scores the highest CP level. We qualitatively find the same results using *DONATE*.

Fig. 2 plots the CP levels in *t-1* to *t*+3 years (t is the year with a new CEO) for Type 3 vs. other forms of successions (first generation or professional managers) combined. For other forms of new CEOs, the industry-adjusted CP (*A_DONATE*) levels fluctuate between −0.01% to 0.02% over *t* − 1 to *t*+3 years. In contrast, for Type 3 succession, the CP level has the lowest level of 0.01% in t-1 but spikes at approximately 0.10% in *t* + 1. The non-industry-adjusted CP (*DONATE*) exhibits a similar pattern. Overall, Figs. 1 and 2 offer preliminary evidence to suggest that both non-

industry and industry-adjusted CP levels increase after a new CEO, especially a second-generation CEO, took office.

Panel C of Table 2 presents some descriptive statistics of *DONATE* and *DONATE$* (in unites of thousands of RMB) donations. Second-generation CEOs has a mean *DONATE$* of RMB 2,155,900 after their succession, which is more than the mean *DONATE$* of RMB 1,236,000 for non-second generation succession. In terms of *DONATE*, the mean of second-generation CEOs is 0.1829%, which is also more than the mean of 0.0632% among non-second generation successions. In terms of absolute amount or relative to the sales level, the CP level is low for Chinese firms relative to the firms in other countries. We conjecture that it is due to the fact that the CP culture in China has not been wide spread and some firms have yet made any CP. In the last two rows of Panel C, the mean *DONATE$* and *DONATE* are RMB 1,190,500 and 0.0788% for firms that made some CP, which are higher than those the full sample.

Panel D of Table 2 shows the family successions according to their compositions. Professional managers, first-generation family members, and second-generation family members have 243, 163, and 58 occurrences, respectively, in the successions.

4.2. Base findings

We present a cross-section analysis on the relationship between a new CEO and CP level among family firms in Table 3. We have six different specifications for Eq. (1). For columns (1) to (3), we use the *TYPE1, TYPE2,* and *TYPE3* dummy variables for the ith firm to capture the impact of Types 1, 2, and 3 successions, and columns (4) and (5) use all dummy variables at the same time. We notice that we use the full sample ($N = 3574$) in columns (1) and (4). For column (2), we consider only family firms with Type 2 succession and compare them with other family firms with professional manager successions. Similarly, for column (3), we only have firms with Type 3 succession. That is, we compare family firms with first- and second-generation successions. When compared to column (4), columns (5) and (6) incorporate additional CEO / chairman characteristic variables, including altruism of the CEO / chairman and the religious atmosphere in the region in which the firm located.

The coefficients of *TYPE1, TYPE2,* and *TYPE3* in columns (1) to (3) are all positive and significant at the 1% level, suggesting that when there is a Type 1, or Type 2, or Type 3 succession, the family firm, on average, engages in more CP than other family firms without succession or family firms with other successions. Thus, the results echo the CP literature (e.g., Breeze, 2009; Schwass and Lief, 2008) that firms use their CP to achieve some goals. Hence, CP is not just part of a firm's altruistic behavior but also part of a firm's overall corporate strategy.

The magnitude of the coefficients for *TYPE1, TYPE2,* and *TYPE3* variables are 0.152, 0.364, and 0.644, respectively. The findings suggest that, on average, a family firm generated 0.0152%, 0.0364%, and 0.0644% more CP (in terms of corporate donations to the total revenue ratio) when it had any form of family firm succession, a first- or second-generation succession, and only a second-generation succession. With a mean of 0.0579% CP in Table 2, the impact of family firm succession on CP is economically significant. The results support *H1*.

When we put all *TYPE1, TYPE2,* and *TYPE3* variables together in Table 3, the results are different. The coefficients of *TYPE3* remain positive and significant at the 1% level in columns (4)–(6) but not for the coefficients of *TYPE1* and *TYPE2* variables. The findings in columns (4)–(6) indicate that the increase in CP among family firms with new CEOs is primarily driven by the Type 3 succession. The magnitudes of the coefficients of *TYPE3* are 0.491, 0.542, and 0.464 in columns (4)–(6), respectively, which are economically significant. The findings are consistent with the literature (e.g., Amore et al., 2011; Bach and Serrano-Velarde, 2015) that

---

[5] In our sample, we use pooled data. That is, we examine 2004-2013 in all years, if family firm succession occurs, *TYPE1*= 1. If a firm has a succession in any years (during 2004-2013), the firm's *TYPE1* is 1. Hence, the mean of *TYPE1* in Panel A of Table 2 is 0.497, which suggests in the 12 years, there is 49.7% of the firms experiences a succession. If we use firm-years, the succession rate is only about 13%.

Table 3

Family firm CEO succession and corporate philanthropy.

Table 3 presents the results for the relationship between the family firm CEO succession and corporate philanthropy (CP). TYPE1 = 1 if the firm has a new CEO in the sample period and is otherwise zero. TYPE2 = 1 if the firm has a new CEO and she is a family member (from the first or second generation). TYPE3 = 1 if the firm has a new CEO and she is from the second generation of the founder and is otherwise zero. In column (1), we use firm-years from all family firms (with and without CEO changes). In column (2), we focus on only family firms with CEO changes at one time. Due to some firms having mixed successions, the N in column (2) is 1393, which is less than all family firms with changes in the CEO (N = 1778). In column (3), we examine only family firms with first and second generation CEO changes. The definitions of other variables are presented in Table 1. The standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

	(1) $DONATE_{i,t}$	(2) $DONATE_{i,t}$	(3) $DONATE_{i,t}$	(4) $DONATE_{i,t}$	(5) $DONATE_{i,t}$	(6) $DONATE_{i,t}$
$TYPE_1$	0.152***			0.066	0.044	0.047
	(0.048)			(0.057)	(0.057)	(0.056)
$TYPE_2$		0.364***		0.011	0.015	−0.065
		(0.095)		(0.075)	(0.075)	(0.073)
$TYPE_3$			0.644***	0.491***	0.542***	0.464***
			(0.161)	(0.093)	(0.097)	(0.095)
$SIZE_{i,t}$	0.065	0.146	−0.394*	0.025	0.030	0.002
	(0.071)	(0.135)	(0.219)	(0.071)	(0.072)	(0.070)
$LEV_{i,t}$	−0.415**	−0.409	−0.072	−0.397**	−0.424**	−0.362**
	(0.166)	(0.296)	(0.422)	(0.165)	(0.166)	(0.162)
$VOL_{i,t}$	0.373***	0.837***	1.078***	0.376***	0.374***	0.379***
	(0.117)	(0.207)	(0.289)	(0.116)	(0.116)	(0.114)
$ROA_{i,t}$	0.649	0.001	3.026**	0.580	0.615	0.429
	(0.482)	(0.906)	(1.290)	(0.480)	(0.480)	(0.468)
$GROW_{i,t}$	0.001***	0.001**	0.001*	0.001**	0.001**	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$DUAL_{i,t}$	−0.064	−0.067	−0.016	−0.057	−0.105**	−0.122**
	(0.047)	(0.102)	(0.137)	(0.047)	(0.052)	(0.050)
$CR1_{i,t}$	0.168	0.162	0.584	0.088	0.114	0.101
	(0.166)	(0.328)	(0.529)	(0.165)	(0.166)	(0.162)
$CASH_{i,t}$	−0.072	−0.123	−0.036	−0.086	−0.116	−0.062
	(0.146)	(0.244)	(0.333)	(0.145)	(0.146)	(0.142)
$MEMBER_{i,t}$	−0.470	−0.252	−0.627	−0.663	−0.614	−0.627
	(0.490)	(1.098)	(1.529)	(0.488)	(0.490)	(0.478)
$FIRMAGE_{i,t}$	0.011**	0.025**	0.015	0.007	0.008	0.003
	(0.006)	(0.011)	(0.020)	(0.006)	(0.006)	(0.005)
$CEOGENDER_{i,t}$					0.086	0.092
					(0.075)	(0.073)
$CEOAGE_{i,t}$					0.005	0.002
					(0.004)	(0.003)
$CEOEDU_{i,t}$					0.041	0.044
					(0.028)	(0.027)
$CHAIRGENDER_{i,t}$					0.030	0.003
					(0.102)	(0.099)
$CHAIRAGE_{i,t}$					−0.006*	−0.006**
					(0.003)	(0.003)
$CHAIREDU_{i,t}$					0.004	0.001
					(0.027)	(0.026)
$CHARITY_i$						2.468***
						(0.180)
$RELIGION_i$						0.006**
						(0.003)
Constant	0.140	−1.183	3.649*	0.436	0.215	0.695
	(0.674)	(1.245)	(1.981)	(0.672)	(0.703)	(0.687)
Year and industry control	Yes	Yes	Yes	Yes	Yes	Yes
N	3574	1393	815	3574	3574	3574
R^2	0.095	0.115	0.159	0.105	0.107	0.153
Mean VIF	2.52	2.24	3.01	2.90	2.88	2.85
Max VIF	6.54	6.02	6.29	6.30	6.30	6.30
Min VIF	1.10	1.15	1.05	1.10	1.06	1.06
F value	5.846***	2.942***	2.764***	6.341***	5.916***	8.644***

different types of successions matter. In our case, a *TYPE3* succession shows a stronger desire to use CP to smooth the transition.

