

# *Entrepreneurial Motivations and Risk Decision Making: A Theoretical Framework*

Junping Yang

School of Economics and Management  
Zhejiang Sci-Tech University,  
Hangzhou, China  
jpyangjlu@163.com

Kuangjian Wu

School of Economics and Management  
Zhejiang Sci-Tech University  
Hangzhou, China  
wkj412@126.com

**Abstract**—From a purely theoretical standpoint, the paper aims to see if there is a relationship between entrepreneurial motivations and risk decision making and at the same time explore the role of cognitive traits, including risk perception and self-efficacy, in the relationship. Based on established theories and extensive researches on existing literatures, it can be deduced that: firstly, entrepreneurial motivation can influence risk decision making. Entrepreneurs who are necessity-driven are more inclined to avoid risk while those who are driven by growth and challenge are more inclined to seek risk. Secondly, risk perception can act as a mediator between entrepreneurial motivations and the risk decision making process. Finally, entrepreneurial self-efficacy has a potential moderator effect between entrepreneurial motivations and risk perception as well as between entrepreneurial motivations and risk decision making. The analysis presented by the paper provides a fresh and meaningful look into the risk decision making process and they could be a sound source for further empirical studies.

**Keywords**—*Entrepreneurial motivations; Risk perception; Self-efficacy; Risk decision making*

## I. INTRODUCTION

Entrepreneurship is regarded as the “pillar” of economic development for countries around the globe, as it has always been a strong force to spur economic output and create employment opportunities. In the meanwhile, however, with the emergence of countless new start-ups, their poor survival rate is a problem that should not be neglected. According to various sources of findings, around 50 percent of small to medium-sized (SMEs) bankrupted within first five years of establishment [1]. A lot of new venture firms have shown weaknesses and are unable to form competitive edge in the market. In addition, compared with those well-established companies, start-ups face many more uncertainties in their growth stage. Risks brought by the ever rapid changes in technology, market and economy pose significant threats to the survival of start-ups. Therefore, entrepreneurs must try to avoid those uncertainties and risks in order to minimize the chances of failure.

Because of the high risks involved with entrepreneurial activities, a lot of scholars have directed their attention toward risk management issues of start-ups. Numerous researches focus on the influencing factors in entrepreneurs’ risk decision making process while few of them look into the issues from the

standpoint of entrepreneurial motivations, which could help explain some of the root causes of entrepreneurial behaviors. In addition, it is also pointed out that personal traits and characteristics, such as risk perception and self-efficacy can have an effect on an entrepreneur’s risk taking decisions. Therefore, this paper is set out to find the relations among entrepreneurial motivations, risk perception, self-efficacy and risk decision making.

## II. LITERATURE REVIEW

### A. Risk Decision Making

In risk management, risk is “the effect of uncertainty or complexities on objectives” and thus it can be positive (often referred to as opportunities) or negative on an organization [1]. And these uncertainty or complexities arise from business environment and lead to the possibility that actual outcomes would deviate from expectations because of the limited abilities of entrepreneurs [2].

Under COSO Enterprise Risk Management (ERM) Framework, ERM is regarded as “a process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives”. The framework identifies eight components, among which the risk decision making, i.e. risk response, plays a vital role as it can directly impact the results of risk management. Entrepreneurs, like all human beings, tend to avoid risks [3]. But common notion that entrepreneurs are more risk prone are likely to be results of the job itself, as one cannot be expected to make money if they choose to rule out all the risky opportunities that can potentially be profitable [4]. Current researches on risk decision making largely focus on its influencing factors and few pays attention to its internal mechanism. And thus this paper aims to provide more insight into the risk decision making process by analyzing the effects of motivations and internal cognitive traits.

### B. Entrepreneurial Motivations

General human motivations, such as need for achievement, desire for independence and passion, are believed to affect entrepreneurship. Entrepreneurial motivations are not only the

internal drives for an individual's initial entrepreneurial activities but also the continuous support for leading the organization towards its objectives [5]. Therefore, entrepreneurial motivations play an indispensable role to inspire, guide and maintain entrepreneurial processes. The contemporary literatures of entrepreneurial motivations surround around the kinds of motivations, the relationship between motivations and entrepreneurial activities or the financial performance of the firm.

