Goal complexity in family firm diversification: Evidence from China

By: Junsheng Dou, Ning Wang, Emma Su, Hanqing Fang, and Esra Memili

Dou, J., Wang, N., Su, E., Fang, H.C., & Memili, E. (2020) Goal complexity in family firm diversification: Evidence from China. *Journal of Family Business Strategy*, 11(1), 100310. https://doi.org/10.1016/j.jfbs.2019.100310



This work is licensed under a <u>Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.</u>

Abstract:

Drawing upon goal setting theory with a focus on *goal hierarchy* and *goal inconsistency*, this study investigates complex relationships among various socioemotional wealth goals in the context of family firm diversification. Using bootstrapping technique, we empirically analyzed a sample of 367 family-owned private firms in China. This study yields two important insights. First, maintaining family control of the firm is the most fundamental (*lower-order*) goal in the goal hierarchy, and intra-family succession intention and emotional attachment goals come into effect only when the owning family has substantial control over the business. Second, intra-family succession intention and emotional attachment have differential (*inconsistent*) effects on a family firm's diversification. This study makes important theoretical contributions to the family business literature by highlighting the complex relationships underlying the various SEW goals. We also provide practical implications for family business advisors and owners.

Keywords: family firms' diversification | goal hierarchy | goal inconsistency | socioemotional wealth

Article:

1. Introduction

Socioemotional wealth (SEW), the non-economic utility that a family derives from its involvement in the business, has been conceptualized as the primary driver of idiosyncratic behaviors in family-owned and -managed firms (Chrisman & Holt, 2016; Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007; Gomez-Mejia, Cruz, Berrone, & De Castro, 2011). There has been a prominent stream of research applying the socioemotional wealth approach (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010; Gomez-Mejia et al., 2007; Morgan & Gomez-Mejia, 2014; Nason, Carney, Le Breton-Miller, & Miller, n.d.). This body of research suggests that the preservation of SEW is the primary reference point in family firms' decision-making. In order to preserve the family's SEW, family firms tend to diversify (Gomez-Mejia, Makri, & Kintana, 2010), invest in R&D (Chrisman & Patel, 2012), take business risks (Gomez-Mejia et al., 2007), and engage in environmental pollution (Berrone et al., 2010) relatively less than non-family firms.

Nonetheless, as the SEW research continues to grow, scholars start to question the validity of the cause-and-effect relationship embedded in the SEW construct (e.g., Miller & Le Breton-Miller, 2014; Schulze & Kellermanns, 2015). The consensus is that various SEW dimensions might stem from distinctive psychological and social sources (Jiang, Kellermanns, Munyon, & Morris, 2018), thus having differential effects on a family firm's behaviors (Holt, Pearson, Carr, & Barnett, 2017; Williams, Pieper, Kellermanns, & Astrachan, 2019). Research also suggests that different SEW dimensions might have contrasting effects on firm behavior (Hauck & Prügl, 2015). Accordingly, researchers call for a better understanding of the complex relations among the various SEW dimensions (Miller & Le Breton-Miller, 2014).

We thus respond to this call by unfolding the complex relationships among various SEW dimensions in this study. Building upon the goal setting and family business literatures, we propose two unique types of relationships—goal hierarchy and goal inconsistency—exist among the different SEW dimensions. In terms of the *goal hierarchy* relationship, we propose that higher-order goals are activated only when lower-order goals have been achieved. *Goal inconsistency* suggests that two (or more) goals might lead to distinct or even contrasting effects on a family firm behavior.

We choose corporate diversification as the context to explore the hierarchical structure and inconsistent nature of SEW goals. Diversification, as one of the most studied topics in the strategic management literature, provides us with an ideal context to investigate the complex relationships embedded in the SEW construct. Past research has shown that family-centered non-economic or socioemotional goals can either facilitate or hinder a family firm's diversification (Gomez-Mejia et al., 2010; Gu, Lu, & Chung, 2019; Hautz, Mayer, & Stadler, 2011; Schmid, Ampenberger, Kaserer, & Achleitner, 2015). For example, the dominant family's intra-family succession intention can facilitate the firm's diversification behavior because a diversified business portfolio can provide more career opportunities for future generation family members (Gu et al., 2019). However, other SEW goals such as the family's emotional attachment to the existing business may hinder the dominant family's willingness to diversify their business into new lines of activity (König, Kammerlander, & Enders, 2013).

We test our hypotheses using a sample of family firms from China. Chinese family firms provide a unique yet appropriate context to test our theory for a number of reasons. First, family plays a pivotal role in shaping the Chinese culture (Liden, 2012). The influence of family in the business may be more pronounced in Chinese family firms. In addition, as the Confucian culture strongly promotes the value of family ties in maintaining group solidarity and social order (Gupta & Levenburg, 2010), family-centered goals may be given higher legitimacy in affecting business decisions in Chinese family firms compared to firms in Western economies. Second, most of Chinese family firms were founded since the start of China's open door policy in 1978 (Huang, 2008). A large number of these firms are currently undergoing the process of transferring the business to the next generation. Research shows that goal diversity may be more strongly expressed when an intra-family succession is imminent (Kotlar & De Massis, 2013). This suggests that family-centered non-economic goals such as emotional attachment to the existing business and intra-family succession might be more prevalent (Pistrui, Huang, Oksoy, Jing, &

¹ Consistent with prior literature (Berrone et al., 2012; Chrisman et al., 2012), non-economic goals and SEW dimensions are used interchangeably in this manuscript.

Welsch, 2001) in these Chinese family firms. Third, as the market competition intensifies and political uncertainty increases in China, diversification strategy is often favored by Chinese family business leaders as an entrepreneurial approach to develop new products, processes, markets, or sources of supply (Schumpeter, 1934), as well as a means to transfer the family's wealth into foreign territories (Li, He, Lan, & Yiu, 2012).

An empirical analysis of 367 family firms from China provides evidence for the existence of both *goal hierarchy* and *goal inconsistency* embedded in the SEW construct. Specifically, our study illustrates that the dominant family's maintaining family control in the business is positively associated with the family's intra-family succession intention and emotional attachment to the business,² thus suggesting the hierarchical nature of goal setting in family firms. Our study further demonstrates that intra-family succession intention and emotional attachment have contrasting effects on a family firm's diversification, hence indicating the inconsistent effects of various SEW goals on a family firm's behavior.

This study makes several important contributions to the family business literature in general, and the SEW literature in particular. First, our study shows that maintaining family control of the firm is the most fundamental goal among the various SEW goals and that the goals of intrafamily succession and emotional attachment to the business are activated only when the owning family has dominant control over the firm. The hierarchical nature of goal setting enhances our knowledge of the complex relationships among the various dimensions of the SEW construct. Second, we also found that intra-family succession intention and emotional attachment to the business represent contrasting effects on a family firm's diversification, thus highlighting the inconsistent effects of various SEW dimensions on a family firm behavior (Holt et al., 2017).

The remainder of this article is organized as follows. The following section reviews the literature on SEW and goal setting in family firms. We then present our hypotheses. The methods section explains the sample, data collection, measurement of variables, statistical methods, and empirical results. The final section includes a discussion of our findings, contributions, limitations and future research directions, practical implications, as well as a conclusion.

2. Theoretical background

2.1. The SEW literature

Research suggests that differences between family- and non-family- firms as well as the heterogeneity among family firms can be explained by family firms' inclination to preserve and enhance their socioemotional wealth (e.g., Chrisman, Chua, Pearson, & Barnett, 2012; Gomez-Mejia et al., 2007). SEW characterizes the non-economic and emotional value associated with a family firm that serves to meet the family's affective needs such as identity, influence, and perpetuation of the family dynasty (Berrone, Cruz, & Gomez-Mejia, 2012; Gomez-Mejia et al.,

² Consistent with the goal hierarchy literature, this study focuses on the *realization* of the intention to maintain family control of the firm instead of the goal of *intention* to maintain family control. This focus is to highlight the hierarchical structure of goals. The goal hierarchy literature suggests that the higher-order goals are activated only when lower-order goals have been achieved. Hence, the *realization* of the intention to maintain family control will be a more accurate measure than the family's *intention* to maintain family control.

2011; Zellweger, Kellermanns, Chrisman, & Chua, 2012). SEW is conceptualized as a multi-dimensional concept consisting of five dimensions including *family control and influence*, binding social ties, emotional attachment of family members, identification of family members with the firm, and renewal of family bonds to the firm through dynastic succession (for a review, see Berrone et al., 2012). Within the domain of SEW perspective, family business can be defined as a unique yet heterogeneous organizational type featured by family's involvement in governance which gives the owning family power and discretion to pursue family-centered economic and non-economic goals (Chua, Chrisman, & De Massis, 2015; Berrone et al., 2012; Chrisman et al., 2012; Chua, Chrisman, & Sharma, 1999; Gomez-Mejia et al., 2011).

While there is a growing number of research from the SEW perspective, researchers also point out SEW has its limitations (e.g., Chua et al., 2015; Miller & Le Breton-Miller, 2014; Schulze & Kellermanns, 2015). For instance, Chua et al. (2015) questioned the accuracy and completeness of the models on SEW and suggested that the relationships among the various SEW dimensions are likely to be more complex than currently theorized in the literature. Schulze and Kellermanns (2015)) also suggested that family firm scholars need to revise their research models as SEW scholarship moves forward.