Among all the control variables in columns (4)–(6) of Table 3, if significant, they carry the expected signs. For instance, the coefficients of *LEV* are negative while those of *GROW* are positive, which are consistent with intuition. When a family firm has a large leverage (high growth rate of operating income), it makes less (more) CP. In addition, in column (6), the coefficients of *CHARITY* and *RELIGION* are positive, suggesting that when a chairman is on the Forbes Charity list or when a firm is located in a highly religious region, her firm engages in more CP. Hence, the impact of a Type 3 succession on CP is beyond the altruism of the family firm CEO / chairman and the religious atmosphere.[6] In addition, we report the variance inflation factor (VIF) for the related variables in Table 3 to

_____

[6] We use an alternative approach by defining *TYPE_FO, TYPE_FP*, and *TYPE3* as "succession from a founder to outside manager", "succession from a founder to a member of first generation", and "succession from a founder to a member of second generation", respectively. *TYPE_FO, TYPE_FP,* and *TYPE3* variables do not overlap. We examine Table 3 again with the new variables. The results show that the coeffi-

gauge the extent of multicollinearity. In columns (1)–(6), all VIFs are less than 10 with mean values less than 4; suggesting no serious multicollinearity among the explanatory variables.

To examine *H2A* and *H2B*, we conduct a longitudinal analysis on the impact of a new CEO change on *DONATE* in the year before, the year of, and the year after the succession (denoted by *BEFORE, CURRENT,* and *AFTER,* respectively). We use full sample as well as sub-samples with all three types of successions. Hence, the unit of analysis is by firm. We present the findings in Panels A and B of Table 4.

Relative to Table 3, we have a smaller sample size in Table 4 due to the requirements measuring CP the year before, the year of, and the year after succession in each family firm. We use *AFTER, CURRENT,* and *BEFORE* dummy variables to capture corporate philanthropy of a family firm in the post- and pre-CEO changes in $t+1$, t and $t-1$ with respect to the three types of succession and the full sample.

In columns (1)–(4) of Panel A, the findings show that *only* when there is a second-generation succession, the CP increases in $t+1$ (the coefficients of *AFTER* and *AFTER*TYPE3* are significant at the 10% level in column (3) and at the 1% level in column (4)). The other two types of succession do not show significant increase in CP after succession. The expanded samples in columns (5)–(8) of Panel A show qualitatively similar findings.

For economic significance, in column (3), the coefficient of *AF-TER* is 0.564 and significant at the 10% level, indicating that when a family firm has a Type 3 succession, it engages in more CP (0.0564% more) one year after the succession. Similarly, we find the coefficient of *TYPE3*AFTER* is positive and significant at the 1% level. That is, with the estimated coefficient of 0.824, for a firm with a Type 3 succession, it makes, on average, 0.0824% more CP than other forms of successions one year after the succession. Again, 0.0824% is economically significant given that the overall mean is only 0.0579% in Table 2. Interestingly, the *TYPE3*BEFORE* is negative and significant in column (4), suggesting that a family firm with a Type 3 succession makes less CP than other forms of successions one year before the succession. We conduct a *t*-test for the sum of coefficients of *TYPE3*AFTER* and *TYPE3*BEFORE,* and the results suggest that they are not significantly different in absolute value. Apparently, when a family firm plans a Type 3 succession, it budgets some funds one year before the succession and uses it to engage in the increase of CP one year after the succession.

In Panel B of Table 4, we present the findings on the impact of CP after two and three years of CEO succession. The reporting format is similar to those in Panel A with only new variables of *CEO* ($t+2$) and *CEO* ($t+3$) as dummy variables with a value of 1 if the CEO is two and three years after succession and zero otherwise. The results from columns (1)–(8) show that the coefficients of *CEO* ($t+2$) and *CEO* ($t+3$) are not significant. In column (3), the coefficients of *AFTER* (i.e., one year after succession) are positive and significant at the 10%level. Similarly, in columns (4) and (8), the coefficients of *TYPE3*AFTER* are positive and significant at the 5% level. We note that the insignificance of *CEO* ($t+2$) and *CEO* ($t+3$) variables imply that CP exhibits a sharp drop after the $t+1$. Brammer and Millington (2005) and Patten (2008) suggest that CP can create instant market sensation and boosts stock price of a firm in the short-term. Burt (1983) and Bae and Park (2011) document that some firms use CP as a crisis management tool due to the short-term effect of CP. Thus, our findings of a sharp drop in CP in $t+2$ relative to $t+1$ are consistent with this body of CP literature. Generally speaking, after a second-generation succession, a family firm faces the market doubt and worry. Therefore, a sharp

increase in CP in $t+1$ serves as a tool to alleviate the market concern about the succession and a potential drop in founder's specialized assets and the loss of a founder's visibility.

Overall, the findings are statistically and economically significant in supporting *H2A*. The negative and significance of *TYPE3*BEFORE* in Panel A does not support *H2B*. We conjecture that the benefits of any CP do not fully go to the successor before the successor appointment. The founder receives the majority of the benefit from CP. Thus, it does not help the transition if a founder intends to use CP before succession to smooth the succession. Before succession, the visibility of the successor is still low relative to the founder. The successor has not been the face of the family firm before the founder fades out of the firm. Thus, any CP made after the successor appointment is a better setting than that of before the successor appointment. Thus, the impact of CP is more pronounced in the first year after succession and for second-generation succession. If a family firm's founder makes more CP before the departure, it does not help the successor.

4.3. Robustness checks

4.3.1. A difference-in-differences (DID) analysis with propensity score matching (PSM)

For robustness, we conduct a DID analysis on the relationship of family firm succession and CP level. We conduct three DID analyses: (a) Type 3 succession firms (treatment group) vs. firms without successions, (b) Treatment group vs. other succession family firms, and (c) Treatment group vs. non-family firm succession firms. For all DID analyses, we compare the CP levels in the post-succession (*POST*=1 in $t+1$) and in other (*POST*=0 in $t-1$ and t) scenarios. For firms without successions, we use a PSM method to select a 1-to-1 match with the Type 3 succession firms. We confine our sample to $t-1$, t, and $t+1$ years (when t is the time in which the successions occur). The regression model is:

$$DONATE_{i,t} = \gamma_0 + \gamma_1 TYPE3_i + \gamma_2 POST_i + \gamma_3 POST_i * TYPE3_i \\ + \sum \gamma_j CONTROL_{i,t} + \xi_{i,t} \qquad (3)$$

The interaction variable of *POST*TYPE3* captures the marginal impact of a Type 3 succession and post-succession period. The samples for Eq. (3) exclude those with mixed successions.

Columns (1) and (2) of Table 5 show the results for the DID analyses for the Type 3 succession firms vs. firms without successions. To conserve space, we do not present the coefficients of control variables. Column (2) includes the CEO and chairman characteristics. For the coefficients of *TYPE3*POST_i*, we find that both coefficients are positive and significant at the 5% level, suggesting that Type 3 succession firms engage in more CP after the succession in $t+1$. The results are consistent with those in Tables 3 and 4. For the *TYPE3* variable, we find that both coefficients are significant at the 1% level. Furthermore, we do not find the coefficients of *POST* to be significant. Hence, when a family firm just has a Type 3 succession, it marginally engages in more CP than firms without successions. In contrast, being just one year after succession does not mean that a family firm engages in more CP.

Columns (3) and (4) of Table 5 present the DID analyses for Type 3 vs. other forms of succession by family firms. The coefficients of *POST*TYPE3* in both columns are positive and significant at the 10% level, showing only when a family firm has a Type 3 succession and only one year after the succession, it engages in more CP relative to other forms of family firm successions and in other years.

Columns (5) and (6) of Table 5 show the DID analyses for Type 3 vs. non-family firm succession. The coefficients of *POST*TYPE3* in both columns are positive and significant at the 5% level, indicating when a family firm has a Type 3 succession and only one year after

---

cient of *TYPE3* is positive and significant at the 1% level while those of *TYPE_FO* and *TYPE_FP* are not significant. Our results in Table 3 are robust.

Table 4
Corporate philanthropy of a family firm in the pre- and post-CEO changes.