Tyszka et al. [4] categorized two types of entrepreneurs: necessity-driven and opportunity-driven entrepreneurs and they differ substantially. Necessity-driven entrepreneurs are similar to employees who value job security, work-life balance and stable income the most. Opportunity-driven entrepreneurs, on the other hand, are motivated by the need for challenge, achievement and independence. They recognize and exploit opportunism for potential economic gains [6]. These opportunities can influence entrepreneurial behaviors, though not fully dictate the process [7]. Therefore, researchers have found a positive relationship of opportunity driven motivation and organization performances [8]. However, there is lack of research that focuses on the relationship between motivations and risk decision making of entrepreneurs.

### *C. Risk Perception*

Because of the differences in value, culture, context, individuals evaluate risk factors in a very distinctive manner and thus exhibit different level of risk perception. The concept of risk perception is associated with the judgements that people make when facing different risks and these judgements are affected by intuition and past experiences on the probability of a bad event would occur, the control they have over its occurrence and the confidence in those estimates [9][10].

The researches on risk perception are concentrated on its impact on entrepreneurship and management decision making as well as its influencing factors. It is believed that entrepreneurs are more inclined than managers to perceive strengths and opportunities and less likely to perceive weaknesses and threats [11]. Consistent with this finding, Simon et al [12] found that individuals who perceive lower level of risk are more likely to start a new business.

So far, scholars have concluded that cognitive bias, risk propensity and entrepreneurial motivations can all affect one's risk perception. For example, Simon et al [12] and Keh et al [13] found out that cognitive bias could reduce the accuracy of risk perception. Risk propensity is not characteristic that inherent to entrepreneurs but an entrepreneur who are risk prone are likely to increase his/her risky activities in business [4]. Sitkin and Weingart [10] found that individuals with high risk propensity were usually associated with relatively low risk perception. Xie and Wang [14] noticed in their research that entrepreneurs with lower need of achievement tended to avoid risks and in turn act more conservatively, revealing an enhanced level of risk perception.

Scholars have not reached consensus on the relationship between risk perception and risk taking behaviors. Some believes that risk perception is negatively correlated with risk taking behaviors [10] [15]. While others conclude that a

positive relationship, which means the more risks one observes and the individual is more likely to make aggressive decisions [16]. The paper will try to confirm the relationship and also look into the role of risk perception between entrepreneurial motivations and risk decision making.

### *D. Self-efficacy*

Self-efficacy is the task-specific self-confidence in one's ability to master and implement the necessary personal resources, skills, and competencies to achieve a certain level of objectives [7] [17]. Therefore, self-efficacy is the subjective view of oneself and it does not necessarily reflect one's actual ability to achieve certain objectives.

Self-efficacy is one of the key factors in determining entrepreneurial intentions [18] [19]. Some show positive correlation between self-efficacy and the possibility of becoming an entrepreneur, which suggests that self-efficacy differentiates business founders from non-founders [20]. Scholars have also linked self-efficacy with firm performance. For example, Forbes [21] established that significant positive relationship between a founder's self-efficacy and his or her organization's financial performances. Others have shown that more self-confident founders achieved greater growth of new ventures [22]. Self-efficacy can heavily influence entrepreneurs' mindset in decision making process, which means the high level of self-efficacy can increase willpower and enhance the level of control on the outcome of certain entrepreneurial activities. When facing risks or hindrances, self-efficacy plays an important role in boosting self-confidence, encouraging counter-measures and achieving success [23]. Because of such effects of self-efficacy on decision making, the paper seeks to find its influence on entrepreneur's risk taking.

## **III. THEORETICAL ANALYSIS**

### *A. Motivations and risk decision making*

Attribution theory, first introduced by Fritz Heider in 1958, is used to explain how individuals explain the causes of behaviors or events around them [24]. In psychology, it is an important part of human cognition process where people use intuition, logic or judgement to look for the reasons of certain activities or events.

