Managerial Overconfidence and Its Impact on Enterprise Investment Behavior

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Keywords: managerial overconfidence, investment behaviour, corporate finance

Abstract: Traditional financial theory implies the hypothesis that the subject of economic behavior is rational-economic man. It is a rewarding exploration and complement for developing the corporation financial theory to bring managers' irrational factors into the research field of corporate finance. Overconfidence is an important psychological characteristic that affects managers' behavior. On the basis of summarizing the concept and behavior of overconfidence, this paper mainly analyses the causes and influencing factors of enterprise managers' overconfidence. Meanwhile, this paper also discusses the influence of managers' overconfidence on corporate investment, merger and financing behavior, thus providing some reference value for corporate governance practice.

1. Introduction

Enterprise investment has always been one of the most important central topics in the field of corporate finance. Enterprise investment means the behavior that corporations allocate their currency to different assets in any kinds in order to acquire the increment in resources. As the starting point of financial decision-making, investment decisions directly affect the company's financing and dividend distribution decisions, thereby affecting the company's business risk and business performance. Therefore, enterprise investment decisions can be one of the main factors for company growth. Nevertheless, most existing enterprise investment behavioral researches follow the traditional financial theory, which is based the "rational-economic individual" hypothesis, indicating that the individuals who made the economic decisions are rational and the goal they pursue can maximize the function. In fact, traditional financial theory neglects to do enough researches about the mentality, psychology and behavioral pattern of the individual who performs the economic behaviors. Many psychological researches indicate that people are not entirely rational, managers' cognitive bias, preferences, emotions and other psychological factors will lead to distorted investment behavior.

Psychological experimental evidence shows that overconfidence is a very robust psychological bias of the behavior person. Overconfidence is a psychological term which means the psychological deviation of overestimating the possibility of success, overestimating self-cognition about accuracy of the information and underestimating the accuracy and authority of the information from any other sources. The performance of overconfidence has permeating to every aspect in daily life. For example, surgeons, psychologists, invest bankers, engineers, doctors, lawyers, investors and managers all show the evidence of overconfidence in their behaviors when they are making the decisions. Hence, overconfidence is a pervasive phenomenon. Now overconfidence is more used to explain the behavior in financing area such as the impact the investor and management can cast on the financing market. Based on the related researches, it is widely believed that one of the reason enterprise decisions cannot always satisfy the maximization principle is the existence of the managerial overconfidence and other irrational factors. In another word, managerial overconfidence can cast a huge impact on the enterprise investment and the managerial behavior.

This paper firstly summarizes the concept and behavioral performance of the overconfidence, then focuses on the causes and influencing factors of enterprise managers' overconfidence, and explores the impact of managers' overconfidence on enterprise investment, merger and financing behavior. This study can help managers to recognize overconfidence and other psychological deviations and their influence on managerial decisions and behavior, and consciously take corrective measures to eliminate or reduce the adverse impact of irrational factors on enterprise investment and management decisions, so as to improve the efficiency of enterprise investment.

2. Concept and Behavioral Performance of Overconfidence

The word "overconfidence" originated from the outcomes of the psychological researches. The concept of overconfidence has pervasively existed in the psychological researches related to the calibration and probability judgement since 1960s. Gervaris, Heaton and Odean (2011) defined overconfidence as a belief that considering the self-cognitive of accuracy is more accurate than the accuracy itself in real world. In another word, individuals give more weight in information accuracy to themselves than they should [1]. The individual who possess overconfidence is more likely to make arbitrary decisions and insist on them, replacing the regular pattern of development in objects by his or her own will and ideas. Sometimes overconfident individual' will is consistent with the law of development, in this circumstance, overconfident individual can reinforce his self-confidence by making the decisions agreed with the developing patterns. However, when sometimes things go another way around, overconfident people insist on believing in something that is inconsistent with the law of things, they refuse to change their plans and goals, and reject others' opinions.

