

# Research on Optimization and Innovation Drive of State-Owned Enterprise Debt Structure Under the Background of Supply-Side Reform

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**Abstract :** This paper studies the current situation of the imperfect debt structure of China's state-owned enterprises under the new normal, leading to high leverage, high debts that are difficult to reduce, and the innovation-driven role of supply-side reforms of "three eliminations, one reduction, and one supplementation" on the optimization of state-owned enterprise debt structures. From 2012 to 2018, the comparison and trend analysis of asset-liability ratios of Chinese state-owned enterprises and industries as a whole revealed that the problem of high leverage is still difficult to reduce after three years of supply-side reform. Then, the principal component analysis method was used to explore the supply-side reform measures and The relationship between the debt structure of state-owned enterprises and an optimization and innovation path. The above research not only enriches the theoretical framework of mutual promotion between supply-side reform and state-owned enterprise reform, but also provides some reference for the optimization of state-owned enterprise debt structure.

## 1. Introduction

Xi Jinping (2015) raised the issue of studying economic structural reform and urban work. After experiencing the discussion of supply-side reform and state-owned enterprise reform (Siping Zhang, 2016; Li Ning, 2016), Preliminary consensus and planning have been reached on the combination of reform and advancement (Liu Yi, 2019; Meng Zhen, 2019). In September 2018, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the Guiding Opinions on Strengthening the Asset-Liability Constraints of State-owned Enterprises. With the advancement of supply-side reforms and state-owned enterprise reforms, the situation of high debt ratios and high leverage ratios of state-owned enterprises has improved but the reform is still difficult (Li Jing, 2018). Investigating its causes, the failure of supply-side reforms to deeply integrate with SOE reforms is an important reason that makes it difficult for SOEs to reduce leverage.

However, what does not match with practical needs is that, on the one hand, although research on supply-side structural reforms has shown a trend of combining state-owned enterprise reforms (Ma Shuai, 2019; Gao Jing; Gao Chunlei, 2018), it has not been specifically stated. The level of impact that supply-side reform has on or may soon have on state-owned enterprises; on the other hand, research on the optimization of debt structure of state-owned enterprises has rarely been combined with supply-side reform.

Therefore, research on the optimization of the debt structure of state-owned enterprises (Zhang Xudong, 2018; Wang Jiechi, 2018) began to appear continuously. At the same time, research on applying supply-side reform to the reform of state-owned enterprises began to be reviewed. How to improve the efficiency of resource allocation of state-owned enterprises by combining supply-side reform and optimization of debt structure of state-owned enterprises has become an important issue in theoretical research.

Therefore, this article takes the asset-liability ratio of state-owned enterprises as a measurement index, and focuses on the role of supply-side reforms in "de-capacity, de-inventory, deleveraging, cost reduction, and shortcomings" in the optimization of state-owned enterprise debt structure. "The

relationship between the optimization of debt structure of state-owned enterprises and supply-side reform" and the mechanism of innovation-driven action.

## 2. Assets and Liabilities of State-Owned Enterprises Under the New Normal

Since the reform of the state-owned enterprises in China in the 1990s, with the goal of establishing a modern enterprise system, the asset-liability ratio has remained at a high level, far exceeding the optimal level generally considered internationally. As the deleveraging process advances, although China's overall leverage ratio has remained basically stable, the state-owned enterprise leverage ratio and local government debt are still the most prominent debt problems and key areas of deleveraging in China.

**Table 1 Statistics of Assets and Liabilities of China's State-owned Enterprises, 2012-2018**

| Year | Assets<br>(100 million yuan) | Liabilities<br>(100 million yuan) | Owners' equity<br>(100 million yuan) | Asset-liability<br>ratio | Asset-liability<br>ratio change |
|------|------------------------------|-----------------------------------|--------------------------------------|--------------------------|---------------------------------|
| 2018 | 1,787,482.9                  | 1,156,474.8                       | 631,008.1                            | 64.70%                   | -1.57%                          |
| 2017 | 1,517,115.4                  | 997,157.4                         | 519,958.0                            | 65.73%                   | -0.53%                          |
| 2016 | 1,317,174.5                  | 870,377.3                         | 446,797.2                            | 66.08%                   | -0.38%                          |
| 2015 | 1,192,048.8                  | 790,670.6                         | 401,378.2                            | 66.33%                   | 1.77%                           |
| 2014 | 1,021,187.8                  | 665,558.4                         | 355,629.4                            | 65.17%                   | 0.10%                           |
| 2013 | 911,038.6                    | 593,166.5                         | 317,872.1                            | 65.11%                   | 0.97%                           |
| 2012 | 806,943.0                    | 520,321.5                         | 286,621.5                            | 64.48%                   | 1.23%                           |

