

CEOS' SUBJECTIVE FACTORS AND FIRM BEHAVIORS

A DISSERTATION ABSTRACT

SUBMITTED TO THE GRADUATE SCHOOL OF COMMERCE  
OF THE WASEDA UNIVERSITY  
BY

Hakaru Iguchi

IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

Hajime Katayama, Adviser

April, 2019

## **Introduction**

Because CEOs can affect the behaviors and performance of firms (Finkelstein, Hambrick, & Cannella, 2009; Hambrick, 2007), a great deal of research has documented the relationship between CEOs' psychological status and organizational behavior (e.g., Chatterjee & Hambrick, 2007; Hayward & Hambrick, 1997; Ou, Waldman, & Peterson, 2014). However, knowledge accumulated in other fields of social science has, by no means, been fully utilized in understanding the influence of CEOs on firm behavior. For example, in economics and sociology, subjective factors such as individual expectations and values are regarded as important factors in explaining individual behaviors. To the extent that firms' strategic decision-making and performance can be predicted by the characteristics of their CEOs (Hambrick & Mason, 1984), subjective factors of the CEO may have significant effects on firm behavior. However, in traditional management literature, these factors are either measured by secondary data that can easily be observed or are totally omitted from the analysis. In this dissertation, we directly observed subjective CEO expectations or values that had not been observed in previous studies, by using approaches to explain individual behaviors that have been used in other fields of social science. Utilizing the data on these expectations or values, we attempted to understand more accurately, the factors that have been regarded as important in management literature and grasp the influence of the factors that have not been accounted for in previous studies.

Till date, in other fields of social science, research has examined individual expectations and values as factors explaining their behavior. For example, in economics, since the 1990's, researchers have pointed out the importance of measuring the individual's probabilistic expectations to explain their choice behavior (Manski, 2004). In particular, when individuals make decisions under uncertainty, it has been revealed that individuals' expectations have high

explanatory power with regards to their choice behavior (Gan, Gong, Hurd, & McFadden, 2015; Hurd, Smith, & Zissimopoulos, 2004; Spaenjer & Spira, 2015). Moreover, when lifespan and health conditions matter to the individual's decision, subjective expectations are regarded as having a particularly important influence on individuals' decision (Dominitz & Manski, 1996; Giustinelli & Manski, 2018; Manski, 2004). In sociology, existing research shows that personal values, especially religious values, have a considerable influence on individual ethics-related behavior such as marriage, divorce, or crime (Bainbridge, 1989; Cochran & Akers, 1989; Evans, Cullen, Dunaway, & Burton, 1995; Heaton & Pratt, 1990; Lehrer & Chiswick, 1993).

In this dissertation, we have three research questions. The first question is "Why and how do CEOs' subjective career horizon affect long-term investment behavior?" CEOs' career horizons can be referred to as their expectations of career security over career termination (i.e., retirement). Extant studies reveal that when a CEO's career horizon is short, he/she tends to avoid long-term investment that will benefit the firm, and to instead make short-term investments that will benefit him- or herself (Canyon & Florou, 2006; Matta & Beamish, 2008). These studies assume that all CEOs uniformly retire at a given age and measure the career horizon using the difference between the uniform retirement age and the CEO's age. Therefore, these studies have a limitation, in that they do not deal with heterogeneity in career horizons amongst CEOs who are of the same age. Furthermore, measuring career horizons in this way causes a more serious challenge, in that it is impossible to distinguish between the effects of CEOs' career horizon, and that of their age. Study 1 resolves these issues by simultaneously introducing to the model, CEO subjective career horizon, and CEO age.

