

# Research on Convertible Bond Financing in China

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## ABSTRACT

Convertible bonds are bonds with stock options, which have advantages that traditional debt financing and equity financing do not have. This article mainly uses The New Steel as the research object to analyze the clause design, motivation and reasons for the failure of convertible bonds issued by listed companies in my country. Finally, it is concluded that the company must design the clauses reasonably, correct the issuance motives and choose the timing of issuance carefully.

**Keywords:** *Convertible bond, Financing management, Risk management, Capital structure.*

## 1. INTRODUCTION

Since the China Securities Regulatory Commission restricted additional issuance in 2017 and encouraged companies to finance through convertible bonds, the scale of convertible bond financing has increased day by day. Convertible bonds are bond, equity, convertible and redeemable, which are more flexible and lower risk than other financing methods.

However, the issuance of convertible bonds to obtain financing needs to meet the issuance conditions, design reasonable issuance terms and choose the appropriate issuance timing, and at the same time consider whether the company has the ability to bear risks and obtain benefits after the issuance of convertible bonds. Behind the attractiveness of convertible bonds is the hidden risk. For example, enterprises face the risks of capital structure imbalance, equity imbalance and capital repayment, investors face the risk of convertible bond clause design and stock conversion failure [1].

This article analyses the reasons for the failure of the case study of The New Steel's issuance of convertible bonds, so as to provide references for investors and issuers. It is hoped that the issuers can correct their motives and truly choose whether to issue convertible bonds from the perspective of corporate development. Rather than drifting with the tide because of the hot convertible bond market, it will eventually bring a crisis to the enterprise.

## 2. RELATED THEORIES

### 2.1. Signal Transmission Theory

The signal model theory mainly studies the problem of information asymmetry existing in the company's internal and external stakeholders. From the perspective of investors, the choice of a company's financing method is directly related to its actual operating status. Companies with good operating conditions can choose bond financing [2]. Companies with poor operating conditions lack a stable capital chain and have a higher risk of capital repayment. Therefore, they can choose equity financing to raise funds, so that companies can raise enough funds and can Avoid higher financial risks. However, for companies with good operating conditions, if they choose bond financing, they will worry about the risk of capital repayment. They choose equity financing and do not want to send negative signals to the stock market and affect the company's stock price. Therefore, in this situation, companies can usually choose to Converting debt financing to meet demand can enable companies to achieve the three purposes of raising funds, reducing financial burdens, and sending positive signals to the market.

### 2.2. Financial Leverage Theory

Financial leverage refers to the phenomenon that the profit per share of ordinary shares changes more than the change in profit before interest and tax due to the existence of preferred stock dividends and fixed debt interest. It mainly reflects the relationship between the

equity capital and the profit of the enterprise under the condition of debt. In improving the income of business owners, the role of debt and preferred stock financing is financial leverage, which is based on the comparative relationship between the return on investment (ROI) and the interest rate on debt. If the ROI is less than the debt interest rate, the business owner will bear additional losses [3]. If the ROI is greater than the debt interest rate, the investment income is enough to make up for the interest brought by the debt and there is a surplus, and the company will get additional benefits at this time.

### 3. ANALYSIS OF CONVERTIBLE BONDS OF THE NEW STEEL

#### 3.1. Company Overview

The New Steel Co., Ltd. is the largest steel company in Jiangxi. Its steel products are the most popular in the market. In addition, the company's main business is more extensive, including the production and sales of metal products, cables and chemical raw materials.

#### 3.2. The Design of the New Steel Convertible Bond Clause

On August 21, 2008, The New Steel publicly issued convertible bonds to the public on the Shanghai Stock Exchange. The main information is shown in Table 1:

**Table 1.** Introduction to the New Steel Convertible Bond Issuance

Project	Description
Number of convertible bonds issued	27.6 million or less
Bond issuance scale	RMB 2.76 billion
Bond maturity	5 years (2008-2012)
Coupon rate	1.5%, 1.8%, 2.1%, 2.4% and 2.8%
Face value of convertible bonds	RMB 100

#### 3.3. Analysis of The New Steel's Motivation for Issuing Convertible Bonds

##### 3.3.1. Reduce Corporate Financing Costs

The coupon rate of the convertible bond issued by The New Steel is much lower than the bank interest rate in the same period, indicating that the financing cost is very low, which reduces the company's financial burden while providing more cash flow for investment. It can

be seen that The New Steel is a convertible bond issued to raise funds through a lower financing cost.