Data sources: CSMAR database

**Table2 Assets and Liabilities Ratio of All Sectors of State-owned Enterprises**

| Trade                         | The end of 2018 | The end of 2015 | The end of 2008 |
|-------------------------------|-----------------|-----------------|-----------------|
| agriculture                   | 45.75%          | 45.60%          | 54.00%          |
| Energy industry               | 61.29%          | 66.40%          | 59.40%          |
| manufacturing                 | 53.33%          | 56.70%          | 44.90%          |
| Catering tourism              | 34.44%          | 49.60%          | 45.10%          |
| Financial industry            | 91.59%          | 92.90%          | 94.20%          |
| Realtyindustry                | 78.85%          | 77.80%          | 63.00%          |
| Service industry              | 45.66%          | 56.70%          | 44.90%          |
| Electronic component industry | 62.99%          | 45.20%          | 44.50%          |
| Construction industry         | 76.22%          | 78.60%          | 80.70%          |
| Media industry                | 36.23%          | 35.20%          | 50.70%          |
| Public facilities management  | 64.84%          | 57.10%          | 55.90%          |
| Transportation                | 58.48%          | 58.00%          | 56.10%          |
| Wholesale and retail trade    | 56.47%          | 60.70%          | 60.50%          |
| Pharmaceutical industry       | 42.01%          | 45.80%          | 46.70%          |

Data sources: CSMAR database

According to the statistics of the above table, it can be seen that the asset-liability ratio has dropped significantly from 2016 to 2018 and the decline has increased year by year. However, according to statistics from the Ministry of Finance in 2018, the liabilities of state-owned enterprises still account for more than 70% of the liabilities of China's corporate sector, the asset-liability ratios of some industries remain high, and the high leverage of some state-owned enterprises are still obvious.

At present, the SASAC has determined a reasonable asset-liability ratio control standard that can ensure the steady development of enterprises, which is divided into three categories: the state-owned industrial enterprise asset-liability ratio early warning line is 65%, the key supervision line is 70%; the state-owned non-industrial enterprise assets The debt ratio is 70% for the early warning line and

75% for the key supervision line; the early warning line for the asset-liability ratio of state-owned scientific and technological enterprises is 60% and the key supervision line is 65%; The key regulatory line is 70%.

### **3. Characteristics and Causes of State-Owned Enterprise Debt Structure**

#### **3.1 Analysis of debt structure and characteristics of state-owned enterprises**

The debt structure of China's state-owned enterprises shows that the proportion of current liabilities is much larger than non-current liabilities. The debt structure shows that short-term borrowings, accounts payable and advance receipts account for a large proportion, while long-term borrowings have a low proportion. The main characteristics are as follows:

(1) Higher current liabilities. From the perspective of the debt structure of China's state-owned enterprises, the proportion of current liabilities is too high, while the proportion of current assets supporting the ability to repay current liabilities is too low. For example, if the ratio of total assets is 100%, the average proportion of current assets in 2012-2018 is 10.51%, and the average proportion of current liabilities in 2012-2018 is about 55.46%. The mismatch in proportions makes state-owned enterprises bear The large short-term debt burden has led to a high level of leverage.

(2) The proportion of direct financing is too small and the proportion of indirect financing is too large. Due to the advantages of state-owned enterprise loans, the main source of financing for the development of China's state-owned enterprises is still bank borrowing. From the perspective of the debt structure of the entire state-owned enterprise in the past five years, short-term loans account for about 25% of total liabilities, and long-term loans account for about 2.14 of total liabilities. %, The total proportion occupies the first place of the source of debt, which results in a serious interest burden on state-owned enterprises, making it difficult to make up losses and making external financing more difficult.

(3) The proportion of non-performing debt is too high. Among the debts of state-owned enterprises in China, overdue, sluggish, bad loans and borrowings have a high proportion. Some enterprises have borrowing, low loan utilization, low operating efficiency of funds, resulting in idle debts and increased interest burden. As a result, the corporate debt ratio has increased year by year.

