

# Stock Price Volatility, Financing Efficiency and Default Risk of Corporate Debt

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**Abstract:** This paper describes the risk index of stock price collapse by financing quality, and analyzes the influence of commercial credit and bank loan on financing quality and market value fluctuation by studying the relationship between the financing cost of commercial credit, bank loan and bank loan and the risk of stock price collapse. It is found that there is a significant positive correlation between commercial credit and the risk of stock price collapse, a significant negative correlation between bank loans and the risk of stock price collapse, and a significant positive correlation between debt financing cost and the risk of stock price collapse. This shows that different ways of debt financing have different economic consequences.

## 1. Introduction

The efficiency of enterprise financing is a special research field and focus in China's financial circle. From the perspective of the national situation, the overall low financing efficiency of enterprises has seriously restricted the further development and growth of enterprises. On how to improve the efficiency of financing, the theoretical circle has carried out a lot of research from the choice of financing methods, the improvement of internal and external environment of enterprises and so on. The stock market is an important financing platform for enterprises[1]. In the stock market, the stock price is always in dynamic change. Then, will the fluctuation of stock price affect the financing efficiency of listed companies. How to make an impact. In this paper, the GEM listed companies are taken as the research samples to explore the effective evidence of stock price fluctuations affecting the financing efficiency of enterprises, and to provide theoretical basis and path choice for improving the financing efficiency of enterprises and the efficiency of the securities market.

Table 1 Industry distribution of enterprises

Factor	Number	Proportion (%)
Textile, clothing	732	40.06
Chemical	134	7.32
Electrical machinery	234	12.82
Metalware	156	8.56
Plastic	234	12.82
General equipment	113	6.18
Other	224	12.26

## 2. Financing Status and Problems of Listed Companies

### 2.1. Financing Status of GEM Listed companies

Gem, also known as the second board market, is an emerging market established to meet the needs of entrepreneurship and innovation. It is characterized by relatively low market threshold, strict information disclosure supervision, and higher market risk than the main board[2]. Most of GEM listed companies are engaged in high-tech business, generally with short establishment time, small scale and outstanding performance, but with high growth potential. It can be said that gem is a stock market with low threshold, high risk and strict supervision, and also the cradle of incubating

technology and growing enterprises.

## 2.2. Financing Problems of GEM Listed Companies

The scale of debt financing of GEM listed companies is generally smaller than that of equity financing, showing a downward trend by the end of 2016. Although the debt financing scale in 2013 and 2014 exceeded the equity financing scale, it is not because of the improvement of debt financing capacity of GEM listed companies, but because the IPO suspension of gem led to the decrease of equity financing. Although the scale of debt financing is small, it will make the financial risk control level of enterprises low, but it is not conducive to the use of financial leverage and tax shield brought by debt. In the long run, it will have a greater adverse impact on the development of enterprises.

The scale of equity financing of GEM listed companies is far larger than that of debt financing. In recent years, the scale of equity refinancing through additional issuance has grown strongly, from 5.1% in five years to 88.3% in five years. However, China's growth enterprise market is still in the early stage of development, and there is a certain degree of instability in its development.

The ability of debt financing is weak and the preference of equity financing is serious[3]. However, a single way of financing may increase the risk of financing and reduce the efficiency of financing. Some studies also show that debt financing is more efficient than equity financing. However, GEM companies have serious equity financing preferences, which may reduce the financing efficiency of GEM companies.

Table 2 Descriptive statistical results of main variables

Variable	Average value	Median	Minimum value	Maximum value	Standard deviation
NCSKEW	- 0.168	- 0.172	- 3.644	3.090	0.678
DUVOL	- 0.120	- 0.121	- 1.738	1.358	0.456
CREDIT	0.317	0.249	0.002	3.586	0.308
DEBT	0.180	0.167	0.000	0.759	0.122

## 3. Theoretical Analysis and Hypothesis Presentation

Stan initially put forward the market timing theory, arguing that unreasonable investor behavior in the capital market will affect the managers' reasonable capital decision-making. Since then, the theory has undergone many empirical tests. When the stock market price is high or the stock price is overvalued, reasonable managers take unreasonable actions for investors who invest in the stock, and use them. When the stock market price is low, when the stock price is evaluated at the same time, reasonable brokers tend to buy back more than stocks [4]. In order to verify the effectiveness of the theory in China, Liu Xiaolong also combines the actual situation of the domestic capital market. Due to the timing effect of the market, when the stock price rises, the amount of capital raised by issuing a certain stock increases, and the marginal cost of capital decreases. Therefore, reasonable managers like equity financing. In the case of bond market and stock market linkage, if the stock price rises, the cost of debt financing will be reduced [5]. Therefore, when the stock price rises, the cost of capital raising is relatively low and the efficiency of capital is improved.

## 4. The Formation of Default Risk of Enterprise Debt

The causes of default risk of corporate debt. The external factors include macroeconomic fluctuation, financial institution support, government function and enterprise operation cost; the internal factors include enterprise operation status, enterprise financial management ability and enterprise debt risk prevention awareness.