Among these, a major limitation with the SEW approach stems from the complex relationships among the various SEW goals. Research suggests that socioemotional goals might be driven by distinctive sources (Jiang et al., 2018). These distinctive sources can have important implications for firm-level outcomes (Holt et al., 2017; Williams et al., 2019). Further, firms might place different priorities on pursuing the various SEW goals (Chua et al., 2015; Gomez-Mejia, Cruz, & Imperatore, 2014). The diverse nature of the SEW priorities warrants further investigation of the drivers and causal implications of the various components of the SEW construct (Miller & Le Breton-Miller, 2014). In the following section, building upon the goal setting literature, we propose two unique relationships underlying the various SEW dimensions: goal hierarchy and goal inconsistency. We capture these relationships within the domain of "goal multiplicity," which leads to the development of our hypotheses.

2.2. Goal multiplicity

The management literature has long suggested that organizations have multiple goals (Cyert & March, 1963; Simon, 1964). Organization's goals can be defined as the aspirational level against a specified organizational outcome (Shinkle, 2012). This definition is aligned with the notion that organizations might have multiple aspirations associated with various organizational outcomes (Greve, 2008; Kotlar, Fang, De Massis, & Frattini, 2014). Perrow (1968) proposed six categories of goals, including *societal*, *public*, *investors*, *system*, *product*, and *derived goals*. Similarly, Houston, Ratneshwar, Ricci, and Malter (2010) classified organizational goals into 'being,' 'doing,' and 'having' goals. Based on the multiplicity nature of goals, firms might assign different levels of priorities to the various types of goals. Factors that might affect the assignment of these different priorities may include, but are not limited to, organization's industrial affiliation, labor specialization, financial status, ownership structure, cultural and career background of top managers, among others (Linder & Foss, 2018).

Prior literature further suggests that these multiple organizational goals might follow a hierarchical structure, where higher-order goals are "activated" only when lower-order goals are achieved (Tuzzolino & Armandi, 1981). Lower-order goals are often concerning the survival of a firm, whereas higher-order goals are associated with firm status, affiliation, and the realization of a firm's other mission and objectives. The hierarchical nature of goals has important implications for our understanding of a firm's strategy and behavior. For example, a firm's environmental performance goal will be activated only after the goal of its survival has been achieved (Tuzzolino & Armandi, 1981). Similarly, in family firms, various goals are found to follow a hierarchical structure. For example, research suggests that the goal of retaining family control through reacting more strongly to increasing supplier bargaining power is activated only after the profitability goal has been reached (Kotlar et al., 2014).

Aside from goal hierarchy, the (in)congruent nature of goals (goal inconsistency) adds another layer of complexity to the goal setting literature. The concept of goal inconsistency can be traced back to as early as Cyert and March's (1963) A behavioral theory of the firm, in which different parties of an organization are argued to have different goals. Different goals are likely to generate inconsistent demands on a firm's resource pool and thus cause conflicts in terms of time, means, and resources dedicated to achieve these goals (Etzioni, 1964; Foss & Linder, 2017). For instance, a firm's financial performance goal may not be compatible with its goal associated with environmental performance (Aupperle, Carroll, & Hatfield, 1985). Organizations often engage in various resource-consuming administrative, political, cognitive, and affective processes with the hope of mitigating the incongruence among these multiple goals (Linder & Foss, 2018; Prietula & Watson, 2000; Weick, 1995).

2.3. Goal hierarchy and goal inconsistency in family businesses

Family firms have diverse goals (Chua, Chrisman, De Massis, & Wang, 2018; Vazquez & Rocha, 2018). They are often characterized by multiple family-centered non-economic goals, thus representing a unique context to examine the multiplicity of goals (Williams et al., 2019; Va). Following the goal hierarchy literature discussed above, we propose that SEW goals in family firms also follow a hierarchical structure with some SEW goals residing at the lowerorder and others at the higher-order of the structure. For example, the goal of maintaining family control and influence is expected to be at the lower-order of the structure. In other words, the pursuit of this goal is fundamental for the family to achieve other family-centered goals (Chrisman et al., 2012; Gomez-Mejia et al., 2007). Indeed, family firm owners often prioritize on the goal of maintaining family control over the business among all the SEW goals (Vardaman & Gondo, 2014). Being a lower-order type of goal, maintaining family control and influence needs to be achieved before the pursuit of other higher-order goals is made possible. Other higher-order goals such as intra-family succession and the needs for family members' belonging and emotional attachment to the business can be achieved only when the owning family retains substantial control in the business (Chrisman et al., 2012). As such, we hypothesize that the realization of maintaining family control in the business is related to family members' emotional attachment to the firm and intra-family succession intentions, in turn both goals will influence a family firm's diversification behavior.

Moreover, the family business literature highlights the inconsistent demands stemming from the different types of goals inherent in the business and family systems. In fact, one prevailing argument in the family business literature is that family owners often face the dilemma of balancing the economic interests of the business with the non-economic interests of the dominant family and/or individual family members (Miller & Le Breton-Miller, 2014). Family firms' strategic decisions are primarily driven by the "mixed gambling" of economic and non-economic interests (Chrisman & Patel, 2012; Gomez-Mejia, Campbell et al., 2014). Further, SEW goals can be associated with positive or negative valence (Kellermanns, Eddleston, & Zellweger, 2012). Positively valenced goals could provide instrumental or normative motives for the controlling family to enhance their strategy such as proactive stakeholder engagement, while negatively valenced goals could lead to family centric behavior and thus have a negative effect on the strategy (Kellermanns et al., 2012). The inconsistent nature of a family firm's goals can be further exacerbated by relational conflicts among family members (Kellermanns & Eddleston, 2004; Rousseau, Kellermanns, Zellweger, & Beck, 2018) and the imminent succession of firm leadership (Kotlar & De Massis, 2013).

Following the logic of goal inconsistency, this study investigates intra-family succession intention and emotional attachment goals and proposes that these two goals have contrasting effects on a family firm's diversification.³ We focus on intra-family succession intention and emotional attachment goals for two reasons. First, both intra-family succession intention (Chua et al., 1999; Churchill & Hatten, 1997) and emotional attachment (Berrone et al., 2012) are considered the defining features of a family business. They are centrally related to the importance attached to (other) family-centered non-financial (or SEW) goals in family firms (Zellweger et al., 2012), such as facilitating the continuity of the family's legacy, strengthening family members' identification with the firm, and enhancing family cohesion and harmony (Berrone et al., 2012; Tagiuri & Davis, 1996). Second, both intra-family succession intention and emotional attachment have important implications for our understanding of a family firm's diversification. The dominant family's intention to transfer the business to future generations can facilitate their decision to engage in business diversification, because a diversified business portfolio can provide career opportunities for younger-generation family members who might have different career needs (Au, Chiang, Birtch, & Ding, 2013). However, the dominant family's strong emotional attachment to the existing business may make the firm stagnant and nonentrepreneurial (Jenkins & Johnson, 1997; Vesper, 1980), thus impeding the diversification behavior.

3. Hypotheses development

3.1. Family control, intra-family succession intention, and diversification

As a defining feature of family businesses (Chua et al., 1999), intra-family succession intention reflects the dominant family's commitment to transfer the business to future generations (Astrachan & Shanker, 2003; Chua, Chrisman, Kellermanns, & Wu, 2011). The strength of the intention to transfer the business to future generations may vary among different family firms. Some owning families might have developed their intention to pass the business onto their future

³ As a robustness check, we have also tested the inconsistency effects of other SEW goals on a firm's diversification. Details are provided in the Robustness Test section.

generations as early as the inception of the business (De Massis, Chua, & Chrisman, 2008). Other owning families might not intend to transfer the business to future generations until a new family member is born (Hoy & Verser, 1994).

Following the goal hierarchical structure, we argue that the family control over the firm has a positive effect on a firm's intra-family succession intention. Family control and influence constitute a lower-order goal within the hierarchical goal structure and this goal is the foundation for the owning family to achieve higher-order goals such as transitioning the business to future generations. Accordingly, only when the owning family secures a substantial amount of control over the business, the goal of intra-family succession will then be activated. Conversely, when the family has only limited power over the firm, the primary goal of the family would be to enhance its control over the firm before pursuing the higher-order goals.

Furthermore, due to the inextricable ties between the family and the firm, there tends to be an identity fit between family and firm for the controlling family (Zellweger, Nason, Nordqvist, & Brush, 2013). A larger amount of family control over the firm is likely to indicate a greater fit of the family and business identities (Dyer & Whetten, 2006; Zellweger et al., 2013). The continuity of the business over time is critical for both family and firm identities to continue (Zellweger et al., 2013). Hence, we argue that the controlling family is like to pass the business onto future generations as a means to continue the business and family identities. We further argue that family firms with significant amount of family control over the firm are more likely to see the firm as an extension of the family and thus have a stronger intention to pass the business onto later-generation family members (Zellweger et al., 2013). As such, we hypothesize:

Hypothesis 1a. Family control of the firm is positively related to the family's intra-family succession intention.

We further argue that the dominant family's intra-family succession intention will further lead to their decision to engage in diversification. First, when the controlling family has a strong intention to pass the business onto future generations, they are likely to act with future generations in mind, and thus undertake long-term investments to assure the firm's continued viability for future generations (Gedajlovic & Carney, 2010; Zellweger et al., 2012). Since it often takes a considerable amount of time to implement diversification strategy and realize its returns (Lee & Lieberman, 2010), we expect that family firms owned and controlled by a dominant family that has a strong intention to pass the business onto future generations are more likely to engage in diversification than other family firms. In addition, when the dominant family has a strong intention to transfer the business onto future generations, the family firm is more likely to be entrepreneurial and have a greater motivation to explore alternative uses of resources (Fang, Kotlar, Memili, Chrisman, & De Massis, 2018). This will suggest these family firms are more likely to engage in diversification, which is often associated with entrepreneurial activity and innovation (Burgelman, 1983; Srivastava & Lee, 2005).