Panel A of Table 4 presents the change of CP in a family firm in the pre- and post-CEO changes. In columns (1) and (4), we use firm-years with a professional manger succession, other first-generation succession, second-generation succession, and full sample, respectively. In columns (5)–(8), we include additional control variables. Panel B presents the results for the long-term impact of CP in $t+2$ and $t+3$. To conserve space, we omit the coefficients of control variables. The definitions of variables are presented in Table 1. Standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

	(1) $DONATE_{i,t}$ (Professional manager succession)	(2) $DONATE_{i,t}$ (other first-generation succession)	(3) $DONATE_{i,t}$ (second-generation succession)	(4) $DONATE_{i,t}$ (full sample)	(5) $DONATE_{i,t}$ (Professional manager succession)	(6) $DONATE_{i,t}$ (other first-generation succession)	(7) $DONATE_{i,t}$ (second-generation succession)	(8) $DONATE_{i,t}$ (full sample)
Panel A: Corporate philanthropy in $t+1$, t and $t-1$								
$AFTER_i$	0.072	−0.201	0.564*	0.005	0.134	−0.045	0.556*	−0.004
	(0.136)	(0.211)	(0.312)	(0.126)	(0.125)	(0.204)	(0.312)	(0.122)
$CURRENT_i$	0.053	−0.358	0.211	0.076	0.145	−0.151	0.155	0.104
	(0.128)	(0.419)	(0.353)	(0.120)	(0.118)	(0.206)	(0.364)	(0.117)
$BEFORE_i$	0.300	−0.008	−0.043	0.183	0.221	0.034	−0.158	0.174
	(0.329)	(0.211)	(0.356)	(0.122)	(0.313)	(0.204)	(0.375)	(0.118)
$AFTER_i*TYPE3_i$				0.824***				0.818***
				(0.306)				(0.299)
$CURRENT_i*TYPE3_i$				−0.383				−0.380
				(0.296)				(0.290)
$BEFORE_i*TYPE3_i$				−0.689**				−0.702**
				(0.306)				(0.299)
$TYPE3_i$				0.632***				0.619***
				(0.156)				(0.163)
$SIZE_{i,t}$	0.196	−0.463	−0.019	−0.019	0.305*	−0.335	0.008	−0.066
	(0.180)	(0.341)	(0.517)	(0.158)	(0.171)	(0.347)	(0.532)	(0.155)
$LEV_{i,t}$	−0.943**	−0.713	0.200	−0.400	−0.918**	−0.932	0.526	−0.241
	(0.447)	(0.712)	(0.852)	(0.340)	(0.416)	(0.717)	(0.909)	(0.332)
$VOL_{i,t}$	0.136	0.265	1.361**	0.753***	0.177	0.320	1.348**	0.774***
	(0.293)	(0.445)	(0.562)	(0.237)	(0.268)	(0.431)	(0.582)	(0.231)
$ROA_{i,t}$	−0.225	5.557***	−4.630	0.745	−0.119	4.099**	−5.330	0.341
	(1.252)	(1.935)	(3.212)	(1.039)	(1.151)	(1.930)	(3.350)	(1.015)
$GROW_{i,t}$	−0.115	−0.217	0.000	0.000	−0.141	−0.289	0.000	0.000
	(0.172)	(0.327)	(0.002)	(0.001)	(0.158)	(0.317)	(0.002)	(0.001)
$DUAL_{i,t}$	−0.041	0.073	0.467	0.149	0.144	0.037	0.588	−0.002
	(0.168)	(0.201)	(0.384)	(0.116)	(0.157)	(0.204)	(0.543)	(0.121)
$CR1_{i,t}$	−0.878**	−0.035	0.683	−0.270	−0.589	−0.268	0.861	−0.328
	(0.420)	(0.794)	(1.327)	(0.392)	(0.396)	(0.812)	(1.411)	(0.390)
$CASH_{i,t}$	−0.792*	−0.214	0.857	−0.020	−0.647	−1.313	1.013	0.066
	(0.471)	(0.831)	(0.660)	(0.315)	(0.437)	(0.845)	(0.679)	(0.307)
$MEMBER_{i,t}$	−0.782	0.434	−1.075	−0.387	−0.536	0.063	−0.236	−0.608
	(2.010)	(3.656)	(4.039)	(1.602)	(1.841)	(3.771)	(4.220)	(1.557)
$FIRMAGE_{i,t}$	−0.020	−0.059	0.064	0.013	−0.019	−0.014	0.065	−0.001
	(0.017)	(0.037)	(0.043)	(0.015)	(0.015)	(0.037)	(0.048)	(0.015)
$CEOGENDER_{i,t}$					0.265	−0.058	−0.151	0.180
					(0.172)	(0.450)	(0.473)	(0.164)
$CEOAGE_{i,t}$					0.015*	−0.016	0.010	0.010
					(0.009)	(0.017)	(0.025)	(0.008)
$CEOEDU_{i,t}$					0.040	0.008	0.245	0.044
					(0.056)	(0.133)	(0.222)	(0.057)
$CHAIRGENDER_{i,t}$					0.153	0.191	−1.414	−0.124
					(0.247)	(0.768)	(0.937)	(0.266)
$CHAIRAGE_{i,t}$					−0.010	−0.014	0.006	−0.008
					(0.008)	(0.020)	(0.023)	(0.007)
$CHAIREDU_{i,t}$					−0.082	−0.130	−0.072	−0.056
					(0.054)	(0.158)	(0.258)	(0.057)
$CHARITY_i$					6.924***	2.506***	0.203	2.311***
					(0.747)	(0.455)	(0.945)	(0.274)
$RELIGION_i$					0.015**	0.008	−0.012	0.015**
					(0.007)	(0.016)	(0.027)	(0.006)
Constant	0.295	4.850	1.057	1.022	−1.256	5.342	0.867	1.452
	(1.687)	(3.051)	(4.701)	(1.433)	(1.614)	(3.414)	(5.325)	(1.477)
Year and industry control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	538	314	265	1117	538	314	265	1117
R^2	0.186	0.295	0.271	0.168	0.344	0.375	0.284	0.227
F	2.129***	2.628***	1.965***	3.376***	4.173***	3.084***	1.701***	4.311***
t test for the sum of coefficients of $(AFTER*TYPE3 + BEFORE*TYPE3) = 0$	–	–	–	0.29	–	–	–	0.25
Panel B: Long-term impact of corporate philanthropy in $t+2$ and $t+3$								
$CEO(t+3)_i$	0.052	0.294	0.345	0.186	0.068	0.448	0.365	0.195
	(0.199)	(0.223)	(0.434)	(0.165)	(0.202)	(0.413)	(0.446)	(0.165)
$CEO(t+2)_i$	−0.198	−0.015	−0.328	−0.124	−0.161	0.156	−0.388	−0.121
	(0.187)	(0.231)	(0.425)	(0.164)	(0.190)	(0.217)	(0.440)	(0.164)
$AFTER_i$	0.094	−−0.025	0.110*	−0.004	0.144	0.032	0.224*	0.012
	(0.187)	(0.247)	(0.06)	(0.170)	(0.190)	(0.228)	(0.120)	(0.169)

Table 4 (*continued*)

