Cognitive Antecedents of Family Business Bias in Investment Decisions: A Commentary on "Risky Decisions and the Family Firm Bias: An Experimental Study based on Prospect Theory"

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Abstract:

Lude and Prügl explored "family business bias," a cognitive tendency where the family nature of a firm can often reduce investors' perceived risk in investments. As a result, investors would display lower risk-avoidance in the gain domain and reinforced risk-seeking in the loss domain. We expanded the authors' work by introducing four cognitive factors (anchoring, representativeness, stereotype heuristic, and information availability) that can explain the underlying mechanisms behind the prevalence of "family business bias" and other cognitive misperceptions surrounding family businesses when it comes to investment decisions.

Keywords: family business | cognitive bias

Article:

Introduction

Because of bounded rationality, individuals and organizations often rely on heuristics to make their decisions, which may result in faulty reasoning and conclusions, or commonly referred as *cognitive bias* in literature (Gigerenzer & Gaissmaier, 2011; Siau, Wand, & Benbasat, 1997). In their article "Risky decisions and the family firm bias: An experimental study based on prospect theory," Lude and Prügl (2019) drew attention to the "family business bias," a cognitive tendency in which investors often associate family business with low risk in their mindsets and often consider family business as a "safe house" for investments. Built upon the prospect theory and employing a novel experimental design, Lude and Prügl (2019) concluded that if their target is identified as a family firm, investors displayed lower risk-avoidance in the gain domain and reinforced risk-seeking in the loss domain. Lude and Prügl (2019) contributed to the literature by shifting the theoretical focus from family business to individuals' perceptions of family business. They further explained that perceptions of longevity and trustworthiness in family businesses might facilitate investors developing a stronger sense of security toward risks. While Lude and Prügl's work offers valuable insight from a psychological perspective, we still do not fully comprehend the underlying cognitive mechanisms that may cause "family firm bias." Indeed, despite the well-documented heterogeneity among the family business population (Chua, Chrisman, Steier, & Rau, 2012), there may still be homogeneous bias and prejudice against this particular type of organization. In this regard, Lude and Prügl's work stimulates more questions than answers and opens a path to more unexplored territories.

Drawing upon the cognition literature (Kahneman, 2003; Simon, 1990), we study the *cognitive reasons behind investors' biased perceptions of family business*. In this paper, we extend Lude and Prügl's work (2019) by developing a theoretical framework explaining the presence, prevalence, and significance of cognitive issues surrounding the (mis)perceptions of family business. This research also expands Lude and Prügl's work (2019) by discussing four cognitive factors that can create and shape the "family business bias" in the minds of investors. This article also aims to explain why different investors or individuals might develop distinctive (biased) perceptions even toward the same family business.

Bounded Rationality and Cognitive Bias

While, undoubtedly, prospect theory is a major contribution of Kahneman and Tversky (1979), the impact of Kahneman and Tversky's works clearly goes beyond the theory itself. Notably, the pair and their followers contribute to the development of a prominent stream of research on human cognition to explain cognitive biases arising from heuristics and other factors. We use this literature as the starting point to develop our theoretical basis.

The inquiry of cognitive bias is theoretically rooted in bounded rationality. Here, *bounded rationality* refers to the fact that individuals are not perfectly rational and often make decisions according to their own beliefs and speculations (Kahneman, 2003). The bounded rationality phenomenon has three important implications. First, an individual's processing capacity, particularly short-term memory, to interpret and process information is quite limited. Hence, our interpretation of a specific subject relies on the availability of information through either memories stored in our minds or accessible data in the market (Simon, 1990). Second, due to the limited processing capacity, we often use approximate methods or mental shortcuts (cognitive economizing) to handle complex tasks (Hammond, Keeney, & Raiffa, 1998; Tversky & Kahneman, 1974). Cognitive economizing often motivates us to adopt prevailing stereotypes rather than systematically searching for optimal solutions (Tversky & Kahneman, 1974). Third, our comprehension of the world is often associated with systematic errors or so-called *cognitive biases* stemming from the limited processing capacity and cognitive economizing mentioned previously (Tversky & Kahneman, 1974).

The development of a human's perception is characterized by continuous sense-making and sense-giving. In this article, as we are interested in investors' biased perception of family business, we focus on four notable cognitive factors: anchoring, representativeness, stereotype heuristic, and information availability. These factors are analyzed because they represent common sources of cognitive bias that cover individual, group, and even society levels of analysis. Hence, they can be used in explaining interpersonal, inter-group, and inter-regional differences.