Second, diversifying into new businesses provides career opportunities and a learning platform for future generation family members (Andersson, Carlsen, & Getz, 2002; Gu et al., 2019). We argue that the controlling family's intra-family succession intention can motivate the family to diversify their business into different lines of activities. Through the diverse business portfolio,

the family can provide opportunities for the future generation family members to hone their management skills without impairing the core business (Miller, Le Breton-Miller, & Lester, 2010) and thus better prepare the young generations for the succession. Anecdotal evidence can provide some support for this line of argument. For example, the Rothschild family adopted a diversification strategy and had each of their five sons set up banking business in different regions. In this case, diversification allowed the second generation family members to apply their expertise and explore their career opportunities in the business (Hughes, 2004). Hence, we hypothesize:

Hypothesis 1b. *Intra-family succession intention is positively related to the level of diversification in a family firm.*

3.2. Family control, emotional attachment, and diversification

The intermingling of emotions among family members is another distinctive attribute of family firms (Berrone et al., 2012; Eddleston, Kellermanns, & Sarathy, 2008). Emotions such as warmth, love, disappointment originating from the family can permeate the firm due to the blurred boundaries between the family and business entities (Berrone et al., 2012). Such emotional factors often play an important role in influencing a family firm's decision-making (Berrone et al., 2012; Kellermanns, Dibrell, & Cruz, 2014). The family's emotional attachment to the business can facilitate the continuity of self through connecting one's present with the past, or even the future (Kleine, Kleine, & Allen, 1995), thus fostering the family's sense of legacy (Hammond, Pearson, & Holt, 2016). Based on the fundamental role of *maintaining family control* in the goal hierarchical structure, we argue that a family's emotional attachment to the firm is achieved only after the family control goal has been achieved.

First, family's control of the firm can provide the controlling family owners with the power and legitimacy to make decisions in idiosyncratic ways and pursue its interests through the firm (Carney, 2005; Chrisman, Fang, Kotlar, & De Massis, 2015). Such decisions mainly reflect the values and aspirations of the family owners. When family members have a substantial amount of control over the firm, they are likely to have the discretion as well as disposition to allocate, direct, and dispose a firm's resources and shape the firm's strategy (Fang, Randolph, Memili, & Chrisman, 2016). On the other hand, the increase of non-family ownership might enhance the odd of principal-principal conflict (Su, Xu, & Phan, 2008), mitigating the family's influence in business (Chrisman, Chua, De Massis, Frattini, & Wright, 2015, Chrisman, Fang et al., 2015). We expect that higher levels of family control, especially through the involvement of family members in leadership positions, will lead to stronger family emotional attachment to the business.

Second, following the goal hierarchy logic, we argue that the family is likely to exhibit a stronger emotional attachment to the business in case of higher levels of control over the business. As argued earlier, the increase of family control might activate higher-order goals of the owning family such as the emotional attachment to the firm. Conversely, when the level of family control is relatively low, the dominant family is more likely to pursue lower-order goals (e.g., enhancing family control) rather than higher-order goals such as preserving the family's emotional attachment to the firm. Thus, we hypothesize:

Hypothesis 2a. Family control is positively related to the family's emotional attachment to the business.

We further expect that family members' emotional attachment to the business will have a negative effect on a family firm's diversification. First, diversification will require changes in the existing ways of doing business (Sharma & Chrisman, 1999). For example, firms need to develop new processes and/or organizational forms for the newly diversified markets (Schumpeter, 1934). When the controlling family has strong emotional ties to the existing resources, they are likely to maintain close, personal relationships within the organization and with other actors in the environment (Berrone et al., 2012; Chrisman, Chua, & Kellermanns, 2009). We argue that these rich resources associated with the "community" and "connections" (Miller & Le Breton-Miller, 2005) are expected to impede family firms' diversification. In other words, the controlling family's strong emotional attachment to the existing business will disincentivize family firms from engaging in diversification (König et al., 2013).

Second, the existing assets and conditions of a family firm often represent the fruits of the past decisions of family owners and managers (Chrisman, Chua et al., 2015; Chrisman, Fang et al., 2015). The link between the family and the business also tends to intensify attachment and commitment to the existing resources and procedures of the firm among family members (Craig, Dibrell, & Davis, 2008; Sharma & Irving, 2005). Diversification is likely to create the risk of appropriation associated with disseminating firm-specific know-how such as technological and marketing know-how to external parties. When family firms have strong emotional attachment to their existing resources and assets, we expect that such strong emotional ties to existing resources will limit their propensity to engage in diversification.

Third, the existing resources in family firm tend to be based on the previous investments made by family owners and managers (Chrisman, Chua et al., 2015; Chrisman, Fang et al., 2015). Hence, emotional attachment to the existing resources and practices might also increase the odds that family decision-makers will refuse to deploy or leverage existing resources in new ways (Craig et al., 2008; Sirmon & Hitt, 2003). In other words, strong emotional attachment to the existing resources and businesses are likely to discourage the family firm to expand into new lines of businesses or other diversification activities. Thus, we hypothesize:

Hypothesis 2b. Family's emotional attachment to the business is negatively related to the level of diversification in a family firm. METHODOLOGY

4. Methodology

4.1. Sample and data collection

To test our hypotheses, we used survey data collected from private firms in China in 2014. The survey was conducted through a joint effort between China Federation of Industry and Commerce and a university located in Southeast China. Most private firms in China have some level of family involvement in business, which makes it appropriate to use in our sample. As stated earlier, family-centered goals might be more strongly expressed in Chinese family firms

due to the pivotal role of founder and founding (Gupta & Levenburg, 2010; Liden, 2012; Phan, 2001). In addition, a large number of family firms in China are currently undergoing business succession, during which goal diversity may be more pronounced (Kotlar & De Massis, 2013). Finally, the uncertainties in the current environment also motivate firms in China to use industrial and global diversification as a means to neutralize the risk and transfer the family's wealth into foreign territories (Li et al., 2012; Xu, Zhou, & Phan, 2010).

In order to mitigate common method bias, we sent two sets of questionnaires and collected the data on independent and dependent variables separately. Information related to a firm' diversification was collected from the finance manager of each firm, whereas other information was collected from the business owners. A pre-test was conducted to refine the SEW items adapted from Berrone et al.' work (2012). A total of 1500 private firms participated in the survey. 1294 pairs of responses were collected, yielding a response rate of % 86.27. Excluding observations with missing values further reduced the sample size into 464. We then operationalized family firms as those with at least 50% of family ownership, resulting in a final sample of 367 family-owned firms included our analyses.

Before analyzing our data, we first conducted ANOVA tests to examine if differences exist between the sampled and excluded firms. No significant differences were found in most of the firm-related characteristics, including firm location (F = 1.229, p = .268), firm's total assets in 2014 (F=1.372, p =.242), and firm's sales in 2014 (F = .748, p =.387). We also conducted ANOVA to check if there is any differences between family-owned firms and nonfamily-owned firms. No significant differences were found in terms of firm location (F = .101, p =.761), total assets in 2014 (F = .188, p =.665), and firm's sales in 2014 (F = .171, p = .679). Thus, we consider the final sample is representative of the population.

4.2. Model specification

We have hypothesized the mediation effects of intra-family succession intention and emotional attachment to the business on the relationship between family control and business diversification. Such mediation effects represent an inconsistent mediation model, where the mediators might have divergent even competing effects. Following Baron and Kenny (1986), we use the four-step approach in testing for the mediation effects. Regression models of all four steps are listed in Table 1.

It is important to note that in an inconsistent mediation model, the direct effect of the independent variable (i.e., family control) on the dependent variable (i.e., diversification) may *not* be significant (MacKinnon, Fairchild, & Fritz, 2007). This insignificant effect might be caused by the existence of both positive (i.e., succession intention) and negative (i.e., emotional attachment) mediation effects.

⁴ As a non-for-profit organization, China Federation of Industry and Commerce has branch offices in all the 23 provinces in China. Each branch office has built a close relationship with the local government and companies. Such a close relationship facilitates data collection, and thus largely contributing to the high response rate.

⁵ Such an operationalization also reflects the fact that ownership and management are not always separated in China, and owners often actively engage in daily management.

⁶ See http://davidakenny.net/cm/mediate.htm.

Table 1. Regression Models.

1		
Step 1	Model 1 Table 4	$Diversification = b0 + \sum_{i=1}^{n} bi * Control i + error$
Step 2	Model 2 Table 4	$Diversification = b_0 + b_1 * Family Control + \sum\nolimits_{i=2}^{n} bi * Control_t + error$
Step 3a	Model 3 Table 4	$Succession\ Intention = b_0 + b_1 * Family\ Control + \sum\nolimits_{i=2}^n bi * Control_t + error$
Step 3b	Model 4 Table 4	$Emotional\ Attachment = b_0 + b_1 * Family\ Control + \sum\nolimits_{i=2}^{n} bi * Control_t + error$
Step 4	Model 5 Table 4	$\begin{aligned} \textit{Diversification} &= b_0 + b_1 * \textit{Family Control} + b_2 * \textit{Succession Intention} + b_3 \\ &* \textit{Emotional Attachment} + \sum_{i=4}^n bi * \textit{Control}_t + \textit{error} \end{aligned}$

Also, the ordinary regression technique has been questioned due to its limitation associated with testing indirect mediation effects (Mackinnon, Lockwood, Hoffman, West, & Sheets, 2002; Preacher, Rucker, & Hayes, 2007) and inability to test inconsistent mediation effects (Mackinnon, Krull, & Lockwood, 2000). Thus, we used the bootstrapping technique (Preacher & Hayes, 2004) to test our mediation model. Specifically, we used the Multiple Mediation Model 4 of the SPSS macro PROCESS developed by Hayes (2017) to test our hypotheses.⁷

4.3. Measures

4.3.1. Dependent variable

Researchers widely used entropy index to measure a firm's *diversification* (Jacquemin & Berry, 1979). This index considers both the number of segments in which a firm operates and the proportion of sales each segment represents (Gomez-Mejia et al., 2010). Following the 4-digit Standard Industrial Classification (SIC), we used 20 industries in our questionnaire. The entropy index is computed as follows:

$$DIV = \sum_{i=1} P_i Ln\left(\frac{1}{P_i}\right)$$

where P_i is the sales attributed to segment i, and $\operatorname{Ln}\left(\frac{1}{P_i}\right)$, the logarithm of the inverse of sales, is the weight for segment i. As a robustness check, we also used the Herfindahl-Hirschman Index (HHI) measurement of diversification (Acar & Sankaran, 1999). The HHI is calculated as the sum of all squared sales generated in each business segment, specifically, $\operatorname{HHI} = 1 - \sum_{i=1}^{n} P_i^2$, where P_i is sales originating from business segment i (Berry, 2015; Schmid et al., 2015).