There are two types of attributions: internal or personal attribution, which explains that the causes of actions lie within individuals themselves, such as personalities, attitude and personal motivations; and external attribution, which points out external factors for the cause of actions, such as environment, effects of other individuals, external motivations or even luck [25]. The important contribution that the attribution theory made is that it helps to explain the complexity of human activities and provide a tool to understand and analyze these activities [26]. Among all the causes of actions, motivations serve as one of the factors in people decision making process. Entrepreneurial motivations are the origin and support of one's entrepreneurial activities and can have an effect on entrepreneurs' decision making process. Managing risk is a crucial component of the whole decision making process for

founders in the start-up companies where they operate in the uncertain and complex business environment. Therefore, it is expected that entrepreneurial motivations would affect risk decision making.

In addition, people who started their companies with distinctive purposes or value orientations can have very different expectations out of their own start-ups and thus these differences can have an impact how the founders interpret information. They may choose to focus on certain issues while ignoring others and as a result, they are likely to act very differently in the risk decision making process. To further analyze the differences in motivations, they are broken down to necessity-driven and opportunity-driven motivations. Compared with necessity-driven entrepreneurs, opportunity-driven entrepreneurs care less about material return or job security as, more often than not, they already have enough wealth and human capitals. Instead, they look for personal achievement and self-realization and thus they would tend to have higher expectation of themselves and willing to take more risks [27]. Hence, in their risk decision making process, necessity-driven entrepreneurs would tend to avoid risks, while opportunity-driven entrepreneurs would tend to seek risks.

### B. Risk Perception

Traits theory, developed by Gordon W. Allport, is also widely used in the study of entrepreneurship. The traits can be either personality traits or social traits. The former refers to cognition bias, personality, willingness to grow; and the latter is usually learned and developed through life and work, including family background, social network as well as past experiences. Risk perception and self-efficacy are two of the personality traits that are considered stable and also valuable focus to study the impact of traits on decision making, as they affect the processing of risk factors and thus affect risk decision making process [28].

As the driving forces of entrepreneurial activities, entrepreneurial motivations set different goals and guide business operation towards these goals. The motivations will affect entrepreneurs' tolerance of risk and in turn affect how they see, interpret and process business risks [29]. Lacking enough stable income or job security, necessity-driven entrepreneurs tend to be more cautious and sensitive to risks. Therefore, different motivations can cause entrepreneurs to exhibit different levels of risk perception and for a given situation; necessity-driven entrepreneurs will be more conservative and perceive more risks (higher level of risk perception) than those who are opportunity-driven.

The paper applies cognitive information-processing theory to develop a framework to examine the effects of risk perception and self-efficacy [30]. Cognitive information-processing theory suggests that although management decisions are based on information from the environment, much of the decision-making process itself is cognitive, especially under risky conditions [31]. Risk perception, as a subjective reaction to risks at hand, plays a pivotal role in the risk decision making process. Kahneman and Tversky [16] found that some of the excessive risks taking behaviors are the direct result of the weak risk perception of the decision makers.

In addition, the more risks those entrepreneurs are able to detect the less associated risk taking behaviors and vice versa [32].

Based on the analysis above, risk perception is very likely to have a mediating effect between entrepreneurial motivations and risk decision making.

### C. Self-efficacy

By applying the same information-processing theory, entrepreneurial self-efficacy can also affect risk decision-making process. Entrepreneurs with high self-efficacy are often confident in their risk management capabilities and even able to maintain such confidence in case when risk event actually occurs to implement effective rescuing measures. In contrast, entrepreneurs without such level of self-efficacy would exaggerate their inability of problem solving and thus limit their authority and ability to gather enough resources to control risks [17]. Therefore, opportunity-driven entrepreneurs with high self-efficacy tend to be even more risk prone and thus perceive even less risk when facing similar conditions as compared with those opportunity-driven entrepreneurs with low self-efficacy because of such confidence. It also holds true for necessity-driven entrepreneurs displaying high self-efficacy and therefore, the positive relationship between necessity-driven motivation and risk perception may be weakened. In this way, self-efficacy works as a moderator that could affect the strength of relationship between entrepreneurial motivations and risk perception.