#### **3.2 Analysis of the reasons for the high leverage of state-owned enterprises**

##### **(1) Historical reason**

The reform of state-owned enterprises in China began with the reform and opening up until the Third Plenary Session of the Fourteenth Central Committee of the Communist Party of China in the 1990s. The reform direction of state-owned enterprises was established in accordance with the "clear property rights, clear rights and responsibilities, separate government and enterprise, and scientific management" modern enterprise system. Enterprises have truly become the mainstay of the market and entered a reform phase with the goal of establishing a modern enterprise system. The development of state-owned enterprises in terms of enterprise systems, corporate governance, and regulatory mechanisms is still immature, and the corporate governance structure of enterprises is still unreasonable. State-owned enterprises have changed their funding sources from state funding to bank loans since the 1980s. They are still the main channel of financing for state-owned enterprises, but the socialist market economy has developed rapidly, foreign companies have entered, and many private private enterprises have emerged to complete the shareholding system reform. As a result, the slow development of state-owned enterprises has insufficient market advantages, limited resources, poor operating performance, and a rising debt ratio.

##### **(2) Realistic reasons**

Since the Chinese economy entered the "new normal" of economic development in 2013 and the new ideas of supply-side reforms proposed by the "two sessions" in 2016, the reform of state-owned enterprises is imperative but progress has been slow and the motivation is insufficient.

Although the reform of mixed ownership of state-owned enterprises has been vigorously promoted, today, for most state-owned enterprises, the state is still its sole owner, and all assets of the company belong to the state. The lack of state restraint on enterprises has resulted in the failure to minimize the

costs in the production and operation process of the enterprise. Only the output value but not the benefits make it difficult for the bank loans borrowed by the enterprise to be paid off, and the debt ratio is increasing.

#### **4. Supply-Side Reform Policy and the Internal Mechanism of SOE Debt Structure Optimization**

##### **4.1 De-capacity and lower borrowing level, reduce interest expenses**

At present, state-owned enterprises still have excess total production capacity, and the problem of insufficient effective production capacity has caused serious waste of corporate resources, resulting in insufficient profit for state-owned enterprises and high demand for borrowing. Failure to improve overcapacity after borrowing from banks, corporate profitability is still insufficient to meet the requirements for timely repayment of borrowings, and the interest generated in turn will increase corporate operating burdens and increase corporate debt ratios.

##### **4.2 Destocking and improving internal governance to improve the efficiency of capital operations**

Because state-owned enterprises are directly owned by the state, their internal governance and management mechanisms are relatively weak, their planning and implementation are inadequate, their work efficiency is low, their inventory is severe, and their management and operating costs are increased. Improving the internal governance and supervision mechanism of state-owned enterprises, reducing the inventory of enterprises, and improving the efficiency of management and operation are of great significance to reducing the debt ratio of state-owned enterprises. Improve the efficiency of capital operations, revitalize the capital stock, convert idle production factors into development funds, enhance the liquidity of corporate funds, reduce the proportion of corporate current liabilities and reduce the corporate debt ratio.

##### **4.3 Deleveraging and reducing loan ratios, optimizing debt structure**

According to data from the Ministry of Finance, the asset-liability ratio of state-owned enterprises (national state-owned and state-holding enterprises) was 66.3% at the end of 2015 and was 64.7% at the end of 2018. Difficulty of leverage. Most of the current sources of financing for state-owned enterprises come from bank loans. A large number of state-owned enterprises operate with high debt in the absence of capital. Coupled with the interest paid, which in turn increases the debt ratio of enterprises, high leverage will definitely bring high risks to state-owned enterprises. The need for corporate deleveraging. Expand the capital replenishment mechanism of state-owned enterprises, reduce the proportion of indirect loans, increase the proportion of direct loans, replace bank loans with equity financing, encourage private assets to inject capital into state-owned enterprises, accelerate the reform of mixed ownership to optimize corporate debt structure, and reduce corporate leverage.

##### **4.4 Reduce costs and increase corporate profits, increase debt repayment rate**

Improve the efficiency of production and operation of enterprises, reduce the cost of production and operation of the enterprise, increase the profitability of the enterprise under the existing business management, increase the profitability of the business to obtain more liquidity, improve the ability of the enterprise to repay loans in a timely manner, reduce debt pressure and Interest pressure reduces corporate debt.