4.3.2. Independent variable

Family control was measured by the number of family managers divided by the total number of managers in the firm (Sciascia, Mazzola, & Kellermanns, 2014). We chose family management

⁷ The PROCESS macro was downloaded from http://www.processmacro.org/index.html.

rather than family ownership to measure family control, because family's involvement in the top management team is a strong indicator of family control in the business (Andres, 2008). In addition, family ownership has already been used as a criterion to identify our family business sample.

Furthermore, we use the *actual* family control in business instead of the family's *intention* to maintain family control. This approach is consistent with our theoretical arguments deriving from the goal hierarchy literature (Maslow, 1987), where higher-order goals (i.e., intra-family succession intention and emotional attachment) will be pursued only when lower-order goals such as family control have been achieved. Hence, using the realized goal (i.e., the actual family control) in our analyses is more appropriate than the goal itself (i.e., intention to maintain family control).

4.3.3. Mediators

Intra-family succession is measured by two seven-point Likert-type scale items (Chrisman & Patel, 2012; Sharma & Irving, 2005). Specifically, we ask the participating firms to what extent they agree with the following statements: 1) I hope the business continues to be owned and controlled by our family; 2) I hope my children will join and take over the business one day (1 = strongly disagree, 7 = strongly agree; Cronbach alpha = 0.893).

We measured *the family's emotional attachment to the firm* by using three seven-point Likert-type scale items. We asked the participating firms to what extent they agree with the following statements: 1) It is important for us to maintain the unity of the family and interpersonal support among family members; 2) It is important for us to continue the family tradition; 3) It is important for us to maintain emotional connection and trust among the family members (1 = strongly disagree, 7 = strongly agree; Cronbach alpha = .678).

4.3.4. Control variables

Consistent with the literature, we controlled for a number of variables that may influence a firm's diversification behavior. These variables are related to characteristics of the family controlling the firm, the firm leader, the firm, industry, and institutional and market context (Dwyer, Gilkeson, & List, 2002; Gomez-Mejia et al., 2010; Hashai, 2015). First, the extent to which the controlling family has power and discretion to pursue family-centered goals will be affected by the percentage of shares owned by the controlling family (Chrisman, Chua et al., 2015; Chrisman, Fang et al., 2015). Thus, we controlled for the influence of *family ownership*, which is measured as the total percentage of shares hold by the controlling family. We also controlled for *the number of children* that the family leader has, because a family firm's diversification might be driven by the family's intention to provide career opportunities for young generation family members (Zellweger, Sieger, & Halter, 2011). The larger number of children might be associated with a stronger intention to engage in diversification. Families that have two or more children are coded as 1, otherwise 0.

Second, we also controlled for *the gender of the leader*, as male leaders are found to be more likely to engage in risky activities such as diversification than female ones (Dwyer et al., 2002).

Male leaders were coded as 1, otherwise 0. A firm's strategic decisions in China may also be affected by the firm leader's political affiliation (Sheng, Zhou, & Li, 2011). Thus, we also controlled for the firm leader's political affiliation (Hillman, Keim, & Schuler, 2004). When firm leaders are affiliated with any of the following three parties—the People's Congress, the Chinese People's Political Consultative Conference, or the Chinese Communist Party—they are considered politically affiliated and coded 1, otherwise 0. Founder CEOs are also found to be more likely to take risks (Miller, Le Breton-Miller, Lester, & Cannella, 2007) and thus are more likely to diversify the business. As such, we controlled for *founder CEOs*. If the CEO of the firm is a founder, we code it as 1 and 0 otherwise.

Third, we also controlled for several firm-related characteristics including *firm size*, *firm age*, *high-technology firms*, *firm's internationalization*, and *past performance of a firm* (Autio, Sapienza, & Almeida, 2000; Hitt, Tihanyi, Miller, & Connelly, 2006). *Firm size* is measured by the natural logarithm of the total sales of the firm. *Firm age* is calculated by the number of years since the firm was founded. We also coded *high-tech firms* as 1, otherwise 0. Likewise, if the firm engages in *internationalization*, it is coded 1 and otherwise 0. The *past performance* of a firm is measured by the value of ROA in 2013.

Lastly, a firm's diversification is also likely to be affected by the market, institutional, and industrial factors (Mayer & Whittington, 2003). Thus, we controlled for *regional economic development index*. By following Fan, Wang, and Others (2003) work on marketization index for China's province, provinces with high-economical development including Guangdong, Zhejiang, Shanghai, and Jiangsu are coded 1, otherwise 0. *Environmental turbulence* may also affect a firm's diversification. This variable is measured using two seven-point Likert-type scale items (Li & Atuahene-Gima, 2001). We asked the participating firms to what the extent they agreed with the following statements: 1) Our competitors are highly unpredictable; 2) Market demand and our consumers' tastes are highly unpredictable (1=strongly disagree, 7=strongly agree; Cronbach alpha = .869). According to the National Economical Industry Classification (GB/T4754-2011) and the distribution of the sampled firms, we created *six industry dummies* including manufacturing, retailing, construction, agriculture, real estate, and leasing (Kim, Hoskisson, & Lee, 2015). Data on these control variable are collected using the surveys answered by business owners and finance managers.

4.4. Empirical results

Variables included in the analyses are listed and defined in Table 2. The descriptive statistics and correlations are shown in Table 3. In general, our sample features a moderate level of family control in business (39.49%) and high family ownership (93.66%). In addition, a founder CEO is present in most of the sampled firms (90.63%). The average age of the sampled firms is 14.86 years. The two diversification measures (i.e., the entropy and HHI index) are also found to be highly correlated to one another.

Table 2. Summary of variables and measures.

Variable	Definition/Measure
Dependent variable	
Diversification	The number of segments in which a firm operates and the proportion of sales each segment represents; measured using the entropy index and the Herfindahl-Hirschman Index (HHI) as a robustness check;
Independent variable	
Family control	Measured based on the number of family members divided by the total number of managers in the firm;
Mediators	
Intra-family succession intention	Measured using two seven-point Likert-type scale items, including to what extent the participating firms agree with the following statements: 1) I hope the business continues to be owned and controlled by our family; 2) I hope my children will join and take over the business one day (1=strongly disagree, 7=strongly agree);
Emotional attachment to the business	Measured using three seven-point Likert-type scale items, including to what extent the participating firms agree with the following statements: 1) It is important for us to maintain the unity of the family and interpersonal support among family members; 2) It is important for us to continue the family tradition; 3) It is important for us to maintain emotional connection and trust among the family members (1=strongly disagree, 7=strongly agree);
Control variables	
Family ownership	Measured as the total percentage of shares hold by the controlling family;
Number of children by the owner	A binary variable; families that have two or more children are coded as 1, otherwise 0;
Leader gender	A binary variable; male leaders are coded as 1, otherwise 0;
Leader's political affiliation	A binary variable; 1 indicates the leader is politically affiliated with any of the following three parties: the People's Congress, the Chinese People's Political Consultative Conference, and the Chinese Communist Party, otherwise 0;
Founder CEO	A binary variable; 1 indicates the CEO is also a founder, otherwise 0;
Firm size	The natural logarithm of the total sales of the firm;
Firm age	The number of years since the firm was founded;
High-technology firms	A binary variable; firms from high-tech industry are coded 1, otherwise 0;
Internationalization	A binary variable; firms that internationalize are coded 1, otherwise 0;
Past performance	Measured based on the value of ROA in the previous year;
Regional economic development index	A binary variable; firms from high-economically developed provinces including Guangdong, Zhejiang, Shanghai, and Jiangsu are coded 1, otherwise 0;
Environmental turbulence	Measured using two seven-point Likert-type scale items: to what extent the participating firms agree with the following statements: 1) our competitors are highly unpredictable; 2) market demand and our consumers' tastes are highly unpredictable (1=strongly disagree, 7=strongly agree);

We tested our hypotheses using the hierarchical regression technique. In Model 1, we only include the control variables. The results show that high-tech industries (β = .056, t = 2.01, p = .045), political affiliations (β = .064, t = 2.357, p = .019), and regional economic development (β = .075, t = 2.673, p = .008) have significant effects on a firm's diversification. In Model 2, we added family control as the independent variable. The direct effect of family control was not significant (β = -.001, t = -1.607, p = .109). In Model 3, we tested the effect of family control on a family's succession intention (H1a). The result shows that family control has a significant positive effect on the family's succession intention (β = .019, SE = .003, p < .001). Thus, H1a is supported. In Model 4, we tested the effect of family control on a family's emotional attachment to the business (H2a). The result shows that family control has a significant positive effect on the family's emotional attachment (β = .006, SE = .002, p < .001). Thus, H2a is also supported.