	(1) $DONATE_{i,t}$ (Professional manager succession)	(2) $DONATE_{i,t}$ (other first-generation succession)	(3) $DONATE_{i,t}$ (second-generation succession)	(4) $DONATE_{i,t}$ (full sample)	(5) $DONATE_{i,t}$ (Professional manager succession)	(6) $DONATE_{i,t}$ (other first-generation succession)	(7) $DONATE_{i,t}$ (second-generation succession)	(8) $DONATE_{i,t}$ (full sample)
$CURRENT_i$	0.093	−0.139	−0.304	−0.020	0.169	−0.100	−0.313	0.033
	(0.187)	(0.245)	(0.456)	(0.174)	(0.193)	(0.228)	(0.478)	(0.174)
$BEFORE_i$	0.023	−0.063	−0.544	0.084	0.017	−0.118	−0.548	0.101
	(0.177)	(0.245)	(0.463)	(0.162)	(0.179)	(0.227)	(0.484)	(0.162)
$CEO(t+3)_i*TYPE3_i$				−0.341				−0.313
				(0.394)				(0.395)
$CEO(t+2)_i*TYPE3_i$				−0.554				−0.611
				(0.391)				(0.394)
$AFTER_i*TYPE3_i$				0.178**				0.276**
				(0.085)				(0.120)
$CURRENT_i*TYPE3_i$				−0.331				−0.448
				(0.404)				(0.407)
$BEFORE_i*TYPE3_i$				−0.155**				−0.232***
				(0.087)				(0.083)
$TYPE3_i$				0.625***				0.582***
				(0.212)				(0.224)
$SIZE_{i,t}$	0.483***	0.459	−0.305	0.218	0.470**	0.595*	−0.073	0.184
	(0.180)	(0.352)	(0.523)	(0.190)	(0.187)	(0.350)	(0.605)	(0.192)
$LEV_{i,t}$	−0.610	−1.748**	−0.772	−0.823*	−0.493	−1.269*	−0.307	−0.682
	(0.526)	(0.757)	(1.293)	(0.481)	(0.541)	(0.730)	(1.420)	(0.486)
$VOL_{i,t}$	0.849**	0.032	1.338	0.288	0.874**	−0.006	1.192	0.302
	(0.345)	(0.475)	(0.895)	(0.347)	(0.350)	(0.446)	(0.918)	(0.348)
$ROA_{i,t}$	−1.042	1.731	−1.213	1.307	0.015	1.652	−1.420	0.999
	(1.530)	(2.006)	(3.326)	(1.285)	(1.614)	(1.928)	(3.634)	(1.307)
$GROW_{i,t}$	−0.148	0.101	0.178	0.050	−0.187	−0.035	0.221	0.050
	(0.233)	(0.342)	(0.259)	(0.139)	(0.236)	(0.317)	(0.277)	(0.140)
$DUAL_{i,t}$	−0.003	−0.104	0.624	−0.011	0.103	−0.257	0.589	−0.111
	(0.238)	(0.216)	(0.453)	(0.159)	(0.250)	(0.212)	(0.741)	(0.175)
$CR1_{i,t}$	−0.614	−0.346	1.213	−0.609	−0.506	−1.122	0.858	−0.560
	(0.565)	(0.876)	(1.357)	(0.536)	(0.605)	(0.870)	(1.433)	(0.559)
$CASH_{i,t}$	−0.025	−0.286	0.646	0.370	−0.062	−0.701	0.826	0.442
	(0.565)	(0.892)	(0.653)	(0.374)	(0.591)	(0.876)	(0.694)	(0.374)
$MEMBER_{i,t}$	−0.952	−1.290	−2.470	0.159	−0.728	−0.643	−2.068	−0.051
	(1.477)	(2.139)	(2.351)	(1.157)	(1.509)	(2.021)	(2.516)	(1.154)
$FIRMAGE_{i,t}$	−0.023	−0.050	0.047	−0.008	−0.028	−0.022	0.007	−0.015
	(0.017)	(0.039)	(0.052)	(0.020)	(0.018)	(0.036)	(0.064)	(0.020)
$CEOGENDER_{i,t}$					0.251	0.875	0.196	0.344
					(0.230)	(0.617)	(0.533)	(0.216)
$CEOAGE_{i,t}$					0.006	−0.042**	0.004	−0.001
					(0.012)	(0.019)	(0.032)	(0.010)
$CEOEDU_{i,t}$					0.159**	−0.079	−0.184	0.004
					(0.073)	(0.131)	(0.275)	(0.076)
$CHAIRGENDER_{i,t}$					−0.113	0.812	−1.370	−0.058
					(0.329)	(0.750)	(0.960)	(0.319)
$CHAIRAGE_{i,t}$					0.004	0.022	0.014	0.006
					(0.010)	(0.022)	(0.028)	(0.010)
$CHAIREDU_{i,t}$					−0.031	−0.152	−0.148	−0.023
					(0.066)	(0.129)	(0.207)	(0.072)
$CHARITY_i$					0.345	2.308***	0.323	1.339***
					(0.456)	(0.469)	(0.703)	(0.360)
$RELIGION_i$					0.012	−0.008	−0.018	0.006
					(0.009)	(0.014)	(0.021)	(0.008)
Constant	−3.434**	−2.016	2.990	−0.572	−4.630**	−3.606	2.597	−0.569
	(1.616)	(3.001)	(4.940)	(1.757)	(1.840)	(3.290)	(6.372)	(1.912)
Year and industry control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	259	169	164	592	259	169	164	592
R^2	0.292	0.430	0.255	0.224	0.387	0.525	0.299	0.249
F	1.800***	2.576***	2.050***	2.461***	2.332***	2.928***	2.023***	2.462***

the succession, it has more CP than non-family firm successions. We notice that the magnitudes of the coefficients of *POST*TYPE3* are 0.057, 0.056, 0.229, 0.264, 0.307 and 0.377 in columns (1)–(6), respectively; suggesting an economic significant impact on CP by a Type 3 succession and one year after the succession.

In sum, the results from DID further support the literature on the strategic use of CP to enhance successor's visibility and using CP to restore the dissipation of specialized assets in family firm transition.

4.3.2. A 2SLS approach

To mitigate potential endogeneity between Type 3 succession and CP, we use a two stage least square approach. We follow Xu et al. (2015) and Cao et al. (2015) to use the age of the founder (*FOUNDERAGE*), the ratio of new born male-to-female yearly (*CLAN*) in the province in which the family firm is located, and the ratio of the number of first children to the number of all children born yearly in the province in which the family firm is located (*FIRST_CHILD_RATIO*) as instrumental variables. The logic is that an older founder is likely to implement a succession plan. A high

Table 5
Difference-in-differences (DID) analysis.
Table 5 presents the DID analysis of the relationship between the CEO change and CP level. $POST = 1$ if the firm-year is in the post-succession period ($t + 1$) after a CEO change in a family firm and otherwise zero. Columns (1) and (2) show the DID results of Type 3 succession firms (treatment) vs. firms without succession. Those without succession firms are selected using a propensity score matching method. Columns (3) and (4) present the DID results of Type 3 succession firms (treatment) vs. other succession family firms. We do not include firms with mixed succession. The definitions of other variables are presented in Table 1. To conserve space, we do not present the coefficients of control variables. The standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

	(1) $DONATE_{i,t}$	(2) $DONATE_{i,t}$	(3) $DONATE_{i,t}$	(4) $DONATE_{i,t}$	(5) $DONATE_{i,t}$	(6) $DONATE_{i,t}$
$TYPE3_i$	0.700***	0.651***	0.422**	0.433**	0.441*	0.402*
	(0.166)	(0.179)	(0.191)	(0.209)	(0.234)	(0.243)
$POST_i$	−0.090	−0.104	−0.044	−0.059	−0.232	−0.242
	(0.226)	(0.229)	(0.109)	(0.111)	(0.255)	(0.258)
$TYPE3_i*POST_i$	0.057**	0.056**	0.229**	0.264***	0.307**	0.337***
	(0.027)	(0.024)	(0.114)	(0.088)	(0.141)	(0.116)
Firm control variables	Yes	Yes	Yes	Yes	Yes	Yes
CEO/chairman control variables	No	Yes	No	Yes	No	Yes
Constant	0.362	−0.713	0.207	1.717	2.248	1.954
	(1.776)	(1.838)	(1.955)	(2.100)	(2.244)	(2.294)
Year and industry control	Yes	Yes	Yes	Yes	Yes	Yes
N	584	584	564	564	572	572
R^2	0.070	0.097	0.093	0.135	0.177	0.193
F	3.318***	2.880***	4.315***	4.045***	1.940***	1.866***

Table 6
Family firm succession and corporate philanthropy: Two stage least square (2SLS) estimation.
Table 6 presents a 2SLS approach to examine the relationship between family firm succession and CP. We focus on second-generation succession. N is from family firms with a second-generation CEO vs. firms with a non-second generation CEO. We exclude firms with mixed succession. *FOUNDERAGE* is the age of the family firm founder. *CLAN* is the ratio of new born male to female yearly in the province in which a family firm is located. *FIRST_CHILD_RATIO* is the ratio of the number of first children to the number of all children born every year in each province in which a family firm located. Because ethnic minority family firms do not adhere to traditional Chinese culture, we exclude these firms. Thus, N is lower in this table compared to those in column (2) of Table 3. The definitions of other variables are presented in Table 1. To conserve space, we do not present the coefficients of control variables. The standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

	(1) $TYPE3_i$	(2) $DONATE_{i,t}$	(3) $DONATE_{i,t}$	(4) $TYPE3_i$	(5) $DONATE_{i,t}$	(6) $DONATE_{i,t}$
$TYPE3_i$			0.611***			0.614***
			(0.128)			(0.128)
$FOUNDERAGE_{i,t}$	0.010**		0.008			
	(0.005)		(0.021)			
$CLAN_{i,t}$	0.490***		−0.106	0.489***		−0.108
	(0.108)		(0.496)	(0.108)		(0.496)
$FIRST\_CHILD\_RATIO_{i,t}$	−2.941***		3.632	−2.882***		3.688
	(0.547)		(2.522)	(0.547)		(2.517)
$PRED\_TYPE3_i$		0.410**			0.438**	
		(0.200)			(0.203)	
Firm control variables	Yes	Yes	Yes	Yes	Yes	Yes
CEO/chairman control variables	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.072	−1.051	−2.999	0.035	−1.428	−3.038
	(0.609)	(1.726)	(2.773)	(0.610)	(1.787)	(2.772)
Year and industry control	Yes	Yes	Yes	Yes	Yes	Yes
N	1322	1322	1322	1322	1322	1322
R^2	0.497	0.180	0.198	0.495	0.171	0.198
F/Wald Chi Square	18.43***	298.10***	4.353***	18.56***	294.81***	4.600***
Cragg-Donald Wald F-statistics	17.758		–	23.845		–
Sargan test	1.282 (P value = 0.527)		–	0.654 (P value = 0.419)		–

CLAN suggests that the founder is in a male-preferred environment indicating a strong within familial practice. Thus, the founder is more likely to pass the CEO role to an insider. Similarly, a high *FIRST_CHILD_RATIO* means that the probability of couples in a province with only one child is high so that the founder has little opportunity to have a second-generation succession. The variables of *FOUNDERAGE, CLAN,* and *FIRST_CHILD_RATIO* help determine the probability of having a Type 3 succession, but they do not directly impact the level of CP. We use the samples in Table 5 to conduct our analysis. Due to several cases of missing *FOUNDERAGE, CLAN,* and *FIRST_CHILD_RATIO,* the samples are confined to Han ethnic regions and, thus, the sample size drops slightly.