Human assessment on a subject often starts with *anchoring*, meaning our evaluations and predictions are affected by our mental starting point (Tversky & Kahneman, 1974). *Representativeness* refers to a human tendency to generalize from samples that are too small compared to the whole population (Tversky & Kahneman, 1974). S*tereotype heuristic* refers to the fact that individuals often choose to follow prevailing stereotypes in society rather than cautiously analyzing underlying evidence (Tversky & Kahneman, 1974). Further, individuals are often inclined to make an assessment based on available information as if the information is exhaustive and complete. Hence, the accuracy of our assessment often depends on the *availability of information* that we can access (Tversky & Kahneman, 1974). Because of these four factors, individuals often have faulty reasoning such that they cannot precisely and accurately specify the means–ends relationships, and often develop inaccurate explanation for a causal relationship, both of which contribute to the prevalence of cognitive bias.

Cognitive Factors and Biased Perceptions of Family Business

As discussed earlier, there are various cognitive factors that might affect human perception of a subject. This section articulates how the aforementioned four cognitive factors may independently and interactively influence an investor's perception of family business.

Anchoring

An investor's perception of family business is often affected by his or her mental starting point, or his or her past experiences with this special type of organization. In particular, if an investor had pleasant experiences with family businesses in the past, the investor might start from an optimistic perception. For instance, compared to nonfamily firms, family firms are often customer-oriented, especially those that are authentic, small, locally-operated, and have long standing family-centered image and reputation (Sageder, Mitter, & Feldbauer-Durstmüller, 2016). Hence, locals, especially those living in rural communities, might have better experiences with family-run businesses compared to other groups; thus, they might be inclined to invest in family-run businesses. As another example, institutional investors who value the stability of returns might have more positive experiences with some long-standing family brands. Therefore, it is not a surprise that some publicly-traded family firms such as chocolate maker Ferrero have frequently received high rankings in Fortune's *America's Most Admired Corporations* since 1982.

Anchoring also relates to the recency and frequency of occurrence, as individuals often assign more weight to recent, memorable, and often dramatic events (Hammond et al., 1998). An unpleasant experience with a family business is more likely to generate a strong negative feeling if it is of recent occurrence and/or frequently encountered. In sum, we argue that an investor's initial impression toward family businesses is affected by his/her past experiences with this type of organization as well as the temporal proximity and frequency of such experiences.

Representativeness

Humans are inclined to evaluate a subject by comparing it to similar subjects or "representatives" in their networks. When individuals rely on representativeness to make judgments, they may judge incorrectly. This is because something that is more represented in their networks does not actually mean it is more likely (Kahneman & Tversky, 1972). Regarding perceptions of family business, an investor might unconsciously generate a biased perception if he or she does not have sufficient observations of family firms in his or her network, or these observations are too homogenous compared to the whole family business population (Chua et al., 2012). The former refers to a situation where individuals who are not familiar with family businesses might just follow prevailing public stereotypes, which will be discussed in the following section. The latter implies that, due to distinctive personal characteristics such as occupation, education, or even physical location and social class, types of family firms are not "equally distributed" among individuals' networks, and there might be a "selection bias." For instance, professional family trust agents (trustees) often need to manage wealth for successful business families. Thus, they are more likely to observe family firms with superior performance and may develop a positive impression on family businesses overall (Zellweger & Kammerlander, 2015). On the other hand, family therapists may often work with families experiencing conflict or other issues and may generally have a negative view on family business (Bowen, 1993). Hence, representativeness suggests that an investor's initial perception of a family business might derive from the prevalence and homogeneity of family firms in his or her surroundings.

Stereotype Heuristic

Individuals often use prevailing or socially dominant beliefs (namely stereotypes) as their cue to make sense of a subject, and the probability of individual adoption of certain opinions increases with respect to the proportion of people who have already done so. Often referred to as *the bandwagon effect*, when more people come to believe in something, others also *hop on the bandwagon* without seeking facts (Nadeau, Cloutier, & Guay, 1993).