Finally, Model 5 tested the effect of intra-family succession intention (H1b) and the effect of the family's emotional attachment on a firm's diversification (H2b). The results show that both succession intention and emotional attachment have significant effects on a firm's diversification, however, in opposite directions (β_{IFSI} = .018, SE_{IFSI} = .008, p < .05; β_{EAM} = -.044, SE_{EAM} = .013, p < .001).

Table 3. Descriptive statistics and correlation (N = 367).

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Entropy Index in Diversification	.063	.22	1								
2. HHI in Diversification	.038	.127	.984**	1							
3. Family Control	39.491	31.221	043	039	1						
4. Succession Intention	4.386	1.785	.067	.073*	.327**	1					
5. Emotional Attachment	5.794	1.103	04	032	.162**	.442**	1				
6. Family Ownership	93.658	13.687	.023	.016	.083*	.140**	.076*	1			
7. Number of Children	.584	.493	.028	.02	.098*	.141**	.016	015	1		
8. Leader Gender	.887	.317	.039	.045	.012	.04	019	.045	.095**	1	
9. Political Affiliation	.512	.5	.058	.061	027	.070*	.037	036	.098**	.019	1
10. Founder CEO	.906	.292	019	02	093*	004	019	.024	.032	.045	.035
11. Firm Size	8.3	2.082	.091*	.096*	013	.042	.097*	003	.048	.059	.205**
12. Firm Age	14.861	7.698	.086*	.090*	.024	.024	014	012	.121**	.054	.178**
13. High-Tech Firm	.395	.489	.090*	.083*	077*	039	.006	034	056	.02	.048
14. Internationalization	.157	.364	.111**	.120**	008	.073*	005	.072*	-0.02	.055	.012
15. ROA 2013	.12	.328	.048	.054	.03	.061	.096*	.022	.074*	045	063
16. Regional Economic Development	.541	.499	.105**	.098**	.156**	.152**	.061	.066*	.107**	.136**	135**
17. Environmental Turbulence	4.984	1.186	023	021	.049	.106**	.152**	.062	.019	.033	046
Variables			10	11	12	1	3	14	15	16	17
10. Founder CEO			1								
11. Firm Size			090*	1							
12. Firm Age			141**	* .291*	* 1						
13. High-Tech Firm			.018	.102*	*0	3 1	l				
14. Internationalization			.041	.184*	* .102	** .21:	5**	1			
15. ROA 2013			.035	056	04	.0	14 .	057	1		
16. Regional Economic Development			079*	.039	.106	**0	25 .2	32**	005	1	
17. Environmental Turbulence			.05	.01	03	.04	43 .	024	.062	01	1

Statistical significance at: $^{\dagger}p < .10, *p < .05; **p < .01.$

To test the two mediation hypotheses, we used Preacher and Hayes's (2004) bootstrapping technique. The results are shown in the upper half of Table 4 and Fig. 1. Specifically, succession intention is found to positively mediate the effect of family control on a firm's diversification ($a_1*b_1=.0003$) with a 95 % confidence interval of [.0001, .0007] that excludes zero. Emotional attachment is found to negatively mediate the effect of family control on diversification ($a_2*b_2=-.0003$) with a 95 % confidence interval of [-.0006, -.0001] that excludes zero. Consistent with the results generated from the hierarchical regression analysis, the direct effect of family control on diversification is not significant (c = -.001, $p_c = .181$) with a 95 % confidence interval of [-.0013, .0003] that includes zero (Table 5).

Table 4. Hierarchical regression analysis.

Model 1		Model 2		Model 3		Model 4		Model 5	
Diversification		Diversification		Succession		Emotional		Diversifi	cation
									se
COCI	36	COCI	30	COCI	30	COCI	se	COCI	SC
000	157	000	540	006	007	005†	004	000	.001
									.025
									.023
									.026
									.020
									.006
									.002
									.026
									.031
	1.495								.031
.075**	2.673	.082**	2.876	.572**	.205	.189	.124	.069*	.027
.005	.509	.006	.567	.076	.077	.125**	.047	.010	.010
Y	es	Y	es	Ye	es	Yes	1	NO)
		001	-1.607	.019***	.003	.006***	.002	001	.000
								.018*	.008
								044***	.013
158	-1.679	146	-1.182	1.849*	.878	4.025***	.532	.010	.125
									•
									ļ
	000 .015 .006 .064*008001 .002 .056* .029 .051 .075** .005 Y	Model 1 Diversitication coef se .000 .457 .015 .590 .006 .139 .064* 2.357 008 188 001 214 .002 1.310 .056* 2.010 .029 .880 .051 1.495 .075** 2.673	Model 1 Model 1 Diversification coef se coef .000 .457 .000 .015 .590 .022 .006 .139 .004 .064* 2.357 .063* 008 188 010 001 214 001 .002 1.310 .002 .056* 2.010 .050† .029 .880 .027 .051 1.495 .050 .075** 2.673 .082** .005 .509 .006 Yes Y 001 158 -1.679 146 367 36 2.163** 2.19 .121 .1 18 1	Model 2 Diversification coef se coef se .000 .457 .000 .549 .015 .590 .022 .850 .006 .139 .004 .098 .064* 2.357 .063* 2.300 008 188 010 235 001 214 001 212 .002 1.310 .002 1.302 .056* 2.010 .050† 1.807 .029 .880 .027 .804 .051 1.495 .050 1.477 .075** 2.673 .082** 2.876 .005 .509 .006 .567 Yes Yes 001 -1.607 158 -1.679 146 -1.182 367 2.163** 2.194** .121 .122 18 19	Model 1 Model 2 Model 2 Diversification coef se Diversification coef Intensification coef .000 .457 .000 .549 .006 .015 .590 .022 .850 .414* .006 .139 .004 .098 040 .064* 2.357 .063* 2.300 .544** 008 188 010 235 .257 001 214 001 212 042 .002 1.310 .002 1.302 002 .056* 2.010 .050† 1.807 201 .029 .880 .027 .804 .221 .051 1.495 .050 1.477 .177 .075** 2.673 .082** 2.876 .572** .005 .509 .006 .567 .076 Yes Yes Yes 158 -1.679 146 -1.182 1.849*	Model 2 Model 3 Diversification Succession Intention coef se coef se .000 .457 .000 .549 .006 .007 .015 .590 .022 .850 .414* .188 .006 .139 .004 .098 040 .310 .064* 2.357 .063* 2.300 .544** .194 008 188 010 235 .257 .311 001 214 001 212 042 .048 .002 1.310 .002 1.302 002 .012 .056* 2.010 .050† 1.807 201 .199 .029 .880 .027 .804 .221 .237 .075** 2.673 .082** 2.876 .572** .205 .005 .509 .006 .567 .076 .077 Yes Yes	Model 1 Model 2 Model 3 Model 4 Model 5 Model 5 Model 6 Model 6 Model 6 Model 7 Model 6 Emotic Attachr coef se coef se coef se coef .000 .457 .000 .549 .006 .007 .005† .015 .590 .022 .850 .414* .188 .032 .006 .139 .004 .098 040 .310 .147 .064* 2.357 .063* 2.300 .544** .194 .202† 008 188 010 235 .257 .311 101 001 214 001 212 042 .048 .017 .002 1.310 .002 1.302 002 .012 .001 .056* 2.010 .050† 1.807 201 .199 .013 .029 .880 .027 .804 .221 .237 </td <td>Model 1 Model 2 Model 3 Model 4 Diversification Succession Intention Emotional Attachment coef se coef se coef se coef se .000 .457 .000 .549 .006 .007 .005† .004 .015 .590 .022 .850 .414* .188 .032 .114 .006 .139 .004 .098 040 .310 .147 .188 .064* 2.357 .063* 2.300 .544** .194 .202† .117 008 188 010 235 .257 .311 101 .188 001 214 001 212 042 .048 .017 .029 .002 1.310 .002 1.302 002 .012 .001 .007 .056* 2.010 .050† 1.807 211</td> <td>Model 1 Model 2 Model 3 Model 4 Model 3 Diversification Succession Emotional Attachment Diversification coef se coef se coef se coef se coef .000 .457 .000 .549 .006 .007 .005† .004 .000 .015 .590 .022 .850 .414* .188 .032 .114 .012 .006 .139 .004 .098 040 .310 .147 .188 .009 .064* 2.357 .063* 2.300 .544*** .194 .202† .117 .047† 008 188 010 212 042 .048 .017 .029 .002 .002 1.310 .002 1.302 002 .012 .001 .007 .002 .029 .880 .027 .804 <td< td=""></td<></td>	Model 1 Model 2 Model 3 Model 4 Diversification Succession Intention Emotional Attachment coef se coef se coef se coef se .000 .457 .000 .549 .006 .007 .005† .004 .015 .590 .022 .850 .414* .188 .032 .114 .006 .139 .004 .098 040 .310 .147 .188 .064* 2.357 .063* 2.300 .544** .194 .202† .117 008 188 010 235 .257 .311 101 .188 001 214 001 212 042 .048 .017 .029 .002 1.310 .002 1.302 002 .012 .001 .007 .056* 2.010 .050† 1.807 211	Model 1 Model 2 Model 3 Model 4 Model 3 Diversification Succession Emotional Attachment Diversification coef se coef se coef se coef se coef .000 .457 .000 .549 .006 .007 .005† .004 .000 .015 .590 .022 .850 .414* .188 .032 .114 .012 .006 .139 .004 .098 040 .310 .147 .188 .009 .064* 2.357 .063* 2.300 .544*** .194 .202† .117 .047† 008 188 010 212 042 .048 .017 .029 .002 .002 1.310 .002 1.302 002 .012 .001 .007 .002 .029 .880 .027 .804 <td< td=""></td<>

Statistical significance at: $^{\dagger}p < .10, *p < .05; **p < .01; ***p < .001.$

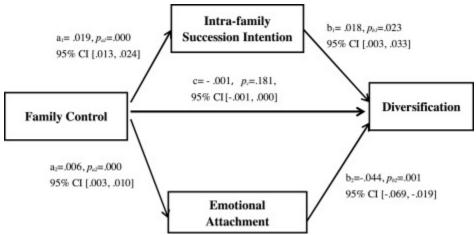


Fig. 1. Inconsistent mediation model in family business diversification. Note: c and p_c are the direct effect of family control on diversification.