##### 3.3.2. Relieve Short-term Cash Flow Pressure

The issuance of convertible bonds can relieve the short-term cash flow pressure of the issuing company to a certain extent. The New Steel's cash flow from 2005 to 2008 is shown in Table 2.

**Table 2.** The New Steel 2005-2008 cash flow statement

Project	2008 ¥ m	2007 ¥ m	2006 ¥ m	2005 ¥ m
1. Cash flow from operating activities				
Cash inflow from operating activities	17,145	5,427	1,192	991
Cash outflow from operating activities	16,923	5,358	1,104	950
Net cash flow from operating activities	222	69	88	41
2. Cash flow from investing activities				
Cash inflow from investing activities	95	8	12	11
Cash outflow from investing activities	4,927	686	23	57
Net cash flow from investing activities	-4,832	-67,9	-11	-46
3. Cash flow from financing activities				
Cash inflow from financing activities	8,837	4,695	167	223
Cash outflow from financing activities	4,413	1,211	217	233
Net cash flow from financing activities	4,424	3,484	-50	-10

It can be drawn from the table that from 2005 to 2008, the cash flow of The New Steel's operating activities showed a trend of curve fluctuations, and the fluctuation range was relatively large. From 2007 to 2008, the difference between the inflow and outflow of cash flow from operating activities increased by 2.2% year-on-year, indicating that the issuance of convertible bonds brought investment funds to enterprises, and the large amount of capital investment made the production and operation activities of enterprises flourish. The cash outflow of investment activities in 2008 showed a trend

of leaps and bounds compared with 2007, indicating that enterprises made a large amount of investment in 2008. It can be seen from this that from 2005 to 2007, companies may face urgent short-term funding pressure and the issuance of convertible bonds in 2008 has largely eased this pressure.

### 3.3.3. Optimize the Capital Structure of The New Steel

Issuing convertible bonds can optimize corporate capital structure. Table 3 illustrates the main financial indicators of The New Steel in the three years from 2005 to 2008.

**Table 3.** The New Steel's main financial indicators from 2005 to 2008

Project	2008	2007	2006	2005
Current ratio	0.79	1.00	1.36	1.38
Quick ratio	0.42	0.61	1.01	0.96
Asset liability ratio	64.56%	57.48%	47.17%	49.74%
Net assets per share	5.79	5.02	1.84	1.67
Turnover rate of accounts receivable (Times)	44.63	25.45	6.67	7.09
Inventory turnover rate (Times)	6.25	3.54	7.62	6.62

The current ratio and quick ratio of The New Steel from 2005 to 2008 have a downward trend, indicating that the short-term solvency of The New Steel has declined. It can be seen that the short-term solvency of The New Steel has not improved after the issuance of convertible bonds, but the downward trend has slowed down, indicating that the issuance of convertible bonds has alleviated the pressure on short-term solvency to a certain extent. During these four years, the asset liability ratio showed a continuous upward trend, and the upward trend slowed down in 2008. Therefore, it can be inferred that although the company's long-term solvency is weakening, the issuance of convertible bonds will also affect the enterprise's long-term solvency to a certain extent. In addition, from 2005 to 2007, the net cash flow of operating activities per share decreased significantly, which also shows that the company is facing the heavy pressure of cash flow shortage. However, after issuing convertible bonds in 2008, the net cash flow of operating activities per share increased compared with 2007, indicating that the

shortage of cash flow has been alleviated.

Issuing convertible bonds can not only bring huge cash flow to the new steel, but also adjust the enterprise capital structure by adjusting liabilities. The New Steel's liability structure analysis is shown in Table 4.