Considering the role stereotypes plays in making judgments, one might expect that there may be regional and/or cultural differences in investors' perceptions of family businesses. As an example, Mittelstand firms in Germany play an important role in regional economy and are often depicted as "hidden champions" in business and innovation even with limited resources (Duran, Kammerlander, Van Essen, & Zellweger, 2016). Hence, investors in certain European countries might exhibit more confidence in family governance compared to those in other areas. As another example, in transitional and developing economies, powerful and wealthy families often engage in rent-seeking behaviors by cultivating political connections (Morck & Yeung, 2004). As a result, the public might perceive large family firms as unethical or opportunistic players and might hold a strong collective resentment or skepticism toward the *nouveau riche* and/or their offspring such as the case in China (Steinfeld, 2015). For instance, the Fuyao Glass Group, a Chinese family business controlled by Cao's family, entered the U.S. market through a *greenfield* investment in 2016. Such an opportunity-driven investment was initially perceived by the public as a cover[1] for the family's tunneling activities such as transferring wealth into the United States.

Information Availability

[1] http://www.bjnews.com.cn/news/2017/11/01/462437.html available on March 15, 2018. News is in Chinese character.

An individual’s assessment of an entity is also affected by the availability of information, meaning that an investor’s evaluation of a family business depends on information the family business chooses to release as well as information the investor can access to (Hauswald & Hack, 2013). Indeed, research shows that the informative value of publicly-accessible financial data can strengthen the owning family’s reputation (Li, 2010), although family firms are often secretive and reluctant to release private information compared to nonfamily firms (Iyer, 1999).

On the other hand, due to information asymmetry and the anchoring effect mentioned earlier, individuals often rely on one piece of information, which is usually the first piece of information acquired on a particular subject. Referred to as *focusing effect*/*illusion*, this heuristic occurs when people place excessive importance on the first-caught aspect of an event, leading to a biased focus on one aspect and neglect of others (Hammond et al., 1998). One wrongdoing by a family business member can inevitably harm not only his or her personal reputation, but also that of the family as well as the business. For instance, a family scandal, such as an extramarital affair, can significantly damage the credibility of owning family, which creates a negative impression regardless of the firm’s operation and performance. In this regard, the investor may partially focus on the family scandal and develop a negative view of the family business even when the scandal may not be relevant to the investment decisions. At the same time, the investor may neglect the fact that a family business is a complex organizational system that involves other actors and activities.

Note that information availability can also be manipulated by the owning family as an impression management tactic. For instance, the family may intentionally separate the family system from direct involvement in daily management (Zellweger & Kammerlander, 2015), creating the impression that the firm is managed by professionals with minimal influence from the family. Thus, the type of information released can be a useful tool to mold investors’ perception of a family business.

Discussion

In this article, we extended Lude and Prügl’s work (2019) by introducing four cognitive mechanisms that may contribute to the development of various misperceptions of family business within the context of investment decisions. In the following section, we discuss potential future research in this area.

Future Research Directions

As the four cognitive mechanisms are novel to the family business field, it might be useful to empirically measure these constructs. In this regard, anchoring can be measured by asking for a respondent’s initial impression and past experiences toward family businesses as well as the temporal proximity and frequency of such experiences. Representativeness can be measured by asking to what extent respondents have family business in their networks and the types of these family firms. Stereotype heuristic can be measured via a respondent’s perception toward some stereotypical notions commonly associated with family business (e.g., long-term orientation, risk aversion, altruism). Information availability can be measured by the extent of information that the family business chooses to release to the public.

As highlighted by Lude and Prügl (2019) and as we have emphasized, the cognition literature, particularly the works by Kahneman and Tversky, remains a fruitful theoretical and conceptual foundation for our field. While our commentary focused on four cognitive factors, arguably, there are other factors that may also deserve our attention. Hence, future research may empirically examine our proposed cognitive factors as well as others which can influence family firm bias. Further, there might be other types of cognitive biases the public associates with family governance. In addition, we did not explore various factors related to the heterogeneity of family businesses. In fact, a misperception of one family business might differ from that of another. Future research may investigate other factors related to the owning family, the business, and their interactions in order to fully explicate the relationship between cognitive bias and family firm heterogeneity. Also, just as family firms are heterogeneous, so are individuals and groups. While we focus on investors in this study, future research may explore other types of stakeholders such as family and nonfamily owners, managers, and employees. Also, more effort can be dedicated to this inquiry from social and economic perspectives as national and regional cultures can influence the development of family firm misperceptions. Finally, cognitive factors as well as family firm biases may not be static over time. The exploration of the temporal evolvement of cognitive bias can also be a promising direction. In conclusion, we hope this commentary brings attention to the importance of cognitive factors and family firm bias. Clearly, more research is required to develop theories in this area and enlighten practice.

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