We present the results in columns (1)–(3) of Table 6. In column (1), as expected, the coefficients of *FOUNDERAGE* and *CLAN* are positive while that of *FIRST_CHILD_RATIO* is negatively related to the probability of having a Type 3 succession. In column (2), the coefficient of *PRED_TYPE3* is positive and significant at the 5% level, confirming the findings in *H2*. That is, Type 3 succession involves more CP than other forms of successions. Both the Cragg-Donald Wald F-statistics and Sargan test results suggest that the instrumental variables are appropriate. In column (3), when we include *TYPE3* and all instrumental variables, we only find the coefficient of *TYPE3* is positive and significant at the 1% level. The coefficients of all instrumental variables are not significant. The sign

and significance level of coefficients of *PRED_TYPE3* (column (2)) and *TYPE3* (in column (3)) are qualitatively the same, suggesting that *TYPE3* capture the impact of the three instrumental variables. Taken columns (1) to (3) together, our three instrumental variables meet the exclusion restriction requirement (Acemoglu et al., 2001) in the selection of instrumental variables.

For robustness of the 2SLS results, we present an alternative set of results by dropping *FOUNDERAGE*. The results in columns (4)–(6) are qualitatively the same as those in columns (1)–(3) of Table 6. That is, the coefficient of *PRED_TYPE3* is still positive and significant in column (5) and the coefficients of *CLAN* and *FIRST_CHILD_RATIO* are not significant in column (6).

We further check the correlation coefficient between *FOUNDER-AGE* and whether the founder made to the *Forbes Charity List* and it is 0.031. We conduct a logistic regression, the results suggest that the *FOUNDERAGE* variable is not significant in explaining *CHARITY* (a dummy variable with a value of 1 if the founder is in the list of *Forbes Charity List*).[7] Essentially, the results suggest that *FOUNDER-AGE, CLAN,* and *FIRST_CHILD_RATIO* are good instruments for *TYPE3*.

4.3.3. Strategic choice on timing of the CEO turnover

A possible source of selection bias is from the strategic choice on timing the family member CEO turnover. Founder will not randomly select the time to pass family firm to his heirs giving his considerable power in determining the turnover time and successor. Rather, the founder may wait (or hire his family member from the first generation with more experience for transition) until his heirs are ready to take over the CEO position even though he is ready for retirement. Therefore, the true level for CP of firms with second-generation successors might be even larger as the second-generation successors we observed already acquire part of the specialized capital and are ready to manage the family firm.[8]

To address the above concern on strategic choice of timing the CEO departure, we examine CEO normal vs. abnormal departure. We define abnormal CEO departures are those due to sudden health issues or involved in criminal activities while other reasons are normal departure. The sudden departure represents an exogenous "shock" to the family firm and these departures are not planned. Hence, we can mitigate the selectivity bias due to strategic timing of founder departure. Among the 320 firm-year observations, 50 of them involve CEO abnormal departure. We conduct a regression analysis to examine the impact of abnormal CEO departure at t upon CP level at $t+1$. The results are presented in Table 7. In columns (1) and (2), we define a dummy variable (*ABNORMAL*) with a value of 1 if the CEO had abnormal departure. The coefficients of $AFTER_{i,t} * ABNORMAL_t$ are positive and significant at the 5% levels in both columns, suggesting when a firm has abnormal CEO departure, it has significant more CP after a second generation takes over the firm.

To be robust, we decompose the 320 observations into two sub-samples of normal vs. abnormal CEO departure. Columns (3) and (4) of Table 7 presents the results. The coefficients of *AFTER* are both positive and significant at the 1% or 5% levels in both columns. However, the coefficient of *AFTER* for abnormal departures is 5.244 while that of normal departure is 0.276 and the difference between the two coefficients is significant at the 1% level. Therefore, the selectivity bias due to the strategic choice on timing the family member CEO turnover should be alleviated. The much higher level of CP for CEO abnormal departure firms relative to those of normal departure firms suggests that when a firm cannot plan its CEO departure, the transition is unlikely to be smooth. Hence, these CEO abnormal departure firms are even more in need

of CP to smooth out the transition, which further corroborates with our core hypothesis and offer support to the literature of using CP as part of a broad overall strategy.

4.3.4. Robustness: Industry-adjusted CP and sub-sample analyses

The results in Tables 3 and 4 use non-industry-adjusted CP as the dependent variable. The impact of the industry effect is controlled in these regression equations. We conduct a robust analysis using industry-adjusted CP, which is the ratio of corporate donations to total revenue minus the respective industry average. This accounts for the industry effect on the CP level. The unreported findings are qualitatively similar to those in Tables 3 and 4.

Major disasters motivate all firms to engage in more CP. For a robust analysis, we remove all firm years in 2008 for the Wenquan earthquake, 2011 for the Yushu earthquake, and 2013 for the Ya'An earthquake and conduct our analysis. Again, the unreported findings are qualitatively similar to those in Tables 3 and 4.

For robustness, we consider a "yes" or "no" CP decision by using a (1, 0) dummy variable (*DONDUMMY*) as the dependent variable with a value of 1 if the family makes CP contribution in a given year and zero otherwise. The unreported findings are similar to those in Tables 3 and 4.[9]

4.3.5. Robustness: Special treatment and/or regulated firms and alternative definition of family firms

Our samples for Tables 3 and 4 do not include special treatment firms but include firms in the regulated industries.[10] To alleviate the concern that our core findings in Tables 3 and 4 are driven by different sub-samples, we conduct three robustness checks: (1) add special treatment firms to the sample; (2) take out firms in the regulated industries from the sample; and (3) take out firms in the regulated industries but add special treatment firms to the sample. The unreported coefficients of all key variables (*TYPE3* in Table 3 and *AFTER*TYPE3, CURRENT*TYPE3,* and *BEFORE*TYPE3* in Table 4) show the same sign, similar magnitude and significance levels in all alternative sample specifications.[11]

In Section 3.1 we follow Anderson and Reeb (2003) to classify the family firm with 10% ownership as the threshold. However, Anderson and Reeb (2003) study US firms while we examine Chinese firms. La Porta et al. (1999) indicate that weak investor protection can result in concentrated ownership. Thus, largest shareholder with at least 10% ownership can be more common in China than in US. For robustness, we use 20% cutoff to define family firm and re-examine the core findings in Table 4. The results with 20% cutoff are qualitatively the same as using 10% cutoff. In addition, for robustness, we also use 5% cutoff. The findings are qualitatively the same.[12]

4.4. Additional analyses

4.4.1. Alternative explanation: Education and work experience of second-generation

With the one-child policy and the success of a founder, it is natural that second-generation family members receive an excellent education. Thus, an alternative explanation of our core results is the superior education of the second-generation successor such that they have better awareness of CSR activities for the firm. The better educational background of second-generation successors drives the high CP. To examine these possibilities, we in-

---

[7] The results are available upon request.

[8] We acknowledge an anonymous reviewer in raising this point.

[9] All the unreported findings are available upon request.

[10] Xu and Yano (2017) suggest that the regulated industries are natural resources, mining, public utilities, real estate, telecommunications, communication and culture.

[11] The results are available upon request.

[12] The results are available upon request.

Table 7

The impact of CEO Abnormal departure at t on corporate philanthropy (CP) at $t+1$.

We examine CEO normal vs. abnormal departure and they related to CP. We define abnormal CEO departures are those due to sudden health issues or involved in criminal activities while all other reasons are normal departure. The sudden departure represents an exogenous "shock" to the family firm and these departures are not planned. Hence, we can mitigate the selectivity bias due to the strategic timing of the CEO departure. Among the 320 firm-year observation, 50 of them involve CEO abnormal departure. We conduct a regression analysis to examine the impact of abnormal CEO departure at t upon CP level at $t+1$. In columns (1) and (2), we define a dummy variable (ABNORMAL) with a value of 1 if the CEO had abnormal departure. Columns (3) and (4) present the results for sub-samples. The definitions of other variables are presented in Table 1. To conserve space, we do not present the coefficients of control variables. The standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

	(1) $DONATE_{i,t}$	(2) $DONATE_{i,t}$	(3) normal departure $DONATE_{i,t}$	(4) abnormal departure $DONATE_{i,t}$
$AFTER_{i,t}$	0.375	0.351	0.276**	5.244***
	(0.353)	(0.365)	(0.134)	(1.486)
$ABNORMAL_t$	0.185	−0.092		
	(0.524)	(0.557)		
$AFTER_{i,t}* ABNORMAL_t$	2.534**	2.490**		
	(1.065)	(1.078)		
Firm control variables	Yes	Yes	Yes	Yes
CEO/chairman control variables	No	Yes	Yes	Yes
Constant	5.294	5.816	9.922*	−29.637
	(4.032)	(4.419)	(5.156)	(26.852)
Year and industry control	Yes	Yes	Yes	Yes
N	320	320	270	50
R^2	0.216	0.230	0.232	0.719
F	1.750***	1.562**	1.452**	1.960***
Equal Coefficient Probability of $AFTER_{i,t}$	–		0.000	
Chi-square	–		13.56	

corporate two measures of education for second-generation successors using Eq. (2). First, SECONDEDU measures the type of education that the second-generation receives. It has a value of 1 to 6 if the second-generation successor has a below-high school, high school, post-secondary, university, master's, and doctoral education, respectively. Second, we use OVERSEA to capture the impact of an overseas education. The dummy variable has a value of 1 when the second-generation member receives an overseas education. We then focus on the interaction variables ($AFTER_i*SECONDEDU_i$ and $AFTER_i*OVERSEA_i$) to examine whether education impacts CP. The results are presented in Panel A of Table 8. The coefficients of $AFTER_i*SECONDEDU$ and $AFTER_i*OVERSEA$ in columns (1)–(4) are not significant.

