

## REVIEW

# Review of Financial Pressure

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### ABSTRACT

Different from foreign capital markets, china's domestic capital markets are special, which also determines that the research on financial pressure starts from the reform of state-owned enterprises, and draws lessons from the relevant theories of financial risk and financial fraud, thus gradually forming a more diversified research results.

## 1. Concept of Financial Pressure

The concept of financial pressure has not yet formed a definite definition, but scholars have expounded it from different perspectives. Guoping Wu, Jun Zhu<sup>[10]</sup>, Guoping Wu, Shi Ma<sup>[14]</sup> believe that the financial pressure is essentially the behavior pressure on the company from the financial point of view, and the main financial pressure should include debt service pressure, cash flow pressure, shell pressure, profit preservation pressure and signal pressure, caused by the decline of profitability. The debt service pressure shows that the enterprise itself has short-term or long-term debt, and whether the business activities of the enterprise can guarantee the most basic debt service ability is the guarantee to enhance the reputation. Shell preservation pressure, as one of the most concerned financial pressure indicators of listed companies, determines the acceptance of investors to the enterprise, and

as an effective way of financing for listed companies, it is very attractive.

In our country, the shell pressure of (Listed Company Under Special Treatment) by ST company is huge, and the pressure of maintaining profit can better reflect the position of the enterprise in the industry, find the gap and improve the core competitiveness. Huayou Duan, Rui Wang, Shengdao Gan<sup>[3]</sup>, Huayou Duan, Shengdao Gan, Quanyuan Xu<sup>[4]</sup> first applied the concept of pressure in physics and psychology to the explanation of enterprise financial pressure. It holds that the enterprise financial pressure is formed by the external environment and internal environment of the enterprise acting on the financial activities of the enterprise, that is to say, the pressure that the financial activity of the enterprise must bear is the pressure that the financial activity of the enterprise must bear. This force will affect the financial activities and business activities of the enterprise to a certain extent, and will also cause cer-

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tain psychological pressure to the management authorities, especially the managers. In the source and control of its financial pressure, Shengdao Gan<sup>[5]</sup> points out that financial pressure is a certain measure of financial and non-financial indicators imposed by controlling shareholders on enterprise operators. Wang Shujun<sup>[20]</sup> pointed out that financial pressure refers to the financial pressure necessary for an enterprise to operate in the internal and external environment and available resources, according to the demands of various interest groups. Hong Wang, Chunyan Liao and Yutong Liu<sup>[9]</sup> point out that the financial pressure is the result of the internal and external interaction of the enterprise, which is generally influenced by the environmental transmission mechanism in the business activities of the enterprise, but acts on the financial level.

## 2. Research on Financial Pressure

State-owned enterprises, as China's economy with public ownership as its main body The foundation of the system plays an important role in the reform of the market economy. Because of the new and old system, the financial pressure of the state-owned enterprises is increasing, the economic benefits are declining, more enterprises are in trouble, and it is difficult to find a solution to the financial pressure of the state-owned enterprises under the influence of the macro policy to become a major problem related to the national economy and the people's livelihood<sup>[1]</sup>.

With the reform of market economy, China's securities capital market has become active, many state-owned enterprises have been reformed and listed, and there have been more financial fraud. Bo Yu and Jinhui Deng<sup>[2]</sup>, based on the analysis of the causes of financial fraud, point out that the lack of control environment and the drive of financial pressure are the important causes of corporate fraud. The relationship among them is that in the "soil" of the lack of control environment, the "seed" of financial pressure will germinate the "bud" of fraudulent financial report.

At present, many enterprises are facing financial pressure, the reasons for these pressures are various, especially the particularity of small and medium-sized enterprises in our country, the problem of financing difficulties exists for a long time, resulting in difficult to bear huge financial pressure and go to the brink of bankruptcy, so high financial leverage is particularly prominent in the financial pressure of small and medium-sized enterprises<sup>[3]</sup>. In terms of the sources of financial pressure in SMEs, Huayou Duan, Shengdao Gan and Quanyuan Xu<sup>[3]</sup> pointed out that the information asymmetry between shareholders, creditors and managers is the only reason, and the result of this asymmetric information is not all negative, which

may encourage interest groups to abide by the contract rules<sup>[4]</sup>. Similarly, the financial transparency of listed companies is high, and the contradiction between financial efficiency and financial equity must be properly handled, otherwise the disharmony of company labor relations may lead managers to abandon contracts and choose financial fraud in the face of higher financial pressure<sup>[5]</sup>. The goal of enterprise development is not only to gain the maximum market share and profit maximization, but also to accept the supervision of the public and gain a good reputation, so<sup>[6]</sup> to demonstrate corporate social responsibility and R&D investment-agency cost mitigation or financial pressure with 3,791 full samples of A-shares and 2412 samples of disclosure R&D investment between 2012 and 2014? The empirical results show that the investment of social responsibility and R&D will increase the financial pressure of the enterprise and exert a heavy burden on the enterprise. In order to reduce the financial pressure of the enterprise and reduce the investment of social responsibility properly, the enterprise should set up a special fund to ensure the division of financial resources with the enterprise.

