Research on the application of behavioural finance in corporate financing

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Abstract

Our country has been encouraging the development of small and medium-sized enterprises and has issued a series of policy measures. However, the financing difficulties of SMEs are becoming more and more serious, and they have become the main obstacle restricting the development of small and medium-sized enterprises. This paper analyzes the current financing situation of SMEs, and discusses the causes of financing difficulties from the perspective of behavioral finance, as well as provides a new thinking dimension for government decision makers.

Keywords

Behavioral finance; Small and medium-sized enterprises; Financing difficulties.

1. Introduction

Due to their strong growth and flexible operating mechanism, SMEs have gradually become the backbone of economic development, and their status and roles in the national economy cannot be ignored. Although SMEs are an indispensable economic force in China's economic development, there are many problems restricting their development and growth. Among them, the most important problem is the difficulties in financing.

Corporate financing can be divided into internal financing and external financing. Internal financing means the enterprises transform early profits into capital to expand production. However, due to the weak strength of SMEs, the profits accumulated in the early stage are not large, so the investment funds obtained through internal financing are small. External financing can be divided into debt financing, private lending, bank lending and equity financing. External financing is the main way for SMEs to get funds. This paper combines the theory of behavioral finance to analyze the internal and external aspects of small enterprises.

2. Analyze the financing difficulties of SMEs from the perspective of managers

From the perspective of behavioral finance, it can be seen that there are irrational factors in the financing process of SMEs as followed.

Overconfidence. The overconfidence in behavioral finance comes from psychology. Psychology has shown that people's illusion of control is the basis of overconfidence. The specific manifestation of overconfidence is that in daily life, people always think that they will be lucky, and subjectively consider that they will be less likely to suffer from the risks under the same condition than others. When making decisions, people tend to think that they are better than others at grasping the essence of things and understanding the truth of things. Overconfidence can be divided into overconfidence in prediction and overconfidence in decision-making. However, no matter what kinds of confidence, it is easier to underestimate the potential risk because the probability that you estimate is greater than the one that the fact exists.

Managers of small and medium-sized enterprises tend to be overconfident in the financing process. The overconfidence of SMEs' managers is that they tend to make the best decisions in their own opinions when they need to make the final decisions from several backup plans, and they tend to ignore the opinions of other companies. The flip side is that corporate decision makers are hesitant when they have to make decisions in only one backup plan. Overconfidence also exists in the selection

of managers. When selecting managers, the company tends to choose those who are confident and show outstanding performance. However, due to the information asymmetry, it is impossible for the company to fully understand all aspects of an employee. Such management is bound to have a greater tendency of self-attribution and is more prone to overconfidence, which leads to irrational behaviors of enterprise managers in the process of financing.

Herd behavior. Herd behavior is a special behavior. Herd behavior refers to the LOI of information that people know about decisions they are about to make and thus unsure. When people are vulnerable to the influence of market information and public opinion, they rely more on the decisions of the majority of people in the market rather than on their own considerations. The SMEs financing process also have a considerable degree of herd effect. The financing difficulty of China's small and medium-sized enterprises is a common problem, while the legitimate financing channels in China mainly include equity financing and debt financing. When some of the small and medium-sized enterprises get funds by going public, others also want to follow suit. Although China's stock market has sector to help enterprises to get listed, but its listing has strict restrictions on listing indicators. Small and medium-sized enterprises invest huge manpower and material resources to go public, which may cause more serious financial crisis to the enterprises and greatly weaken the survival and development abilities of the enterprises. Similarly, when the debt financing occurs, the auditing standards of bank loans are strict and rigorous. If the small and medium-sized enterprises cannot meet such standards, they are delusional to follow the SMEs with strong strength to get financing, which will inevitably suffer from the consequences.

Due to the common overconfidence and herd behavior of SMEs, they are inclined to equity financing. However, there are many restrictions on the listing financing of Chinese SMEs, which are the internal causes of the financing difficulty.

3. Analyze the financing difficulties of SMEs from the perspective of external stakeholders

The financing difficulties of SMEs can be divided into two aspects: the bank credit decision and the behavior of investors in the capital market.

Bank credit decision. In the analysis of bank credit decision, we analyze the prospect theory of behavioral finance and herd effect.

1). Prospect theory.

Kahneman and Tversky established the prospect theory model in 1979, which became an important theoretical foundation of behavioral finance. The difference between prospect theory and traditional expectation theory of financial assets is that the weight of the investor's utility maximization is no longer equal to the probability, and the utility is no longer a utility function, but a value function. In prospect theory, people always reduce or exaggerate the event probability. Using prospect theory, we can explain the irrational behavior of bank credit decision.

For example, suppose the bank has 5 million yuan of loans which is ready to be issued. There are two alternatives.