**Table 4.** The New Steel 2005-2008 debt structure analysis table

Project	2008	2007	2006	2005
Proportion of current assets	60.89%	64.10%	55.25%	40.63%
Proportion of non-current assets	39.11%	35.90%	44.75%	59.37%
Proportion of current liabilities	44.23%	47.11%	54.99%	51.46%
The sum of non-current liabilities and equity	55.77%	52.89%	45.01%	48.54%

It can be seen from the above table that the proportion of current liabilities in total assets of The New Steel increased from 44.23% to 54.99% in the three-year period from 2005 to 2007, and decreased only in 2008. At the same time, the proportion of current assets in total assets decreased from 60.89% in 2005 to 40.63% in 2008. Therefore, the capital structure of The New Steel shares has potential risks, because the current liabilities of the company are mainly used for long-term investment, and the current assets are not enough to guarantee the current liabilities, so the capital structure of the company should be adjusted.

## 3.4. Analysis of the Reasons for the Failure of The New Steel Convertible Bonds

### 3.4.1. Improper Timing of Issuance

The new steel chooses to issue convertible bonds when they are just emerging in China, which itself has huge potential risks. In addition, investors will only choose to convert convertible bonds into stocks on the premise that it is more profitable. Therefore, the issuance of convertible bonds also needs to consider the long-term operation of the enterprise [4]. A good time is particularly important for enterprises issuing convertible bonds.

### 3.4.2. Unreasonable Shareholding Structure

The New Steel Co., Ltd. is the largest shareholder of the new steel, with a shareholding ratio of 77.02%. One share dominates the company and firmly controls the enterprise, which will lead to the difficulty of reducing the conversion price and the failure of conversion [5].

## 4. CONCLUSION

### ***4.1. The Company Carefully Chooses Whether to Issue Convertible Bonds***

When the management makes a decision on whether to issue convertible bonds, it should first make a comprehensive analysis in combination with the company's own situation and external environment, and then select relevant decisions that can accelerate the company's realization of strategic objectives. Whether the issuance of convertible bonds is in line with the company's overall development objectives and plans, whether it can help achieve the company's strategic objectives, and whether it is coordinated or contradictory with various projects running by the company are the top issues affecting the future development of the enterprise [6].

### ***4.2. Reasonable Design of Convertible Bond Terms***

On the basis of weighing benefits and risks, the company should not only consider its own interest payment ability to determine the coupon rate, but also reasonably design the issuance period and redemption terms. [7] Therefore, the company needs to scientifically design the terms of convertible bonds in combination with its own characteristics and market environment, so as to attract investors while creating income for the enterprise.

### ***4.3. Correct the Financing Motivation and Carefully Choose the Issuance Time***

Under the supervision of the public, the market and relevant institutions, listed companies shall comply with laws and regulations for refinancing in the capital market. [8] If they violate the requirements of relevant laws and regulations, listed companies and their relevant

personnel may face legal sanctions. In terms of issuance timing, the company should correct its motivation and choose an appropriate period to issue convertible bonds when it has real financing needs, so as to bring maximum benefits to the enterprise.

## REFERENCES

- [1] Han Jing. Analysis on the impact of convertible bonds to shares on corporate value [J]. China management informatization, 2020 (3): 27-28
- [2] Xie Lin. On the risk and control of convertible bond financing [J]. Business news, 2020 (9): 97-98
- [3] Yu Haoyuan. Risk identification and Countermeasures of convertible corporate bond investment [J]. Fujian finance, 2020 (2): 33-37
- [4] Ma Yaping. Analysis on the motivation and effect of goer's issuance of convertible bonds [J]. 2020 (2): 105-106
- [5] Song Jiayi. Reasons and Countermeasures for the failure of convertible bonds to convert shares - A Study Based on Xingang's convertible bonds [J]. Contemporary county economy, 2020 (3): 59-61
- [6] Mou Wen. Analysis on Financing Effect of convertible corporate bonds [D]. Lanzhou: Lanzhou University of Finance and economics, 2018:1-61
- [7] Jia Jianhan. Case study of goer's convertible bond financing [D]. Shenyang: Shenyang University of technology, 2019:1-55
- [8] Zhang Xiaobing, Liu Changfu. Motivation analysis of convertible bonds [J]. Finance and finance, 2019 (8): 9-10
- [9] Zhao Jinfeng. Suggestions on the issuance of convertible corporate bonds [J]. Cooperative economy and technology, 2016 (18): 48-50