The second research question is "Why and how do the expectations of managerial succession by family-owned firm CEOs influence their investment time horizons?" This research

question is of particular importance in the context of family businesses. In family business research, the transgenerational succession, especially within the family, is considered to be one of the most important issues (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007). Accordingly, numerous publications on the family businesses concentrate on the characteristics of the successor, the succession process, and the influence of the successor's selection on the firm's strategic decision-making and performance (Herrmann & Datta, 2002; Shen & Cannella Jr, 2002). However, extant research has not sufficiently taken into consideration the possibility that the existence of a successor influences the decision-making of the incumbent CEO. Moreover, even when there is no agreed-upon successor, the CEO's expectation that his/her successors will be found, may affect their firm behaviors. Taking this perspective, Study 2 investigates the ways in which CEOs' expectations of managerial succession affect decision-making related to long-term investments, by directly measuring the subjective probability that a successor will be found.

The third research question is "How does a CEO's religiosity influence his/her firm's environmental proactivity?" Although previous studies find antecedents of corporate environmental proactivity from diverse theoretical perspectives, their explanations are restricted mainly to firm or institutional characteristics. Little research sheds light on the micro-foundations of environmental proactivity (Aguinis & Glavas 2012). Study 3 regards CEOs' religiosity as a possible factor in corporate environmental proactivity, given that individual religiosity evokes individual morality. Many previous studies that have dealt with the relationship between religion and individual behavior have used religious affiliation as an independent variable. However, there may be differences in religious views, even amongst members of the same religion. In the field of environmental economics, a recent study indicates that even after controlling for their religious affiliations, an individual's religiosity affects his/her environmental behaviors (Owen & Videras,

2007). This study measures CEOs' religiosity in the same way as Owen and Videras (2007), and thereby clarifies the influence of CEOs' religiosity on environmental proactivity.

In this dissertation, we analyze small and medium-sized enterprises (SMEs) to answer these research questions. Because SMEs face a variety of restrictions such as inadequate resources, a limited ability to raise funds, and a shortage of human resources (Welsh & White, 1981), the CEO plays a significant role in strategic decision-making (Lubatkin et al., 2006). Therefore, SMEs provide a suitable context to examine the influence of CEOs' subjective factors on firm behavior. Furthermore, by targeting SMEs, it is easier to obtain a response to questionnaires directly from CEOs. In the case of large companies, even when designating the CEO as a respondent, it is difficult to actually obtain a response from the CEO, him- or herself. Hence, with regards to this point, targeting SMEs is a clear advantage for this dissertation.

The abstract of each study is as follows.

### **Study 1 - The CEO's Subjective Career Horizon and Environmental Investments**

While there is increasing interest in the topic of CEOs' career horizons, previous studies still have a methodological weakness. Since these studies have used CEO age as a proxy for the CEO's career horizon, they could not distinguish the effect of the career horizon from that of CEO age. This article directly measures the CEO's subjective career horizon by conducting a survey on manufacturing SMEs and also examine their effects on environmental investment behaviors. Moreover, we assess the validity of using the CEO age as a proxy for CEO career horizon. For these purposes, we estimate two different models: (1) a model with subjective career horizon and CEO age, (2) a model with CEO age only. Probit regressions show that subjective career horizon is positively and significantly associated with a firm's environmental investments. Moreover, we

obtain consistent results with previous studies in the model with CEO age only. However, the marginal effect of CEO age is smaller than that of CEO subjective career horizon. While these results indicate the validity of using CEO age as a proxy for CEO career horizon, they suggest that previous studies have underestimated the effect of career horizon.

## **Study 2 -Family CEOs' Expectations of Managerial Succession and Investment Time**

### **Horizons**

How do family firm CEOs' expectations of succession in their firms influence their investment time horizons? By extending the socioemotional wealth perspective from the myopic loss aversion framework, we propose that family firm CEOs who are confident that a successor will be found are more likely to engage in long-term investments. Additionally, the likelihood of long-term investment is more positively associated with CEOs' expectations of managerial succession by non-children than by their children. We examine a sample of 410 manufacturing SMEs run by families in Tokyo, Japan, and find statistical support for the hypothesized relationships.