Plan A: 5 million is distributed to 1 large company

Plan B: 5 million is distributed to 10 small and medium companies. Among them, the loan repayment rate is 98%. If a business can repay a corporate loan, the bank's principal plus interest rate is 103%. Instead, the bank loses all principal and interest.

The traditional expectation theory can calculate the expected value of plan A and plan B, but the variance of plan A is greater than the variance of plan B. The large variance of plan A indicates that plan A is more likely to fail to return the investment and interest. Therefore, according to the assumption of rational economists, the bank should choose plan B, that is, to make loans to 10 small and medium enterprises and reduce the investment risk.

But when calculating according to prospect theory, since the default rate of 2% is subjectively minuscule, lenders generally consider it an impossible event, and thus the bank lending decision makers consider the 98% probability to be 100%. In this case, according to the traditional expectation theory, the expected value of plan A is greater than that of plan B. Bank policy makers will choose to implement plan A, which is to provide loans to a large enterprise.

The above is just an example of a bank. If every bank makes decisions based on the prospect theory, the capital of the whole society will flow to a small number of large enterprises, while most of the small and medium-sized enterprises that really need the capital to maintain their operation cannot get any bank loans. In this way, the financing difficulties of small and medium-sized enterprises appear.

2). Herd behavior. When Banks make lending decisions to enterprises, they have the same serious herd effect as the managers of small and medium-sized enterprises. The herd effect of credit market can be divided into the herd effect of information flow and the herd effect of reputation. Information flow herding effect refers to the banks in the credit market. For the bankers can not fully understand the information of enterprises, when decide to make loans to which companies, they choose to give up by understanding their own information, but select the decision according to the other bank credit market. The result must be that banks are all inclined to big, creditworthy and powerful companies, while small and medium-sized enterprises are rarely favoured by banks. Reputation herding effect refers to the decision makers of banks in the credit market are not willing to take risks to select SMEs as loan objects in order to obtain certain performance and reputation. That's because bank managers and policy makers believe that following the market option will at least yield average profits, and that lending risk will be significantly reduced. This kind of subjectively low risk and average return investment decision is considered the most appropriate, then the possibility of SMEs to obtain loans is greatly reduced.

The four major state-owned commercial banks play an absolutely dominant role in China's financial system. When the credit of state-owned commercial banks is concentrated in large enterprises, small and medium-sized banks will reduce the loan of small and medium-sized enterprises due to the asymmetric information and herding effect. Therefore, it is difficult for small and medium-sized enterprises not only to borrow in state-owned commercial banks, but also to raise funds in small and medium-sized banks. If the economy falters and banks scale back lending, there will be few opportunities for SMEs to get loans from banks. Under the explanation of behavioral finance, the financing difficulty of small and medium-sized enterprises becomes inevitable.

The decision of investors in capital markets. When SMEs want to finance in the capital market, investors also have typical finance phenomena such as herd benefit and overconfidence, which make it difficult for SMEs to finance through equity. The main causes of herd effect in capital market are information similarity and information asymmetry. Information similarity of capital market refers to the information source and information content of small and medium-sized enterprises obtained by their investors. This is because SMEs' investors can't go deep into small and medium-sized enterprises like big institutional investors. They can only judge whether a small and medium-sized enterprise has the value of investment through the research reports of institutional investors and the reports of the news media. The so-called information asymmetry refers to the information asymmetry between the small and medium sized investors and institutional investors about how much information grasped by small and medium sized enterprises. The information similarity and asymmetry inevitably lead to the small and medium investors follow the institutional investors. When institutional investors are reluctant to invest in SMEs due to the economic downturn, a large number of small and medium-sized investors inevitably follow their lead, resulting in the difficulty of equity financing for small and medium-sized enterprises.

There is also overconfidence among investors in capital markets. The overconfidence of investors is mainly reflected in overreaction and underreaction. Investors have overconfidence cognitive bias and often overestimate their ability and knowledge. Overreaction refers to investors' habit of violating bayesian laws and exaggerating the probability of small probability events. When the share price of

a small number of SMEs in the stock market drops sharply, investors may think that this is the problem of the entire sector of small and medium-sized enterprises, which has led to overreaction and repeated selling. The sharp fall in the share price of small and medium-sized enterprises is not conducive to their concentration on the company. Underreaction refers to the anchoring effect of investor psychology on stock price. The so-called anchoring effect refers to that investors have a psychological point of view on the stock price, and believe that the stock price is the most reasonable stock price. Any stock price that deviates too far from this price level will be corrected. When the share price of some companies keeps soaring due to the increase of long-term profitability, investors may think that this is only a short-term benefit and ignore it, thus missing out on the investment opportunities for high-quality SMEs. And if these small and medium-sized enterprises cannot gain market recognition, then the possibility to continue to obtain funds from the stock market to expand the scale of production is greatly reduced.

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