Table 5. The mediating roles of intra-family succession intention and emotional attachment.

	Bootstrapped estimate							
	Effect .0003	SE .0001	Confide	rval				
Intra-Family Succession Intention			.0001	.0007	Mediation supported			
Emotional Attachment	0003	.0001	0006	0001	Mediation supported			
	.,		bel test					
244 (228 80 00 00 60	z		p		10.000			
Intra-Family Succession Intention	2.133		.03	3	Mediation supported			
Emotional Attachment	-2.429		.015		Mediation supported			

4.5. Robustness tests

We conducted a number of tests to ensure that our results are robust. First, we included the four dimensions of FIBER (Identification of family to the business β = .0000, SE = .0001, [-.0002, .0000]; Binding social ties β = .0000, SE = .0001, [-.0002, .0002], Emotional attachment to the business β = -.0002, SE = .0001, [-.0006, .0000]), and Renewal of family dynasty through intrafamily succession β = .0003, SE = .0001, [.0001, .0006]) as antecedents of family business diversification. Overall, only two factors included in the original model yield significant results, explaining 73.618 % of the variance. Again, this result provides strong support for our choice of *intra-family succession intention* and *emotional attachment to the business* as the two mediators.

In addition, we conducted the Sobel test (Sobel, 1982) to check whether the inconsistent mediation model is robust. We found that the effect of family control on firm diversification (the lower half of Table 3) is positively mediated through succession intention (z = 2.133, p < .05) and negatively mediated through emotional attachment (z = -2.429, p < .05). Moreover, we used HHI as an alternative measure of diversification. Regression results are comparable to our primary results (Table 4). The Sobel test using HHI as the dependent variable also yields significant mediation effects.

Table 6. Using Herfindahl-Hirschman Index (HHI) to measure diversification.

	Bootstrapped estimate							
	Effect	SE .0001	Confide	erval				
Intra-Family Succession Intention	.0002		.0001	.0004	Mediation supported			
Emotional Attachment	0001	.0001	0004	.0000	Mediation supported			
	1	Sobel tes						
	Z		p					
Intra-Family Succession Intention	2.147		.03	2	Mediation supported			
Emotional Attachment	-2.335		.02	0	Mediation supported			

To rule out the concern of reverse causality, we followed Landis and Dunlap's (2000) approach and used diversification as the independent variable and intra-family succession intention and emotional attachment as the dependent variables. No significant findings were observed at the

0.05 level (p = 0.067 for succession intention; p = 0.276 for emotional attachment). These robustness tests indicate that our results are robust (Table 6).

5. Discussion and conclusions

Research draws attention to the preservation of SEW as the primary reference point in family firms' decision-making processes. As this line of literature continues to increase, there have been calls for a better understanding about the complex relationships underlying the various SEW dimensions (Miller & Le Breton-Miller, 2014; Schulze & Kellermanns, 2015).

Based on the SEW and goal-setting literature with a focus on goal hierarchy and goal inconsistency, we develop and test an inconsistent mediation model to capture the relationships between three SEW goals (family control, intra-family succession intention, and the family's emotional attachment to the business) and a family firm's diversification. Specifically, we hypothesize that the owing family's control in business has a positive effect on the controlling family's intra-family succession intention and the family's emotional attachment to the business. Further, we hypothesize that intra-family succession intention has a positive effect on a firm's diversification; however the effect of the family's emotional attachment is negative. An empirical assessment of 367 family-owned firms from China provides support for the proposed theoretical model. Family control of the firm serves as the lower-order goal in the goal hierarchy, while intra-family succession and the family's emotional attachment are the higher-order goals which are realized only when the lower-order goal (i.e., family control) has been achieved. Goal inconsistency is also manifested in the finding that intra-family succession intention and the family's emotional attachment have opposite effects on a firm's diversification.

These findings suggest that the various SEW goals follow a hierarchical structure. Specifically, family control as a lower-order goal, is the prerequisite to achieve other higher-order goals including intra-family succession intention and emotional attachment to the firm. Further, our study also shows that intra-family succession and emotional attachment goals have contrasting effects on a family firm's diversification behavior. As such, this study enhances our knowledge of the complex relationships underlying the various SEW goals.

5.1. Theoretical contributions

Our study makes several important contributions to the family business literature in general, and the SEW literature in particular. First, this study highlights the complex relationships among the various SEW goals. Although the multidimensional nature of the SEW construct has been well recognized in the family business literature (Berrone et al., 2012), most of the current research has treated SEW as a reflective construct and overlooked the complex relationships among its various dimensions. Our study provides empirical evidence for the existence of *goal hierarchy* and *goal inconsistency* among the various SEW dimensions, thus enhancing our knowledge of the complex relationships among the various SEW goals. Specifically, our study shows that *retaining family control* is a lower-order goal and other higher-order goals including *intrafamily succession intention* and *emotional attachment to the firm* are activated only when the goal of maintaining family control of the firm has been achieved.

Second, in terms of family influence on a firm's diversification, past research tends to take an 'either-or' approach. One stream of research shows that family involvement has a negative effect on a firm's diversification (e.g. Anderson & Reeb, 2003; Gomez-Mejia et al., 2010), while others suggest that the effect of family involvement can be positive (e.g. Jones, Makri, & Gomez-Mejia, 2008; Strike, Berrone, Sapp, & Congiu, 2015). In this study, we suggest that the effect of family control on a firm's diversification also depends on the specific SEW goal that the firm strives to achieve. This goal inconsistency view helps to reconcile the conflicting findings in the current literature. As such, our research echoes previous studies on the complex relationships between governance mechanisms and firm-level entrepreneurial activities such as diversification (e.g. Phan, Wright, Ucbasaran, & Tan, 2009). Future research can further examine the effect of family involvement on other entrepreneurial activities such as R&D investments and internationalization.

Third, despite the relevance and prevalence of emotions in the family business setting, emotions in family business research have been largely understudied (Berrone et al., 2012). By investigating the role of emotional attachment and measuring the emotional dimension directly, this study enhances our understanding of the role of emotional attachment in affecting a family firm's behavior. Specifically, in this research, we found that emotional attachment negatively mediates the effect of family control on a firm's diversification behavior, thus contributing to our knowledge of the antecedents of a family firm's behavior.

5.2. Practical implications

This study also has several important practical implications. First, professional advisors are argued to have a substantial effect on family business decision-making (Strike, Michel, & Kammerlander, 2018; Su & Dou, 2013). Family business leaders often rely on external experts for professional advice in achieving their goals. Our study provides empirical evidence to support the hierarchical structure of goals in family firms. Based on our finding that retaining family control of the firm as a lower-order goal needs to be achieved before the family firm achieves higher-order goals, family business advisors need to be aware of the goal hierarchical structure and the complex relationships existing among various SEW goals in order to offer most effective advice to their family business clients.

Second, this study also offers practical implications for family firm owners. Depending on the specific goals that the dominant family sets out to pursue, different family firm goals could have differential effects on a family firm diversification. Hence, family business owners need to take an in-depth look on what goals that the family sets out to pursue that may influence the implementation of strategies. For example, before adopting a firm's strategy such as diversification, family firm owners are recommended to first clarify their financial and non-financial goals. They need to make sure the implementation of such strategy is in line with the pursuit of their goals. Strategies that are not consistent with the firm's goals may not be realistic and attainable.

5.3. Limitations

Aside from its contributions, this study has several limitations that represent opportunities for future research. First, we used a cross-sectional data to test our hypotheses. Although Rindfleisch, Malter, Ganesan, and Moorman (2008) found that results drawn from cross-sectional data exhibit validity comparable to those obtained from longitudinal data, the results of our study need to be interpreted with caution. To further ensure the causal relationships drawn from our study, future research can replicate our study using longitudinal study design. Second, the choice of our sample may represent another limitation of this study. We tested our theoretical model using data collected in 2014. During this period of time, China was undergoing dramatic economic reform. Therefore, findings drawn from this era may not be generalizable to other periods of time. We recommend future studies to explore our hypothesized relationships using sample from different time periods.

Third, while Chinese family firms provide a unique context to test the influence of family control on diversification, the conclusions drawn from our study may not be generalizable to firms from other countries. These countries might have different regulative, cultural, and market systems that can affect governance mechanism and diversification differently (Yoshikawa & Phan, 2001, 2005). In addition, the firms examined in our study are largely small and medium-sized. Although this sample is appropriate given family-centered non-economic goals are likely to be more pronounced in such firms, findings of our study may not be generalizable to larger firms such as the publicly traded family firms. Hence, future research can examine diversification in other types of family firms. Lastly, while we theorized and found that *intra-family succession intention* and *emotional attachment to the business* have contrasting mediation effects on the relationship between family control and diversification, there might be other goals that may mediate the effect of family control on a firm's diversification. Future research could examine how other family-centered goals such as the goal of preserving a positive reputation for the family firm may mediate the relationship between retaining family control and diversification.