With the continuous improvement of China's capital market and the experience of foreign developed capital market, the application of derivative financial instruments in the financial management of domestic listed companies is generalized.<sup>[7]</sup> from 2012 to 2014, 500 manufacturing listed companies were selected, and the return on net assets (ROE) was used as the index to measure the financial pressure, and the model was established to verify that the investment behavior of the enterprises with high financial pressure was cautious and be ware of further financial risks. And<sup>[8]</sup> through the concrete derivative financial instrument, explained the listed company under the financial pressure influence, according to the demand and the market operation trend, the rational choice derivative financial instrument. Financial pressure can not only affect the financial situation of the enterprise as a whole, induce the possible financial risk, but also play a guiding role in the business activities of the enterprise together with other variables as one aspect. Hong Wang, Chunyan Liao, Yutong Liu<sup>[9]</sup>. This paper comprehensively studies the relationship among the two major financial pressures (performance pressure and tax pressure), corporate governance efficiency and earnings management. It is found that under the condition of high corporate governance efficiency, the financial pressure of enterprises is relatively small. It is necessary to avoid the financial crisis caused by financial pressure agglomeration and guide enterprises to enter a benign growth road<sup>[9]</sup>. At the same time, because of the high pressure of performance and tax burden, it may trig-

ger the motivation of management earnings management.

### 3. Research on the Evaluation Method of Financial Pressure

The existing scholars have different evaluation methods of financial pressure, through the construction of different models and index system to evaluate and analyze the financial pressure.

An empirical study. Guliang Tang, Zhao Fan (2009) first extended the pressure test mechanism widely used in financial enterprises to industrial and commercial enterprises, using free cash flow (FCF) as the enterprise risk early warning test model, divided into four modules: operating net cash flow, working capital, long-term investment and external financing (especially debt financing)<sup>[10]</sup>. Shuofeng Wu<sup>[7]</sup> takes 500 companies listed in manufacturing industry as the research object, from the source of financial pressure, using the return on net assets (ROE) as the factor of financial pressure, choosing three measures of solvency, profitability and operational ability to analyze the more reasonable investment behavior of enterprises. Fangfang Wu (2018) based on the change of financial pressure in the coal industry before and after the supply-side structural reform, constructed the index system of debt service pressure, shell protection pressure, earnings protection pressure, operating pressure, cash flow pressure, and analyzed the current financial pressure state of the coal industry as a whole. Wang Hong, Liao Chunyan, Liu Yutong<sup>[9]</sup> extended the evaluation index of financial pressure from performance pressure to tax burden pressure, taking legal tax rate, average tax rate and actual tax rate as tax burden pressure index, constructing different empirical models to study the relationship between financial pressure, earnings management and corporate governance efficiency.

Logistic regression model. Ma Shi<sup>[14]</sup>, Zeng Yueming, Cui Yanlai, Chen Yun<sup>[12]</sup> all through empirical research, the financial pressure of listed companies and the relationship of information disclosure. In addition to the fact that the cash flow pressure is not significant to the information disclosure violation, the other debt service pressure and the shell-keeping pressure are significantly related, while the latter takes 74 listed companies with the information disclosure violation of the Shenzhen Stock Exchange from 2006 to 2009 as the sample, using the logistic regression model as an explanatory variable and the characteristics of the company's equity board of directors to analyze the factors of information disclosure violation. The results show that the relationship between the debt service and the company's information disclosure is positive, and the

former is consistent with the empirical results<sup>[11,12]</sup>. On the basis of using the former two analytical frameworks for reference and using the model, Junqing Zhang<sup>[13]</sup> selected the illegal listed companies disclosed by CSRC and stock exchange from 2007 to 2009 as large samples, and again proved the consistency of the above two research results by using Logistic regression model. Using the logistic regression model to examine the influence of various factors on the behavior of derivative financial instruments in listed companies from 2012 to 2014, Shi Ma<sup>[14]</sup> proved that the greater the financial pressure of listed companies, the more likely they are to use derivative financial instruments to resolve the financial pressure.

Enterprise management entropy model. The idea of managing entropy comes from the law of entropy proposed by Clausius. Peiyu Ren, Li Zhang, Yong Song<sup>[15]</sup> pioneered the application of the law to complex management science by proposing the concept of management entropy<sup>[16]</sup>, that is, the management system represents the integrated nonlinear efficiency ratio state of energy state and order degree in air at a certain time. The greater the management entropy value of the enterprise system, the more disordered the internal management is; on the contrary, it indicates that the internal management of the enterprise is more orderly, which indicates that the financial situation of the enterprise reflects the operation activity of the enterprise very well. Ling Wu, Peiyu Ren, Weizheng Chen, et al.<sup>[17]</sup>, Peiyu Ren, Miao Wang, Jingfei Ren, et al.<sup>[19]</sup> systematically describe the development of entropy theory, put forward the law of decreasing management efficiency, and evaluate the comprehensive performance of enterprises under the framework of entropy theory and stakeholders through comprehensive rating index. Shujun Wang<sup>[20]</sup>, based on the perspective of management entropy, compares the existing financial pressure evaluation framework and puts forward the superiority of management entropy evaluation of financial pressure.