Individuals who are able to notice more risks would try to avoid taking these risks. However, this effect would be weakened if that individual has a high level of self-efficacy as such confidence may promote risk intake. Therefore, similar moderator effect should also exist to weaken the relationship between risk perception and risk decision making.

Self-efficacy may also moderate the relationship between motivations and risk decision making. Because of the effect of boosted confidence, self-efficacy would cause entrepreneurs to take more risks and thus weakens the relationship between necessity-driven motivation and risk decision making while strengthens the relationship between opportunity-driven motivation and risk decision making.

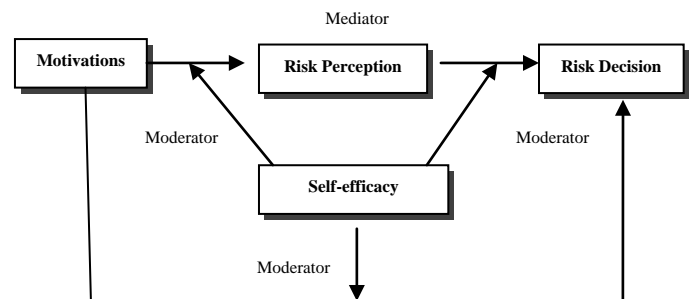


Fig. 1. Summarizes the results of theoretical analysis of this paper



#### IV. CONCLUSIONS

The paper seeks to find the relationship, if any, between entrepreneurial motivations and risk decision making from a purely theoretical point of view and sees how risk perception and self-efficacy influence such relationship.

To begin with, the analysis shows that entrepreneurial motivations can impact an individual's risk decision making. Different motivations set very distinctive objectives for the organizations for their founders to achieve and such difference would require decision makers to exercise different judgments in terms of how much risk to take. Therefore, it is crucial for them to be aware of their motivations and in term understand how their decision making process is affected. In all the risk decision making process, entrepreneurs need to carefully assess the scenario itself and, now by knowing one's motivation can cloud one's judgement, try not letting it interfere with your risk tolerance and risk appetite.

Furthermore, entrepreneurs need to understand the important role of risk perception. Risk perception is a subjective evaluation of the probability and controllability of a risk pertaining to an event. The higher risks perceived in the environment would cause entrepreneurs to act more cautiously and thus risk perception can affect risk decision making. What is affecting risk perception, according to the research, is entrepreneurial motivations as necessity-driven entrepreneurs tend to have higher level of risk perception and thus making them more risk averse than opportunity-driven entrepreneurs. It is also interesting to see that risk perception is a link (mediator) between motivations and risk decision making, which sheds light on how the three factors are interrelated.

Finally, self-efficacy can also contribute to how risk decision making process is influenced. Self-efficacy is a subjective perception of one's ability to accomplish the objectives or successfully complete tasks for his/her entrepreneurial activities. It is a presentation of confidence and it does not equate to egotism or arrogance. With such confidence, entrepreneurs are able to keep focused facing important decision in crisis and select the best possible solutions to tackle problems, making entrepreneurs bolder to take risky moves. While for those lack such confidence, they magnify their shortcomings, focus on potential risks and the downside of their decisions and cannot always manage to make proper decisions. Because of the potential moderating effect of self-efficacy, decision makers need to properly evaluate their level of self-efficacy and with a more complete understanding so they can objectively and calmly assess whether their business decisions are the result of their confidence or a comprehensive analysis of the circumstances.

The paper contributes to current literatures by approaching risk decision making from entrepreneurial motivations perspective and at the same time looking into how this relationship is influenced by decision makers' own cognitive traits. Since the results of the paper are entirely theoretical, they can provide a solid foundation for future quantitative researches.

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