A second alternative explanation is the number of years the second-generation has worked for the family firm before being the CEO of the firm. It is usual that second-generation heirs receive "on the job" training in their family firms before taking over as CEOs. Hence, it is possible that the CP activities for a firm with a second-generation successor will be less important if the potential successor has already had involvement in the family firm.[13] To account for this, we define ENTER as the number of years the second generation has worked for the family firm before being the CEO. Then, we modified the regression equation to add ENTER and ENTER*AFTER to account for the impact of ENTER. The results are presented in Panel B of Table 8. In columns (1)–(4), the coefficients of ENTER and ENTER*AFTER are not significant, suggestion the number of years the second generation has worked for the family firm alone does not impact CP. The core findings still hold.

Taken together, the findings show that the interaction variables are not significant and do not support the prediction of the alternative explanations. That is, among several possible alternatives, we find evidence to corroborate with the literature that CP is particular helpful as a corporate strategy. In our case, CP helps smoothing family firm succession.

4.4.2. The role of specialized assets and visibility[14]

The core argument of our social outreach hypothesis draws on the specialized asset transfer and business roadmap hypothesis in Bennedsen and Fan (2014) and Bennedsen et al. (2015) as well as using CP to enhance the visibility of the successor. That is, a family firm has specialized assets, and these assets are intangible, such as the reputational and relational capital of the founder. To examine the micro-foundation of the social outreach hypothesis, we examine several factors that relate to specialized assets. These factors include political connections of the founder, the social network of the founder, and the family firm's reputation.

For political connections, if the family firm founder is politically connected ($PC = 1$), we expect the successor to engage in more CP to preserve the political connection. When the founder is the leader of one or more chambers of commerce ($CHAMBER = 1$), the founder is shown to have developed a social network. To preserve such relational capital, we expect the new CEO to engage in more CP to preserve this social network (when $CHAMBER = 1$).

When a family firm's revenue is in the top 25% of the industry to which it belongs, we classify the firm as having a high reputation ($REPUTATION = 1$). Hence, it is necessary to maintain the reputational capital for a new CEO relative to other firms that belong to the same industry. We expect a new CEO to engage in more CP when $REPUTATION = 1$. The regression model is:

$$DONATE_{i,t} = \delta_0 + \gamma_1 AFTER_{i,t} + \gamma_2 X_{i,t} + \gamma_3 AFTER_{i,t} * X_{i,t} + \sum \delta_j CONTROL_{i,t} + \mu_{i,t} \qquad (4)$$

where X represents PC, CHAMBER, and REPUTATION when a Type 3 succession occurs in t. $DONATE_{i,t}$ shows the amount of CP made by the family firm after the succession occurred in t. We expect γ_3 to be positive when X is PC, CHAMBER, and REPUTATION. We present the results in Table 9. Except for PC in columns (1) and (2), the coefficients of CHAMBER and REPUTATION are not significant in columns (3)–(6), suggesting that these moderating factors alone may not drive CP decisions. The interaction variables (AFTER*PC, AFTER*CHAMBER and AFTER*REPUTATION) in columns (1)–(6) show positive and significant coefficients at the 5% or 10% levels.

---

[13] We acknowledge an anonymous reviewer to suggest this possibility.

[14] We acknowledge an anonymous reviewer to suggest the visibility explanation.

Table 8

Family firm CEO succession and corporate philanthropy: Alternative explanation.

Table 8 presents the results of the role of the educational background of the second generation (Panel A) and the number of years the second generation has worked for the family firm before being the CEO (Panel B) in the relationship between family firm second generation succession and CP. SECONDEDU is second generation's educational level (less than high school = 1; high school = 2; post-secondary = 3; university = 4; master = 5; doctor = 6); OVERSEA = 1 if the second-generation member has overseas education background and otherwise zero. ENTER = the number of years the second generation has worked for the family firm before being the CEO. The analysis is confined to the second-generation successions sample. Other variables are defined in Table 1. To conserve space, we do not present the coefficients of control variables. Standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

Panel A: the role of education background

	(1) $DONATE_{i,t}$	(2) $DONATE_{i,t}$	(3) $DONATE_{i,t}$	(4) $DONATE_{i,t}$
$AFTER_{i,t}$	0.797**	0.867**	0.102*	0.332*
	(0.357)	(0.375)	(0.060)	(0.184)
$SECONDEDU_t$	0.578	0.795		
	(0.661)	(0.673)		
$AFTER_{i,t}*SECONDEDU_t$	−0.984	−1.173		
	(0.874)	(0.883)		
$OVERSEA_t$			−0.063	−0.004
			(0.186)	(0.212)
$AFTER_{i,t}*OVERSEA_t$			0.191	0.123
			(0.337)	(0.345)
Firm control variables	Yes	Yes	Yes	Yes
CEO/chairman control variables	No	Yes	No	Yes
Constant	5.509	4.237	5.511	4.324
	(3.950)	(4.325)	(4.035)	(4.379)
Year and industry control	Yes	Yes	Yes	Yes
N	320	320	320	320
R^2	0.221	0.243	0.217	0.236
F	1.810***	1.674***	1.771***	1.612***

Panel B: the number of years the second generation has worked for the family firm before being the CEO

	(1) $DONATE_{i,t}$	(2) $DONATE_{i,t}$	(3) $DONATE_{i,t}$	(4) $DONATE_{i,t}$
$AFTER_{i,t}$	0.312*	0.315*	0.669**	0.666*
	(0.183)	(0.175)	(0.332)	(0.347)
$ENTER_t$	0.267	0.328	0.294	0.359
	(0.258)	(0.274)	(0.653)	(0.668)
$AFTER_{i,t}* ENTER_t$	0.177	0.170		
	(0.250)	(0.254)		
Firm control variables	Yes	Yes	Yes	Yes
CEO/chairman control variables	No	Yes	No	Yes
Constant	4.504	4.838	4.600	4.883
	(4.010)	(4.362)	(4.004)	(4.357)
Year and industry control	Yes	Yes	Yes	Yes
N	320	320	320	320
R^2	0.210	0.229	0.208	0.228
F	1.689***	1.753***	1.721***	1.778***

To examine if the visibility of successor can be another explanation of using CP in succession, we count the number of times media outlets reporting the news of the family firm (*MEDIA*) in the year of transition in the China Core Newspaper Database (CCND)[15] to capture the visibility of the second-generation for the year when the second-generation took over at t. It is natural that when a family firm has high visibility, the CEO (second-generation in our case) is also highly visible. We use a similar methodology as columns (1) to (6) in Table 9 to examine the impact of visibility on CP. As shown in columns (7) and (8), we find the coefficients of *AFTER*MEDIA* are negative and significant at the 5% level. That is, when the second-generation is less visible at *t*, the family firm makes more CP at *t* + 1. Hence, the visibility explanation is also valid.

Overall, the findings in Table 9 are consistent with the notion that Type 3 succession family firms engage in more CP after their succession due to the preservation of specialized assets and enhance the visibility of successors. The results in Table 9 echo the specialized asset literature (Bennedsen and Fan 2014) and provide

some support for the visibility argument. They highlight the importance of specialized assets and visibility enhancement of the successor from the founder in succession.

4.4.3. Does it pay to increase CP?

We show that family firms with Type 3 successions engage in more CP than family firms with other forms of successions and non-family firms. The important question is whether these Type 3 succession family firms are able to garner more tangible benefits and/or perform better than their counterparts after the increase in CP. We present the results in Table 10 using future year (t + 2), government subsidy (SUB_{t+2}), financing (FIN_{t+2}), buy-and-hold return (BHR_{t+2}), Tobin's Q (TQ_{t+2}), and return on assets (ROA_{t+2}). Government subsidy and financing are critical elements because these are the channels in which the family firm can use CP to garner tangible benefits. It is noted that the number of samples in Table 10 is lower than that of Table 3 because a cross-section analysis is needed to track variables in t, t + 1, and t + 2 years.

We note several interesting findings. First, the coefficients of $DONATE_{i,t+1}$ are not significant in columns (1)–(5), indicating that simply engaging in more CP in t + 1 does not positively affect gov-

---

[15] CCND collects newspaper reports from over 700 newspapers in China, and includes detailed information such as article title, author, full text, and publisher.