## **Study 3- CEOs' Religiosity and Corporate Proactivity**

How does a CEO's religiosity influence his/her firm's proactive behaviors to promote environmental integrity? Previous studies of corporate environmental proactivity have limited insight into their micro-foundations, which are individuals and their interactions within a firm. From an upper-echelon perspective, we argue that CEOs with religious beliefs are more likely to engage in corporate environmental proactivity because they hold higher religious role expectations that they are monitored to fulfill. This perception of monitoring promotes prosocial behaviors,

which increase public goods. We examine a sample of 1,184 manufacturing SMEs in the Tokyo metropolitan area in Japan. Using latent class modeling, we classify respondent CEOs' religious belief systems into eight classes and find that a CEO with religiosity is more likely to engage in corporate environmental proactivity. In addition, the positive impact of CEOs' religiosity on the firm's environmental proactivity is weaker when the CEO uses a more participative decision-making process. We provide new theoretical and empirical ways of explaining managerial religiosity as a trigger of corporate environmental proactivity.

### **Contribution**

This dissertation contributes to the broader literature on the relationship between upper echelon characteristics and organizational strategies, by showing the importance of CEOs' expectations and values. Study 1 represents a methodological improvement on CEO career horizon literature. Since previous studies have used CEO age as a proxy for CEOs' career horizon, they are unable to distinguish the effect of CEOs' career horizons from that of their age. We addressed this challenge by directly measuring CEOs' subjective career horizon through a survey and demonstrated that previous studies might have underestimated the effect of career horizon. Put differently, the impact of the opportunistic behavior of CEOs approaching retirement on long-term investment behavior may be even greater than that indicated in existing studies.

Study 1 also carries important implications for literature on the effects of CEO age on their decision-making. Although management research has regarded CEO age as one of the most important variables that affect CEOs' decision-making, there is no consensus on the effects that CEO age really have on their decision-making. For example, some studies emphasized the negative aspects of the increasing age of CEOs. They suggested that older CEOs find difficulty in

integrating the information required for decision-making (Clapham & Schwenk, 1991; Hambrick & Mason, 1984), and bring attention to their personal benefit, such as their reputation and wealth (Dechow & Sloan, 1991; Murphy & Zimmerman, 1993; Matta & Beamish, 2008). On the other hand, other studies focus on the positive aspects, suggesting that the accumulation of firm-specific experience and managerial skills increase as CEO gets older (Buchholtz, Ribbens, & Houle, 2003). In fact, although almost all firm-level studies include CEO age in their empirical models, few studies systematically explore the effects of CEO age on firm outcome (Krause et al. 2014). Our methodological improvement in Study 1 opens up the possibility to identify a more accurate effect of CEO age on their decision-making, by regarding the shorter CEOs' subjective career horizon as negative aspects of the increasing age of CEOs.

Regarding theoretical implications, Study 2 contributes to family firm succession literature. Although organizational researchers have indicated that the beliefs of top managers are predictors of corporate behavior, few studies have theoretically and empirically identified the beliefs that have impact, and the ways in which they impact. To bridge this gap in the literature, Study 2 successfully applies the concept of socioemotional wealth to explain the ways in which a family CEO's expectations of managerial succession determine the choice of investment time horizons, by varying the periods over which firms evaluate investments. This study also has methodological contributions to succession literature, suggesting that family CEOs have different expectations of managerial succession, despite having children. For example, children might choose their own jobs and be reluctant to take over the position of CEO if their own jobs are more profitable. Since the presence of children is a necessary, but never a sufficient condition for family managerial succession, measuring the CEOs' expectations of managerial succession provides more reliable estimation results than the number of children, which has been used in succession literature.

The results of Study 2 indicate that even if a CEO does not have a successor, he/she would carry out long-term investment in the expectation that successor will be found. This result has important policy implications for SME development. Nowadays, business succession issues are very urgent for Japanese SMEs because of a declining population. Moreover, CEOs of SMEs are facing the difficulty of succession, since their children are often not interested in taking over their business. Under these circumstances, by providing information about potential successors to aging CEOs who are not ready to transfer their business, government agencies can not only save SMEs from involuntary termination as a result of succession failure, but also facilitate their long-term investments.