Domestic research is consistent with China's social-economic development and follows this research sequence. State-owned enterprises, as the foundation of socialist system, play an important role in the reform of market economy. In the 1990s, China began to establish a modern market economic order and gradually developed capital market. Policy the research on small and medium-sized enterprises is constantly on the rise, forming the current multi-level research, thus seeing that the scope of domestic research is constantly expanding and the level is more in-depth. Whereas the evaluation methods of financial pressure, more empirical research, logistic regression model, research object for large samples, or a certain industry, have integrity.

## References

- [1] Kexiong Wang, Tazhang Sun. Reflections on the Work of State-owned Enterprises to Turn Profit and Increase Profit [J]. *Shanghai Accounting*, 1995(07): 27-29.
- [2] Bo Yu, Jinhui Deng. The cause of formation theory of fraud financial report[J]. *Journal of Guangzhou Institute of Economic and Management cadres*, 2002(03): 35-40.
- [3] Huayou Duan, Rui Wang, Shengdao Gan. The road to success. Analysis on mechanism and countermeasure of financial pressure of small and medium-sized enterprises [J]. 2014(1): 99-102.
- [4] Huayu Duan, Shengdao Gan, Quanyuan Xu. Literature review of financial pressure in SMEs [J]. *Monthly Journal of Accounting (Part 2)*, 2014(10): 110-112.
- [5] Jinke Liu, Shengdao Gan, Shanshan Yang. A Comparative Study on Capital Financial Equity Measurement - Taking Listed Companies in High-Tech Industries as an Example [J]. *Managing the World*, 2016(1): 180-181.
- [6] Bo Yang, Chuan Lin. Corporate social responsibility and R&D investment-agency cost relief or financial pressure?[J]. *Journal of Yunnan University of Finance and Economics*, 2016, 32(4): 124-131.
- [7] Shuofeng Wu. An empirical analysis of investment behavior under financial pressure [J]. *Chinese market*, 2018 (11): 65-66.
- [8] Jianxiong He. Financial pressure of listed companies and the use of derivative financial instruments[J]. *Chinese business theory*, 2019, 778(03): 205-206.
- [9] Hong Wang, Chunyan Liao, Yutong Liu. Financial pressure, corporate governance efficiency and earnings management[J]. *Financial monthly journal*, 2019, 853(09): 11-18.
- [10] Guliang Tang, Zhao Fan. The “pressure test” was introduced to construct the risk “physical examination” mechanism of industrial and commercial enterprises[C]. 2009 academic annual meeting of the Financial Management Committee of China Accounting Institute, 2009.
- [11] Guoping Wu, Marsh. An empirical study on financial pressure and information disclosure violations of listed companies[J]. *Financial theory and practice*, 2010, 31(2): 59-63.
- [12] Yueming Zeng, Yanlai Cui, Yun Chen. Research on the Influencing Factors of Information Disclosure Violation of Listed Companies in China - An Empirical Analysis Based on the Data from 2006 to 2009[J]. *Economic Problems*, 2011(1): 116-120.
- [13] Junqing Zhang. An Empirical Study on Financial Pressure and Information Disclosure Violation of Listed Companies [J]. 2013(21): 32-33.
- [14] Marsh. Research on Financial Pressure and Application of Derivative Financial Instruments in Listed Companies[J]. *Modern Management Science*, 2017(01): 117-119.
- [15] Peiyu Ren, Li Zhang, Song Yong. Management entropy based on complexity science, management dissipative structure theory and its role in enterprise organization and decision making [J]. 2001(06): 142-147.
- [16] Peiyu Ren. On the strategic decision of reengineering organization in management efficiency[J]. *Economic system reform*, 1998(3): 98-101.
- [17] Peiyu Ren, Weiping Yu, Anhua Yang. Research on Life Cycle and Ability Strategy of Chinese Listed Companies Based on Management Entropy[J]. 2004(10): 76-82.
- [18] Ling Wu, Peiyu Ren, Weizheng Chen. Entropy Theory in Management System and Entropy Value Evaluation of Enterprise's Comprehensive Performance under the Framework of Stakeholders [J]. *Soft Science*, 2004(01): 39-42+46.
- [19] Peiyu Ren, Miao Wang, Jingfei Ren. From Natural System to Management System - The Stage of Entropy Theory Development and Management Entropy Law [J]. *Managing the World*, 2013(12): 188-189.
- [20] Shujun Wang. Research on the Evaluation Framework of Enterprise Financial pressure from the Perspective of Management Entropy[J]. *A New academic Vision of Sichuan Institute of Commerce and Industry*, 2017(2): 47.