Table 9

Family firm succession and corporate philanthropy: The role of specialized assets.

Table 9 presents the results of the role of specialized assets (impact of political connections, social networks, and firm reputation) on the relationship between family firm second-generation succession and CP. $PC = 1$ if the family firm founder is politically connected and is otherwise zero; $CHAMBER = 1$ if the founder is the leader of one or more chambers of commerce and otherwise zero; and $REPUTATION = 1$ if the family firm's sale revenue ranks in the top quartile in the industry and is otherwise zero. $MEDIA$ is the total number of news about the family firm reported in major media outlets when the second-generation succession was announced. The analysis is confined to the second-generation successions sample. The other variables are defined in Table 1. To conserve space, we do not present the coefficients of control variables. Standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

	(1) $DONATE_{i,t}$	(2) $DONATE_{i,t}$	(3) $DONATE_{i,t}$	(4) $DONATE_{i,t}$	(5) $DONATE_{i,t}$	(6) $DONATE_{i,t}$	(7) $DONATE_{i,t}$	(8) $DONATE_{i,t}$
$AFTER_{i,t}$	0.109	0.103	0.103	0.045	0.293	0.266	0.714**	0.693**
	(0.407)	(0.428)	(0.421)	(0.435)	(0.381)	(0.399)	(0.329)	(0.345)
$PC_{i,t}$	0.688**	0.804**						
	(0.344)	(0.369)						
$AFTER_{i,t}*PC_{i,t}$	1.349**	1.278*						
	(0.665)	(0.677)						
$CHAMBER_{i,t}$			0.173	0.077				
			(0.356)	(0.392)				
$AFTER_{i,t}*CHAMBER_{i,t}$			1.457**	1.536**				
			(0.671)	(0.680)				
$REPUTATION_{i,t}$					−0.168	−0.269		
					(0.450)	(0.458)		
$AFTER_{i,t}*REPUTATION_{i,t}$					1.549*	1.510*		
					(0.816)	(0.840)		
$MEDIA_i$							0.003	0.002
							(0.011)	(0.013)
$AFTER_{i,t}*MEDIA_t$							−0.010**	−0.011**
							(0.004)	(0.004)
Firm control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CEO/chairman control variables	No	Yes	No	Yes	No	Yes	No	Yes
Constant	4.605	4.618	5.917	5.675	5.192	5.779	5.504	5.736
	(3.933)	(4.302)	(3.967)	(4.354)	(4.673)	(5.009)	(3.858)	(4.203)
Year and industry control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	320	320	320	320	320	320	320	320
R^2	0.231	0.250	0.215	0.232	0.208	0.224	0.207	0.217
F	1.917***	1.735***	1.750**	1.578**	1.676***	1.508**	1.905***	1.999***

Table 10

Economic consequences of making corporate philanthropy.

Table 10 presents the findings on the economic consequences after family firms engage in CP during succession. In columns (1)–(5), we use family firms with second-generation succession vs. those with other succession types. The N in columns (1)–(5) (N = 339) is less than 815 (N in column (3) of Table 3) because each family firm is one observation due to the multiple years of CP and performance measures. The definitions of other variables are presented in Table 1. Standard errors are reported in the parentheses. *, **, and *** indicate 10%, 5%, and 1%, respectively.

Variables	(1) $SUB_{i,t+2}$	(2) $FIN_{i,t+2}$	(3) $BHR_{i,t+2}$	(4) $TQ_{i,t+2}$	(5) $ROA_{i,t+2}$
$DONATE_{i,t+1}$	3.794	0.145	−0.002	0.055	0.637
	(0.800)	(0.283)	(0.044)	(0.089)	(1.053)
$TYPE3_i$	−4.956***	0.148	−0.184*	−0.372*	−1.027**
	(1.651)	(0.692)	(0.107)	(0.216)	(0.513)
$DONATE_{i,t+1}*TYPE3_i$	2.306**	0.677**	0.132**	0.284***	0.746*
	(0.952)	(0.337)	(0.052)	(0.105)	(0.431)
$SIZE_{i,t}$	15.720***	2.411***	−0.145	−1.155***	0.091
	(2.218)	(0.786)	(0.121)	(0.245)	(1.196)
$LEV_{i,t}$	8.765*	0.735	0.090	−0.060	2.581
	(4.784)	(1.695)	(0.261)	(0.529)	(2.579)
$GROW_{i,t}$	6.221***	−0.102	0.049	−0.257	0.432
	(1.700)	(0.602)	(0.093)	(0.188)	(0.917)
$ROA_{i,t}$	−2.853	6.276	−1.681**	9.916***	47.442***
	(14.690)	(5.203)	(0.802)	(1.625)	(7.919)
$CR1_{i,t}$	0.611	0.961	0.522*	0.058	2.588
	(5.021)	(1.779)	(0.274)	(0.556)	(2.707)
$CASH_{i,t}$	−1.794	−5.121***	−0.027	−0.083	0.882
	(3.890)	(1.378)	(0.212)	(0.430)	(2.097)
$FIRMAGE_{i,t}$	0.026	0.144**	−0.001	−0.044**	−0.093
	(0.185)	(0.066)	(0.010)	(0.020)	(0.100)
Constant	−146.820***	−11.329	1.189	11.472***	4.788
	(20.555)	(7.281)	(1.122)	(2.275)	(11.081)
Year and industry control	Yes	Yes	Yes	Yes	Yes
N	339	339	339	339	339
R^2	0.566	0.520	0.615	0.645	0.449
F	6.712***	5.213***	8.154***	6.032***	3.421***

ernment subsidies, financing buy-and-hold returns, Tobin's Q, or returns on assets in $t+2$.

Second, in columns (1), (3), (4), and (5) of Table 10, the coefficients of $TYPE3_i$ (a firm with a Type 3 succession) are negative and significant at the 1%, 5%, or 10% levels, suggesting that a family firm, on average, experiences a drop of future government subsidies, buy-and-hold returns, Tobin's Q, and returns on assets relative to other successors. It is consistent with the notion that a firm led by a second-generation family member — if the CEO does nothing — will suffer more than other forms of succession in the context of receiving future government subsidies and performance benchmarks, presumably due to the depletion of specialized assets.

Third, the coefficients of $DONATE_{i,t+1}*TYPE3_i$ are positive and significant at the 1%, 5%, or 10% levels in columns (1) to (5), indicating that, by engaging in CP, the second-generation successor is able to gain some future additional government subsidies, financing, buy-and-hold returns, Tobin's Q, and returns on assets. However, the magnitudes of the coefficients of $DONATE_{i,t+1}*TYPE3_i$ are considerably less than those of $TYPE3_i$. For instance, the coefficient of $DONATE_{i,t+1}*TYPE3_i$ is 2.306 but that of $TYPE3_i$ is -4.956 in column (1). Hence, the help received from engaging in CP to improve the return on assets when a Type 3 succession occurs is not sufficient to offset the drop in the return on assets due to the succession. We conduct a formal causality test to rule out the possibility of reverse causality from performance to donation.[16]

Overall, CP activities help raising the visibility of all succession so that the market participants hold a better image of the successors, especially those of the second generation successors. Hence, the performance of the family firms after a second-generation succession with CP is, on average, better than other successions. CP is a reasonable economic strategy, which is consistent with the strategic CP literature to allow successor to enhance visibility and the preservation of specialized asset in family firm succession. We advance the literature on family firm succession theories (Bennedsen and Fan (2014) and Bennedsen et al. (2015) by showing the relation between CP and family firm succession is consistent with a social outreach hypothesis.

5. Summary

Family firm success is an interesting research issue because many family firms fail after succession. Drawing from the theoretical framework in Bennedsen and Fan (2014) and Bennedsen et al. (2015) and the strategic CP literature (e.g., Saiia et al., 2003; Sánchez, 2000; Wang and Qian, 2011; Zhang et al., 2010a, 2010b), we propose and test a social outreach hypothesis of family succession. We extend the core argument in Bennedsen and Fan (2014) and Bennedsen et al. (2015) where the value of specialized assets, such as the relational and reputational capital of the founder in a family firm dissipates in the succession process. In addition, along the CP literature, CP can make a CEO visible so that the market value of her firm is higher than those without CP.

We develop the social outreach hypothesis by integrating the strategic value of CP and theoretical arguments in Bennedsen and Fan (2014), Bennedsen et al. (2015) and Kammerlander et al. (2015), a number of CP studies. The core logic is that family firms will use CP to make the new CEOs visible in such a way as to enhance the chance of intergenerational transfer success. The hypothesis offers three predictions. First, family firms increase their CP with succession. Second, second-generation successions show stronger results in engaging in CP relative to other successions. Third, after succession, a family firm's CP is positively correlated with its performance.

Our findings are robust to alternative specifications of CP activities, various sub-sample analyses, using a difference-in-differences analysis, a two-stage least square approach, strategic choice on timing of succession, and accounting for the successor's education and experience of working for the family firm before succession. Our results are more pronounced when the family experiences a first-to-second generation succession. Our additional analyses suggest that when a firm has more specialized assets (the founder has political connections or is socially active, or the family firm has a high reputation), the relationship between the second-generation CEO and CP activity is stronger.