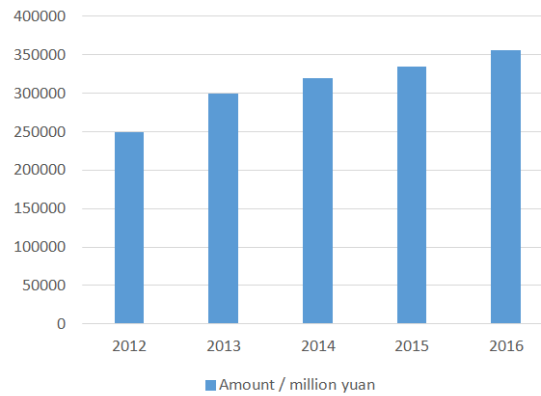


Figure 1 Financing scale of start-up companies

#### 4.1. External Factors

Macroeconomic fluctuations have a greater impact. At present, some private enterprises in Zhejiang are still distributed in traditional industries[6]. Due to the constraints of land, labor, raw materials and other factors, its production cost increases year by year. At the same time, most private enterprises in Zhejiang have small scale, short product life cycle and poor ability to resist market risk. There are many reasons why profit margins are getting smaller and smaller. According to the survey, the profit margin of 1421 companies is lower than 8%. Private enterprises are at the low end of the product value chain due to their small capital and asset size. Their products are more vulnerable to the impact of economic cycle fluctuations, so their ability to resist market risks is limited. With the outbreak of the financial crisis in 2008, this wave has a great impact on private enterprises in Zhejiang Province. Most of them are unable to pay their debts because of the backlog of products and the sharp drop in profits caused by export restrictions. Our survey shows that there are 915 companies, accounting for about 50% of the total, whose profits have declined due to macroeconomic fluctuations. Support from financial institutions is insufficient. According to the survey, the proportion of private enterprises in Zhejiang is about 33%. In terms of the proportion of equity investment, about 79% of the enterprises still rely on their own funds, the proportion of shareholder investment is only 18.5%, the proportion of venture investment is 17.1%, and the proportion of foreign direct investment used by all enterprises is 4.5%. It can be seen that for most private enterprises in Zhejiang, their financing methods are mainly through bank financing and private financing[7]. The survey found that 1181 companies raised funds through banks, 735 through private financing, and only 69 through the securities market. At present, the cost of bank financing and underground financing are both high, which makes the proportion of interest in the total debt of the company higher. Among the surveyed enterprises, the interest rate of 801 enterprises accounts for about 50% of the total debt, and that of 426 enterprises accounts for about 60% of the total debt. In the analysis of the causes of high interest rates, 709 enterprises think that the interest rates of bank loans are too high, and 165 enterprises think that they are caused by high interest rates.

#### 4.2. Internal Factors

The poor operation of private enterprises increases the risk of debt default. First, the competitiveness of enterprises' products is low. Most private enterprises in Zhejiang are backward in equipment technology, low in science and technology, and weak in product research and development. According to the survey, R & D revenue of 1109 companies is less than 3%, and 387 companies have no R & D departments. Due to the lack of R & D investment, the technical ability of products is not high, and the competitiveness of products is relatively weak[8]. In terms of product selection, there are more low-end products, less high value-added new industries and high-end products. According to the survey, 41 companies have high-end products, accounting for only 2.25% of the total. Secondly, after some enterprises enter into the virtual economy, their management ability becomes weaker. In recent years, with the global economic

recession, some enterprises enter the virtual economy field due to the lack of investment channels. Due to the lack of business information, enterprises have not achieved success in the field of virtual economy. According to the survey, there are 373 enterprises whose funds are related to the non physical to virtual sector, among which 201 enterprises have not made profits in the virtual sector such as finance, which has weakened the operation ability of the original business and increased the risk of debt default. Third, the quality of labor force is relatively low. Most of the private enterprises in Zhejiang Province are traditional labor-intensive enterprises, with fierce competition, low personnel quality and high elimination rate. According to the survey, 95.17% of the enterprises think that the labor quality is not high; 96.15% of the enterprises think that the industry competition is fierce and the elimination rate is high. The above reasons lead to the company's poor profit and increase the possibility of default of the company's debt.

## **5. Commercial Credit and Risk of Stock Price Collapse**

Because the current legal system and business environment in China are not perfect enough, the commercial credit based on the purchase and sale contract is not protected by law [9]. At the same time, as a low-cost capital source, commercial credit is an important financing way to ease financing constraints and improve liquidity. In order to obtain more commercial credit funds, it is possible to conduct earnings management, conceal the negative information of the company, provide low-quality or even false business and financial information to mislead suppliers, and make them believe that they are fully capable of paying for goods in the future. In addition, the default cost of commercial credit is relatively low, the internal control system is relatively imperfect, and the external supervision is also insufficient. The motivation of enterprises to conceal negative information to obtain more commercial credit may be stronger. In addition, in order to be able to sell goods faster, enterprises with weak competitiveness are often forced to provide commercial credit to enterprises with strong competitiveness. Therefore, enterprises with low market position, as creditors, do not have enough ability and way to collect and analyze the real operation and financial information of enterprises with high market position. This makes it more difficult for enterprises with low market position to find the negative information concealed by enterprises with high market position in order to obtain commercial credit. At the same time, it is difficult for enterprises with low market position to supervise and restrict the use and repayment of funds.

## **6. Debt Financing Cost and Risk of Stock Price Collapse**

The cost of debt capital of bank loan has a great influence on the decision of business investment and debt risk. At the same time, it shows that there is a high degree of information asymmetry between enterprises and banks. In the case of high cost of capital, in order to keep profits in the fierce market competition, the company is not suitable for loans [10]. Under the greater risk, individuals may choose projects or exceed the ability of investment companies. This will undoubtedly greatly increase the risk of enterprises and creditor banks.

## **7. Conclusion**

Therefore, stock price volatility and financing efficiency are closely related to the risk of corporate debt default. Therefore, the government should improve the commercial credit guarantee mechanism, guide enterprises to use commercial credit financing reasonably, and improve the enterprise credit system and relevant laws and regulations.

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