Study 3 clarified managerial religiosity as a micro-foundational mechanism of corporate environmental proactivity. Against the backdrop of a call for a serious investigation of religions in management studies (Chan-Serafin et al., 2013; Tracey et al., 2014), this study is the first attempt to explicitly clarify the link between a CEO's religiosity, and corporate environmental behaviors. Prior studies adopt the upper echelon perspective to examine the link between the nature of managers' personal values and beliefs, and types of corporate behaviors beyond the heterogeneity among top management teams and board members (Hambrick & Mason, 1984; Hambrick, 2007). Our findings indicate that managerial religiosity evokes morality and leads to corporate environmental proactivity.

### **Limitations and Future Research**

Care must be taken in interpreting the results of this dissertation. First of all, several limitations exist with regard to data collection. First, each study in this dissertation is based on analysis using cross-sectional data. We control for possible endogeneity bias due to CEOs'

idiosyncratic characteristics by using the instrumental variables method in each study, but there is still a possibility that reverse causality or other sources of endogeneity exist, especially in Study 1.

Our results may also suffer from the common method bias. This problem is caused either by using a common source to obtain information on both, the dependent and independent variables, or by specific characteristics of a questionnaire that strengthen respondents' tendency to answer the survey questions in a distorted way (Fuller et al., 2016; Jakobsen & Jensen, 2012). However, because common method bias is mostly related to perceptual measures, the fact-based variables used in our questionnaire, such as internationalization, R&D implement, new product development, and environmental behaviors, are unlikely to be affected by such problems. Moreover, we assured the respondents that their responses are completely anonymous, thereby mitigating the probability of social desirability bias in their answers (Podsakoff et al., 2003). Therefore, common method bias is unlikely to be a challenge for the three studies in this dissertation.

Furthermore, partly because we needed to obtain a direct response from the CEO, the data of this dissertation are drawn from a survey of Japanese SMEs. It thus remains an open question as to how much of what we empirically found can be generalized to large firms, and how much of it is limited to Japan. A CEO's subjective factors may not play an important role in large firms, because his/her powers are more restricted, and accordingly, decision-making in today's large firms tends to be collective rather than individual. On the other hand, because CEOs of SMEs tend to have significant powers in decision-making based on their large ownership and long tenure, they can proceed with their preferred decisions at will. Therefore, our findings for SMEs may show relatively larger effects of CEOs' subjective factors on firm behaviors.

Despite these limitations, it is noteworthy that this dissertation provides compelling evidence that CEOs' subjective factors have significant impacts on their firms' behaviors. In future

research, including the organizational context may be useful to better assess the association between CEOs' subjective factors and firm behaviors. For example, although in Study 3, we found that CEOs' decision-making style moderates the relationship between their religiosity and corporate environmental proactivity, we did not include such an organizational context in Studies 1 and 2 due to the limitations of the data. Future research should test the moderating effects of the organizational context on the relationship between CEOs' subjective factors and firm behaviors in a more sophisticated way.

Another possible research avenue is to address the homogeneity/heterogeneity of religious beliefs among top executives. As Bromiley and Rau (2016) argue, top management teams (TMTs) are one of the sources of moderating effects on the relationship between CEOs' values and strategic decision-making. In our context, this argument suggests that CEOs derive more support from members of their boards if CEOs' religious views are similar with those TMT members, than if not. Therefore, it may be worthwhile to examine whether, and to what extent the homogeneity/heterogeneity of religious beliefs among top executives influences the role of the expectations of managerial succession on long-term investment.

This dissertation extends the methodological repertoire of management research and suggests some additional research avenues for literature on the importance of CEOs' expectations and values. We hope that others will use these methodologies to further advance research on the role of executives' values and expectations.