In conclusion, this study explores the complex relationships among various SEW goals including family control, intra-family succession intentions, and emotional attachment in the context of family firm diversification. Building upon the goal-setting literature, we propose an inconsistent mediation model to capture the hierarchical and inconsistent nature of SEW goals in family firms. Our study yields two important insights. First, family control is the most fundamental dimension of SEW compared to other dimensions. Other dimensions (i.e., intra-family succession intention and emotional attachment) are activated only when the owning family secures a substantial amount of control over the business. Second, intra-family succession intention and emotional attachment have differential effects on a family firm's diversification; specifically, succession intention facilitates diversification, however emotional attachment impedes the implementation of such strategy in a family firm.

Acknowledgement

The National Natural Science Foundation of China [Grant Numbers 71672173].

References

- Acar, W., & Sankaran, K. (1999). The myth of the unique decomposability: Specializing the Herfindahl and entropy measures? *Strategic Management Journal*, 20(10), 969-975.
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership, corporate diversification, and firm leverage. *Journal of Law and Economics*, 46(2), 653-684.
- Andersson, T., Carlsen, J., & Getz, D. (2002). Family business goals in the tourism and hospitality sector: Case studies and cross-case analysis from Australia, Canada, and Sweden. *Family Business Review*, 15(2), 89-106.
- Andres, C. (2008). Large shareholders ad firm performance: An empirical examination of founding-family ownership. *Journal of Corporate Finance*, 14(4), 431-445.
- Astrachan, J. H., & Shanker, M. C. (2003). Family businesses' contribution to the U.S. economy: A closer look. *Family Business Review*, 16(3), 211-219.
- Au, K., Chiang, F. F. T., Birtch, T. A., & Ding, Z. (2013). Incubating the next generation to venture: The case of a family business in Hong Kong. *Asia Pacific Journal of Management*, 30(3), 749-767.
- Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *The Academy of Management Journal*, 28(2), 446-463.
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *The Academy of Management Journal*, 43(5), 909-924.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258-279.
- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55(1), 82-113.
- Berry, C. H. (2015). Corporate growth and diversification. Princeton University Press.
- Burgelman, R. A. (1983). Corporate entrepreneurship and strategic management: Insights from a process study. *Management Science*, 29(12), 1349-1364.
- Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, *29*(3), 249-265.
- Chrisman, J. J., Chua, J. H., De Massis, A., Frattini, F., & Wright, M. (2015). The ability and willingness paradox in family firm innovation. *The Journal of Product Innovation Management*, 32(3), 310-318.

- Chrisman, J. J., Chua, J. H., & Kellermanns, F. (2009). Priorities, resource stocks, and performance in family and nonfamily firms. *Entrepreneurship Theory and Practice*, 33(3), 739-760.
- Chrisman, J. J., Chua, J. H., Pearson, A. W., & Barnett, T. (2012). Family involvement, family influence, and family-centered non-economic goals in small firms. *Entrepreneurship Theory and Practice*, 36(2), 267-293.
- Chrisman, J. J., Fang, H., Kotlar, J., & De Massis, A. (2015). A note on family influence and the adoption of discontinuous technologies in family firms. *The Journal of Product Innovation Management*, 32(3), 384-388.
- Chrisman, J. J., & Holt, D. T. (2016). Beyond socioemotional wealth: Taking another step toward a theory of the family firm. *Management Research: Journal of the Iberoamerican Academy of Management*, 14(3), 279-287.
- Chrisman, J. J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives. *The Academy of Management Journal*, 55(4), 976-997.
- Chua, J. H., Chrisman, J. J., & De Massis, A. (2015). A closer look at socioemotional wealth: Its flows, stocks, and prospects for moving forward. *Entrepreneurship Theory and Practice*, 39(2), 173-182.
- Chua, J. H., Chrisman, J. J., De Massis, A., & Wang, H. (2018). Reflections on family firm goals and the assessment of performance. *Journal of Family Business Strategy*, 9(2), 107-113.
- Chua, J. H., Chrisman, J. J., Kellermanns, F., & Wu, Z. (2011). Family involvement and new venture debt financing. *Journal of Business Venturing*, 26(4), 472-488. Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19-40.
- Churchill, N. C., & Hatten, K. J. (1997). Non-market-based transfers of wealth and power: A research framework for family business. *Family Business Review*, 10(1), 53-67.
- Craig, J. B., Dibrell, C., & Davis, P. S. (2008). Leveraging family-based brand identity to enhance firm competitiveness and performance in family businesses. *Journal of Small Business Management*, 46(3), 351-371.
- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. NJ: Englewood Cliffs.
- De Massis, A., Chua, J. H., & Chrisman, J. J. (2008). Factors preventing intra-family succession. *Family Business Review*, 21(2), 183-199.
- Dwyer, P. D., Gilkeson, J. H., & List, J. A. (2002). Gender differences in revealed risk taking: Evidence from mutual fund investors. *Economics Letters*, 76(2), 151-158.
- Dyer, W. G., & Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, 30(6), 785-802.

- Eddleston, K. A., Kellermanns, F. W., & Sarathy, R. (2008). Resource configuration in family firms: Linking resources, strategic planning and technological opportunities to performance. *Journal of Management Studies*, 45(1), 26-50.
- Etzioni, A. (1964). Modern organizations. Englewood Cliffs, NJ: Prentice-Hall.
- Fang, H., Kotlar, J., Memili, E., Chrisman, J. J., & De Massis, A. (2018). The pursuit of international opportunities in family firms: Generational differences and the role of knowledge-based resources. *Global Strategy Journal*, 8(1), 136-157 "Chevy".
- Fan, G., Wang, X. A., & Others (2003). Marketization index for china's provinces. *Economic Research Journal*, 16-17.
- Fang, H. C., Randolph, R. V., Memili, E., & Chrisman, J. J. (2016). Does size matter? The moderating effects of firm size on the employment of nonfamily managers in privately held family SMEs. *Entrepreneurship Theory and Practice*, 40(5), 1017-1039.
- Foss, N. J., & Linder, S. (2017). The changing nature of the corporation and the economic theory of the firm. In C. R. T. O'Kelley, J. O'Brien, & T. Clarke (Eds.). *Oxford handbook of the corporation*. Oxford: Oxford University Press.
- Gedajlovic, E. R., & Carney, M. (2010). Markets, hierarchies, and families: Toward a transaction cost theory of the family firm. *Entrepreneurship Theory and Practice*, 34(6), 1145-1172.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *The Academy of Management Annals*, 5(1), 653-707.
- Gomez-Mejia, L. R., Cruz, C., & Imperatore, C. (2014). Financial reporting and the protection of socioemotional wealth in family controlled firms. *European Accounting Review*, 23(3), 387-402.
- Gomez-Mejia, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., & Sirmon, D. G. (2014). Socioemotional wealth as a mixed gamble: Revisiting family firm R & D investments with the behavioral agency model. *Entrepreneurship Theory and Practice*, 38(6), 1351-1374.
- Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, *52*(1), 106-137.
- Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies*, 47(2), 223-252.
- Greve, H. R. (2008). A behavioral theory of firm growth: Sequential attention to size and performance goals. *The Academy of Management Journal*, 51(3), 476-494.
- Gu, Q., Lu, J. W., & Chung, C. N. (2019). Incentive or disincentive? A socioemotional wealth explanation of new industry entry in family business groups. *Journal of Management*, 45(2), 645-672.

- Gupta, V., & Levenburg, N. (2010). A thematic analysis of cultural variations in family businesses: The CASE project. *Family Business Review*, 23(2), 155-169.
- Hammond, N. L., Pearson, A. W., & Holt, D. T. (2016). The quagmire of legacy in family firms: Definition and implications of family and family firm legacy orientations. *Entrepreneurship Theory and Practice*, 40(6), 1209-1231.
- Hashai, N. (2015). Within-industry diversification and firm performance—An S-shaped hypothesis. *Strategic Management Journal*, *36*(9), 1378-1400.
- Hoy, F., & Verser, T. G. (1994). Emerging business, emerging field: Entrepreneurship and the family firm. *Entrepreneurship Theory and Practice*, 19(1), 9-23.
- Hauck, J., & Prugl, R. (2015). Innovation activities during intra-family leadership succession in family firms: An empirical study from a socioemotional wealth perspective. *Journal of Family Business Strategy*, 6(2), 104-118.
- Hautz, J., Mayer, M. C. J., & Stadler, C. (2011). Ownership identity and concentration: A study of their joint impact on corporate diversification. *British Journal of Management*, 24(1), 102-126.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Publications.
- Hillman, A. J., Keim, G. D., & Schuler, D. (2004). Corporate political activity: A review and research agenda. *Journal of Management*, 30(6), 837-857.
- Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. (2006). International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6), 831-867.
- Holt, D. T., Pearson, A. W., Carr, J. C., & Barnett, T. (2017). Family firm (s) outcomes model: Structuring financial and nonfinancial outcomes across the family and firm. *Family Business Review*, 30(2), 182-202.
- Houston, M. B., Ratneshwar, S., Ricci, L., & Malter, A. J. (2010). Dynamic strategic goal setting: They and initial evidence. *Review of Marketing Research*, 7, 19-62.
- Huang, Y. (2008). *Capitalism with Chinese characteristics: Entrepreneurship and the state.* Cambridge University Press.
- Hughes, J. E., Jr. (2004). Family wealth: Keeping it in the family. New York: Bloomberg.
- Jacquemin, A. P., & Berry, C. H. (1979). Entropy measure of diversification and corporate growth. *The Journal of Industrial Economics*, 27(4), 359-369.
- Jenkins, M., & Johnson, G. (1997). Linking managerial cognition and organizational performance: A preliminary investigation using causal maps. *British Journal of Management*, 8(s1), 77-90.
- Jiang, D. S., Kellermanns, F. W., Munyon, T. P., & Morris, M. L. (2018). More than meets the eye: A review and future directions for the social psychology of socioemotional wealth. *Family Business Review*, 31(1), 125-157.