Future research can be done on testing the social outreach hypothesis in a mature market or with a different social setting. In addition, given that family firms after successions typically do not perform well, we can explore which specific strategy works the best to preserve the performance of family firms after successions. We show that, among different types of successions, second-generation successions need more help. When founders have large specialized assets or the second-generation is less visible, the family firm value destruction may be larger. Our findings suggest that using CP can partially alleviate such value destruction by lower the dissipation of specialized assets and raise the visibility of the second-generation. Therefore, family firms in other countries can learn from our China study to use CP to help partially restore some of the firm value destruction. Family firms in different countries, perhaps, have different types of specialized assets, which may require some activities from the successors to overcome the challenge.

References

Acemoglu, D., Johnson, S., Robinson, J.A., 2001. The colonial origins of comparative development: an empirical investigation. Am. Econ. Rev. 91, 1369–1401.

Amore, M.D., Minichilli, A., Corbetta, G., 2011. How do managerial successions shape corporate financial policies in family firms. J. Corporate Finance 17, 1016–1027.

Anderson, R.C., Reeb, D.M., 2003. Founding-family ownership and firm performance: evidence from the S&P 500. J. Finance 58, 1301–1328.

Bertrand, M., Johnson, S., Samphantharak, K., Schoar, A., 2008. Mixing family with business: a study of Thai business groups and the families behind them. J. Financial Econ. 88, 466–498.

Bach, L., Serrano-Velarde, N., 2015. CEO identify and labor contracts: evidence from CEO transitions. J. Corporate Finance 33, 227–242.

Bae, J., Park, S.A., 2011. Socio-contextual influences on the Korean news media's interpretation of Samsung's $847.6 million donation. J. Public Relat. Res. 23, 141–166.

Bennedsen, M., Fan, J., 2014. The Family Business Map: Assets and Roadblocks in Long Term Planning. Springer.

Bennedsen, M., Fan, J.P.H., Jian, M., Yeh, Y.H., 2015. The family business map: Framework, selective survey, and evidence from Chinese family firm succession. J. Corporate Finance 33, 212–226.

Brammer, S., Millington, A., 2005. Corporate reputation and philanthropy: an empirical analysis. J. Bus. Ethics 61, 29–44.

Brammer, S., Millington, A., 2006. Firm size, organizational visibility and corporate philanthropy: an empirical analysis. Bus. Ethics 15, 6–18.

Breeze, B., 2009. Natural philanthropists: Findings of the family business philanthropy and social responsibility inquiry. Institute for Family Business Retrieved from https://www4.dcu.ie/sites/default/files/centre_for_family_business/natural_philanthropists.pdf.

Burkart, M., Panunzi, F., Shleifer, A., 2003. Family firms. J. Finance 58, 2167–2201.

Burt, R.S., 1983. Corporate Profits and Cooptation: Networks of Market Constraints and Directorate Ties in the American Economy. Academic Press.

Cahan, S.F., Chen, C., Li, C., Nguyen, N.H., 2015. Corporate social responsibility and media coverage. J. Banking Finance 59, 409–422.

Campopiano, G., De Massis, A., Chirico, F., 2014. Firm philanthropy in small- and medium-sized family firms: the effects of family involvement in ownership and management. Family Bus. Rev. 27, 244–258.

Cao, J., Cumming, D., Wang, X., 2015. One-child policy and family firms in China. J. Corporate Finance 33, 317–329.

Chang, S.J., Shim, J., 2015. When does transitioning from family to professional management improve firm performance? Strategic Manage. J. 36, 1297–1316.

Claessens, S., Djankov, S., Lang, L.H.P., 2000. The separation of ownership and control in East Asian corporations. J. Financial Econ. 58, 81–112.

Cruz, C., Larraza-Kintana, M., Garcés-Galdeano, L., Berrone, P., 2014. Are family firms really more socially responsible? Entrepreneurship Theory Pract. 38, 1295–1316.

De Vries, M.F.R.K., Miller, D., 1984. The Neurotic Organization. Jossey-Bass.

Dyck, A., Volchkova, N., Zingales, L., 2008. The corporate governance role of the media: evidence from Russia. J. Finance 63, 1093–1135.

---

[16] The findings are available upon request.

Du, X., Jian, W., Du, Y., Feng, W., Zeng, Q., 2014. Religion, the nature of ultimate owner, and corporate philanthropic giving: evidence from China. J. Bus. Ethics 123, 235–256.

Eichenberger, E., Johnson, J., 2013. Philanthropy: What it Provides to Families in Business Retrieved from http://www.wise.net/press/Tharawat%20magazine%20-Wise%20Article%20(English).pdf.

Feliu, N., Botero, I.C., 2016. Philanthropy in family enterprises: a review of literature. Family Bus. Rev. 29, 121–141.

Gautier, A., Pache, A.C., 2015. Research on corporate philanthropy: a review and assessment. J. Bus. Ethics 126, 343–369.

Godfrey, P.C., 2005. The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. Acad. Manage. Rev. 30, 777–798.

Ibrahim, A.B., Soufani, K., Lam, J., 2001. A study of succession in a family firm. Family Bus. Review 14, 245–258.

Jaskiewicz, P., Heinrichs, K., Rau, S.B., Reay, T., 2016. To be or not to be: how family firms manage family and commercial logics in succession. Entrepreneurship Theory Pract. 40, 781–813.

Kammerlander, N., Sieger, P., Voordeckers, W., Zellweger, T., 2015. Value creation in family firms: a model of fit. J. Family Bus. Strategy 6, 63–72.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Corporate ownership around the world. J. Finance 54, 471–517.

Liket, K., Simaens, A., 2015. Battling the devolution in the research on corporate philanthropy. J. Bus. Ethics 126, 285–308.

Liu, Q., Luo, T., Tian, G.G., 2015. Family control and corporate cash holdings: evidence from China. J. Corporate Finance 31, 220–245.

McConaughy, D.L., Walker, M.C., Henderson Jr., G.V., Mishra, C.S., 1998. Founding family controlled firms: efficiency and value. Rev. Financial Econ. 7, 1–19.

Morck, R., Stangeland, D., Yeung, B., 2000. Inherited Wealth, Corporate Control, and Economic Growth?. In: Morck, Randall K. (Ed.), Concentrated Corporate Ownership. University of Chicago Press, Chicago.

Palacios, T.M.B., Martínez, A.B., Jiménez, J.L.T., 2013. Family growth versus family firm growth: professional management and succession process. Manage. Res. 11, 58–76.

Patten, D.M., 2008. Does the market value corporate philanthropy? Evidence from the response to the 2004 tsunami relief effort. J. Bus. Ethics 81, 599–607.

Pérez-González, F., 2006. Inherited control and firm performance. Am. Econ. Rev. 96, 1559–1588.

Porter, M.E., Kramer, M.R., 2006. Strategy and society: the link between competitive advantage and corporate social responsibility. Harv. Bus. Rev. 84, 78–92.

Saiia, D.H., Carroll, A.B., Buchholtz, A.K., 2003. Philanthropy as strategy: when corporate charity "begins at home". Bus. Soc. 42, 169–201.

Sánchez, C.M., 2000. Motives for corporate philanthropy in El Salvador: altruism and political legitimacy. J. Bus. Ethics 27, 363–375.

Schwass, J., Lief, C., 2008. About Family, Business, and Philanthropy. Perspectives for Managers Retrieved from https://www.imd.org/uupload/IMD.WebSite/MicroSites/family-business/pdfs/articles/About-Family-Businessand-Philanthropy.pdf.

Smith, B.F., Amoako-Adu, B., 1999. Management succession and financial performance of family controlled firms. J. Corporate Finance 5, 341–368.

Wang, H., Choi, J., Li, J., 2008. Too little or too much? Untangling the relationship between corporate philanthropy and firm financial performance. Organiz. Sci. 19, 143–159.

Wang, H., Qian, C., 2011. Corporate philanthropy and corporate financial performance: the roles of stakeholder response and political access. Acad. Manage. J. 54, 1159–1181.

Ward, J.L, 2009. The ten hidden arts of successful business families. Family Bus. 20, 49–52.

Xu, N., Yuan, Q., Jiang, X., Chan, K.C., 2015. Founder's political connections, second generation involvement, and family firm performance: evidence from China. J. Corporate Finance 33, 243–259.

Xu, G., Yano, G., 2017. How does anti-corruption affect corporate innovation? Evidence from recent anti-corruption efforts in China. J. Comp. Econ. 45, 498–519.

Zhang, R., Rezaee, Z., Zhu, J., 2010a. Corporate philanthropic disaster response and ownership type: evidence from Chinese firms' response to the Sichuan Earthquake. J. Bus. Ethics 91, 51–63.

Zhang, R., Zhu, J., Yue, H., Zhu, C., 2010b. Corporate philanthropic giving, advertising intensity, and industry competition level. J. Bus. Ethics 94, 39–52.