Griffin and Tversky (1992) found that people are more likely to show the sign of overconfidence when they are facing something they cannot solve by themselves or at least having tremendous amount of troubles to solve them. In contrast, people are more likely to show the signs of lack of confidence when they are asked questions that are easy to solve [2]. Based on the traditional marketing theory, it is our nature to avoid risks. In real world, however, people are toward risks, they prefer risks. Friedman and Savage (1948) found that although the chance of winning the lottery is only one in millions, there are still many people willing to buy lottery tickets, this behavior is exactly an example of risk seeking behavior. And overconfidence may be the cause of the risk seeking [3].

Overconfidence has its advantages and disadvantages. The advantage is that overconfidence can bring people happiness and optimism because overconfidence can bring people a feeling of superiority complex. Therefore, the positive emotion outweighs the negative one because people do not have to worry about the potential loss and risk for their decisions since they confidently believe that they can make the optimal decision. In addition, individuals who possess overconfidence can develop a way of autosuggestion which has an imperative influence on one's success, they are more encouraged and powerful once they acquire this king of belief. They also think thoroughly since they keep reminding themselves their success, they are good at catching the framework and trains of thought of a problem and they are more creative to support their own idea, However, overconfidence can also bring those people negative impression from others. For instance, because of overconfidence, the actor may make irrational decisions, which are often made by intuition and lack of theoretical and logical support. Therefore, individuals who possess overconfidence are exposed to more potential loss and are easier to fail.

3. Causes and Influencing Factors of Managerial Overconfidence

3.1. Experience and Age of Managers

The influence of managerial experience on enterprises is not a linear cumulative process, but unstable. Through threshold regression model, Lun Rui (2016) concluded that the accumulation of managers' early experience may improve managers' cognitive ability and reduce the probability of investment deviation. However, when managers have longer tenure, their experience will be "overloaded". As they grow older, their minds could be more rigid and cautious, which lead to the phenomenon of overconfidence [4].

3.2. Confirmation Bias of Managers

The theory of "limited rationality" told us that, one of the most severe and elusive results in people's prejudice is confirmation bias. Confirmation bias means people intentionally or unintentionally look for information that support their ideas in order to avoid or rebut the information that are against their decisions [5]. For instance, as a fan of a famous basketball player, you will be confident and looking forward to every game he plays. When his performance is terrible at one game, you will find any possible reasons for defending him, excessively believing that it was just an accidence and he could perform much better next time. That is, confirmation bias only gives attention to evidence and ideas that people agree with and intentionally avoids theory and evidence that are against people's belief. One of the consequences of confirmation bias is overconfidence. Managers will think that many comments and theories outside are supportive since they intentionally avoid things that are detrimental to them. Therefore, overconfidence in their behaviors could be developed during this process.

3.3. Shareholding Ratio of Managers

Shareholding ratio of managers determine the degree of the relationship between managers' personal interests and enterprises' interests. Managerial overconfidence will be depressed when their shareholding ratio is increasing since they would start to worry about that their personal profit could be hurt by their overconfidence. Hence, the decisions made by the managers who possess more shares in a corporation would be more cautious and conservative. In contrast, the decisions made by the shareholders who have fewer shares would be more aggressive and radical since their profit is less related to the company's profit, they are more willing to make some experimental decisions and take more risks. Therefore, we can assume that possessing relatively fewer shares in a company in a cause of overconfidence.

3.4. Scale and Internal Governance of Company

Comparatively speaking, managerial overconfidence more likely happens in the small-scale companies or in the companies that lack of internal governance. Firstly, in smaller companies (such as individual proprietorships), the number of managers is often small, or even only one manager. At this time, managers tend to be overconfident. Secondly, the company with inadequate internal management structure is also a source of managers' overconfidence. Because of the lack of effective mutual restriction mechanism within the company, managers can make decisions for the whole company. Accordingly, there is a negative correlation between company's internal governance level and managerial overconfidence. Managerial behaviors can be well regulated and restricted by perfecting company's governance mechanism, to some extent can this mechanism depress their irrational confidence and help them make more rational and steady decisions [6].