- Jones, C. D., Makri, M., & Gomez-Mejia, L. R. (2008). Affiliate directors and perceived risk bearing in publicly traded, family-Controlled firms: The case of diversification. *Entrepreneurship Theory and Practice*, 32(6), 1007-1026.
- Kellermanns, F. W., & Eddleston, K. A. (2004). Feuding families: When conflict does a family firm good. *Entrepreneurship Theory and Practice*, 28(3), 209-228.
- Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, 36(6), 1175-1182.
- Kellermanns, F. W., Dibrell, C., & Cruz, C. (2014). The role and impact of emotions in family business strategy: New approaches and paradigms. *Journal of Family Business Strategy*, 5(3), 277-279.
- Kim, H., Hoskisson, R. E., & Lee, S. H. (2015). Why strategic factor markets matter: "new" multinationals' geographic diversification and firm profitability. *Strategic Management Journal*, 36(4), 518-536.
- Kleine, S. S., Kleine, R. E., III, & Allen, C. T. (1995). How is a possession "me" or "not me"? Characterizing types and an antecedent of material possession attachment. *The Journal of Consumer Research*, 22(3), 327-343.
- Konig, A., Kammerlander, N., & Enders, A. (2013). The family innovator's dilemma: How family influence affects the adoption of discontinuous technologies by incumbent firms. *The Academy of Management Review*, 38(4), 418-441.
- Kotlar, J., & De Massis, A. (2013). Goal setting in family firms: Goal diversity, social interactions, and collective commitment to family-centered goals. *Entrepreneurship Theory and Practice*, *37*(6), 1263-1288.
- Kotlar, J., Fang, H., De Massis, A., & Frattini, F. (2014). Profitability goals, control goals, and the R & D investment decisions of family and nonfamily firms. *The Journal of Product Innovation Management*, 31(6), 1128-1145.
- Landis, R. S., & Dunlap, W. P. (2000). Moderated multiple regression tests are criterion specific. Organizational Research Methods, 3(3), 254-266.
- Lee, G. K., & Lieberman, M. B. (2010). Acquisition vs. internal development as modes of market entry. *Strategic Management Journal*, 31(2), 140-158.
- Li, H., & Atuahene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. *The Academy of Management Journal*, 44(6), 1123-1134.
- Li, W., He, A., Lan, H., & Yiu, D. (2012). Political connections and corporate diversification in emerging economies: Evidence from China. *Asia Pacific Journal of Management, 29*(3), 799-818.
- Liden, R. C. (2012). Leadership research in Asia: A brief assessment and suggestions for the future. *Asia Pacific Journal of Management*, 29(2), 205-212.

- Linder, S., & Foss, N. J. (2018). Microfoundations of organizational goals: A review and new directions for future research. *International Journal of Management Reviews*, 20(s1), 39-62.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593-614.
- Mackinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science*, 1(4), 173-181.
- Mackinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104.
- Maslow, A. H. (1987). Motivation and personality (3rd ed.). Delhi, India: Pearson Education.
- Mayer, M., & Whittington, R. (2003). Diversification in context: A cross-national and cross-temporal extension. *Strategic Management Journal*, 24(8), 773-781.
- Miller, D., & Le Breton-Miller, I. (2005). Managing for the long run: Lessons in competitive advantage from great family businesses. Harvard Business Press.
- Miller, D., & Le Breton-Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice*, 38(4), 713-720.
- Miller, D., Le Breton-Miller, I., & Lester, R. H. (2010). Family ownership and acquisition behavior in publicly traded companies. *Strategic Management Journal*, 31(2), 201-223.
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella, A. A., Jr. (2007). Are family firms really superior performers? *Journal of Corporate Finance*, 13(5), 829-858.
- Morgan, T. J., & Gomez-Mejia, L. (2014). Hooked on a feeling: The affective component of socioemotional wealth in family firms. *Journal of Family Business Strategy*, 5(3), 280-288.
- Nason, R. S., Carney, M., Le Breton-Miller, I., & Miller, D. (2019). Who cares about socioemotional wealth? SEW and rentier perspectives on the one percent wealthiest business households. *Journal of Family Business Strategy*. https://doi.org/10.1016/j.jfbs.2019.04.002 (in press).
- Perrow, C. (1968). Organizational goals. International encyclopedia of social science. New York, NY: Macmillan305-311.
- Phan, P. H. (2001). Corporate governance in the newly emerging economies. *Asia Pacific Journal of Management*, 18(2), 131-136.
- Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W. L. (2009). Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing*, 24(3), 197-205.
- Pistrui, D., Huang, W., Oksoy, D., Jing, Z., & Welsch, H. (2001). Entrepreneurship in China: Characteristics, attributes, and family forces shaping the emerging private sector. *Family Business Review*, 14(2), 141-152.

- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods Instruments & Computers*, 36(4), 717-731.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227.
- Prietula, M. J., & Watson, H. S. (2000). Extending the Cyert-March Duopoly Model: Organizational and economic insights. *Organization Science*, 11(5), 565-585.
- Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-sectional versus longitudinal survey research: Concepts, findings, and guidelines. *Journal of Marketing Research*, 45(3), 261-279.
- Rousseau, M. B., Kellermanns, F., Zellweger, T., & Beck, T. E. (2018). Relationship conflict, family name congruence, and socioemotional wealth in family firms. *Family Business Review*, *31*(4), 397-416.
- Schmid, T., Ampenberger, M., Kaserer, C., & Achleitner, A. K. (2015). Family firm heterogeneity and corporate policy: Evidence from diversification decisions. *Corporate Governance: An International Review, 23*(3), 285-302.
- Schulze, W. S., & Kellermanns, F. W. (2015). Reifying socioemotional wealth. *Entrepreneurship Theory and Practice*, *39*(3), 447-459.
- Schumpeter, J. A. (1934). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle, Vol. 55. Transaction Publishers.
- Sciascia, S., Mazzola, P., & Kellermanns, F. W. (2014). Family management and profitability in private family-owned firms: Introducing generational stage and the socioemotional wealth perspective. *Journal of Family Business Strategy*, *5*(2), 131-137.
- Sharma, P., & Chrisman, J. J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice*, 23(3), 11-27.
- Sharma, P., & Irving, P. G. (2005). Four bases of family business successor commitment: Antecedents and consequences. *Entrepreneurship Theory and Practice*, 29(1), 13-33.
- Sheng, S., Zhou, K. Z., & Li, J. J. (2011). The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing*, 75(1), 1-15.
- Shinkle, G. A. (2012). Organizational aspirations, reference points, and goals: Building on the past and aiming for the future. *Journal of Management*, 38(1), 415-455.
- Simon, H. A. (1964). On the concept of organizational goal. *Administrative Science Quarterly*, 9(1), 1-22.
- Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. *Entrepreneurship Theory and Practice*, 27(4), 339-358.

- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290-312.
- Srivastava, A., & Lee, H. (2005). Predicting order and timing of new product moves: The role of top management in corporate entrepreneurship. *Journal of Business Venturing*, 20(4), 459-481.
- Strike, V. M., Berrone, P., Sapp, S. G., & Congiu, L. (2015). A socioemotional wealth approach to CEO career horizons in family firms. *Journal of Management Studies*, 52(4), 555-583.
- Strike, V. M., Michel, A., & Kammerlander, N. (2018). Unpacking the black box of family business advising: Insights from psychology. *Family Business Review*, 31(1), 80-124.
- Su, E., & Dou, J. (2013). How does knowledge sharing among advisors from different disciplines affect the quality of the services provided to the family business client? An investigation from the family business advisor's perspective. *Family Business Review*, 26(3), 256-270.
- Su, Y., Xu, D., & Phan, P. H. (2008). Principal-Principal conflict in the governance of the Chinese public Corporation. *Management and Organization Review*, 4(1), 17-38.
- Tagiuri, R., & Davis, J. (1996). Bivalent attributes of the family firm. *Family Business Review*, 9(2), 199-208.
- Tuzzolino, F., & Armandi, B. R. (1981). A need-hierarchy framework for assessing corporate social responsibility. *The Academy of Management Review*, 6(1), 21-28.
- Vardaman, J. M., & Gondo, M. B. (2014). Socioemotional wealth conflict in family firms. *Entrepreneurship Theory and Practice*, 38(6), 1317-1322.
- Vazquez, P., & Rocha, H. (2018). On the goals of family firms: A review and integration. Journal of Family Business Strategy, 9(2), 94-106.
- Vesper, K. H. (1980). New venture strategies. Prentice-Hall.
- Weick, K. E. (1995). Sensemaking in organizations. Thousand Oaks, CA: Sage.
- Williams, R. I., Pieper, T. M., Kellermanns, F. W., & Astrachan, J. H. (2019). Family business goal formation: A literature review and discussion of alternative algorithms. *Management Review Quarterly*, 1-21.
- Xu, D., Zhou, C., & Phan, P. H. (2010). A real options perspective on sequential acquisitions in China. *Journal of International Business Studies*, 41(1), 166-174.
- Yoshikawa, T., & Phan, P. H. (2001). Alternative corporate governance systems in Japanese firms: Implications for a shift to stockholder-centered corporate governance. *Asia Pacific Journal of Management*, 18(2), 183-205.
- Yoshikawa, T., & Phan, P. H. (2005). The effects of ownership and capital structure on board composition and strategic diversification in Japanese corporations. *Corporate Governance an International Review*, 13(2), 303-312.

- Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., & Chua, J. H. (2012). Family control and family firm valuation by family CEOs: The importance of intentions for transgenerational control.
- Zellweger, T. M., Nason, R. S., Nordqvist, M., & Brush, C. G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrepreneurship Theory and Practice*, *37*(2), 229-248.
- Zellweger, T., Sieger, P., & Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. *Journal of Business Venturing*, 26(5), 521-536.