4. Impacts of Managerial Overconfidence on Corporate Investment and Financing Behavior

4.1. Impact on Corporate Investment Behavior

The first research which indicates the managerial overconfidence's influence on the enterprise investment comes from Roll (1986) who first introduces the concept of overconfidence to financing area. Roll (1986) indicates that overconfidence can not only explain the overspending phenomenons happend in merger and acquisition process, but also can explain other forms of investments [6]. This result is attractive to many reserachers who start to deeply exlopre this area. Heaton (2002) adopted a simple two-phase model to study the influences the mangement optmism casts on the companies' monetary flow prediction, the earnings from free cash flow and the perception of cost [7]. The results indicate that the most distorted behavior in enterprise investments possibly is overestimating the return of the investment. Optimistic managers consider that conpany's risk securities are underestimated by the capital market, hence reduce the projects which need external financial and have a positive net present value. In the meantime, optimistic managers overestimate the net present value of their company's new investment projects. Consequently, despite their loyalty to shareholders, they may also invest in projects that they mistakenly believe are positive and are actually negative. Zhang et al. (2014) analyzed the influence of managers' different sources of self-confidence on enterprise investment, including gender ratio of managers, average age of managers, shareholding ratio of managers, education level of managers, etc. The result shows that overconfidence of managers will mostly bring negative impacts on investment behavior of enterprises [8].

Generally speaking, there is a positive correlation between managerial overconfidence and the enterprise investment amount. When managerial overconfidence happends, they will pay most of their attention on opportunities they consider positive and profitable, and unconsciously neglect or weaken the potential loss. This irrational mentality will make managers bolder and dare to take risks, which will increase the amount of enterprises' foreign investment and finally lead to over-investment. Due to overconfidence, managers are sure to achieve the goals of expanding their investment and increase the companies' profit at the same time. However, this overconfidence many lead to unnecessary cost expasion and investments, adversely depressing the development of the corporation. In addition, when a corporation possess huge liquid cash funds, managerial overconfidence will impel managers to use those cash flow to increase investments because they believe that they are capable of making more profit out of the free cash instead of leaving it unused. To some extend, they increase the risk of low turnover of cash and over investments [9].

4.2. Impact on Mergers and Acquisitions

Due to overconfidence, managers will believe in the accuracy of their experience and knowledge, so that it is easier for them to make decisions about mergers and acquisitions. Comparing with other managers who lack of overconfidence, if their experience and knowledge are accurate enough, they will undoubtedly bring more correct decisions and seize more opportunities for enterprises to expand their enterprises and increase their market share through rapid mergers and acquisitions, eventually increasing the overall value of the company. However, managers with overconfidence is irration towards the mergers and acquisition decisions. Underestimating costs and overestimating profit can undoubtly hurt company's overall performance, and repeated failures in mergers and acquisitions can even bring bankruptcy crisis to enterprises [10].

4.3. Impact on Corporate Financing Decisions

With the influence of overconfidence, managers will prefer external financing, that is, the enterprise will pay interest and principal to raise funds. By conducting this financing method, there is no restriction on managerial operation, the rights of shareholders are not influenced by any external factors. This financing method is relatively fast, more efficient and safer for corporations. However, this method could reduce the shareholding ratio to some extend, hence casts impact on the long-term equity to debt ration in a long period of time. Therefore, this method is detrimental to the long-term development of the company. Meanwhile, overconfident managers prefer short-term debt to long-term debt, which tends to be riskier and puts more pressure on business operations.

5. Conclusion

The research on managerial overconfidence and enterprise investment has become a hot topic in the field of behavioral corporate finance. This paper comprehensively reviews the concept, behavioral performance, causes and influencing factors of overconfidence, and analyzes the influence of managerial overconfidence on corporate investment and other behaviors. Most current studies indicate that managerial overconfidence has a significant role in promoting corporate investment expenditure, that is, it often leads to overinvestment. Accordingly, managers can adopt some strategies to correct and regulate the deviations caused by managerial overconfidence in real world, such as perfecting internal governance mechanism. Previous studies have shown that good corporate governance mechanism can effectively restrain overinvestment caused by managerial overconfidence [8].

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