##### **4.5 Make up for shortcomings, improve corporate performance, and broaden funding sources**

Due to their own characteristics, state-owned enterprises have slow growth and limited business operations. Under the market economy environment, during the period of rapid development of private enterprises, the disadvantages of shortcomings have been obvious, affecting the company's operating performance, reducing profitability, and insufficient debt repayment capabilities. The corporate debt ratio has gradually increased. Therefore, make up the shortcomings of production and operation of the enterprise, improve the business performance of the enterprise, enhance the ability of the enterprise to absorb the injected funds, and broaden the source of corporate funds to reduce the corporate borrowing ratio and corporate debt ratio.

## 5. Innovation-Driven Development of Optimizing the Debt Structure of State-Owned Enterprises in the Context of Supply-Side Reform

Starting from the formula of debt ratio = debt / income, strategies for deleveraging can be divided into "numerator countermeasures" and "denominator countermeasures". The molecular countermeasure refers to the adjustment of the molecular (that is, debt), including: repayment of debts, debt reduction, government or central bank acceptance of debts, reduction of interest expenses, etc. Among them, debt repayment is the basic way to deleverage, and debt repayment by selling assets is the right way to deleverage. However, any method of debt reduction has a tightening effect, which is a side effect that cannot be ignored; the denominator countermeasure is to adjust the denominator by means of structural reform, expanding the real GDP scale, or expanding the nominal GDP scale through inflation. The denominator strategy does not work as quickly as the numerator strategy, but it is a permanent solution.

(1) Guided by the integration and innovation of the business sector, quality of inefficient assets and increase the effective capital ratio of state-owned enterprises

State-owned enterprises have improved low-efficiency assets, pledged invalid assets, integrated business sectors, strengthened management of corporate operating systems, and clarified business areas to increase the effective capital ratio of enterprises, improve capital quality to achieve debt repayment ability, and reduce the asset-liability ratio. Actively promote mergers and reorganizations of enterprises, encourage enterprises in industries with overcapacity to increase mergers and reorganization efforts, speed up the exit of "zombie enterprises", effectively resolve excess capacity, and achieve market clearance.

(2) Guided by the innovation-driven debt-to-equity system, optimizing the financing structure and reducing the leverage of state-owned enterprises

Promote the reform of transforming the debt financing of state-owned enterprises into equity financing, absorb external investment, continue to promote the reform of mixed ownership of state-owned enterprises, and optimize the debt structure of state-owned enterprises to reduce the debt ratio of state-owned enterprises. Improve the modern enterprise system and strengthen self-restraint. Through the establishment and improvement of modern enterprise systems and corporate governance structures, the establishment of effective decision-making and supervision mechanisms for corporate debt behavior with clear powers and responsibilities, and effective checks and balances, strengthen the constraints of the company's own financial leverage, rationally arrange the scale of debt financing, and then effectively control the leverage ratio of the enterprise. Reasonable asset-liability structure.

(3) Guided by optimizing the adjustment of investment direction, avoiding blind and excessive diversification, and improving the efficiency of state-owned enterprise capital utilization

State-owned enterprises should strengthen corporate investment and financing planning, strengthen business management, optimize corporate investment directions, avoid blind or excessive investment, reduce inefficient consumption of assets, reduce inefficient assets, enhance corporate capital utilization efficiency, reduce current debt ratios to reduce state Corporate debt ratio.

(4) Guided by fostering strategic emerging industries, speeding up industrial upgrading and improving the competitiveness of state-owned enterprises

State-owned enterprises should pay attention to the development trends of the times, take technological innovation as the guidance to enhance their core competitiveness, improve their performance, enhance their ability to absorb foreign capital, expand their sources of funds to reduce debt financing ratios, and reduce their debt ratio.

## 6. Conclusion

China is in the new normal period of economic development. As a state-owned enterprise that is increasingly building a modern enterprise system, it is facing many problems. Defects in debt structure are one of the issues that have attracted much attention. The healthy, sustained and stable development of the national economy plays a vital role. Based on the relevant analysis of the debt structure of SOEs and their causes, the article draws out that in the context of supply-side reforms,

state-owned enterprises still have problems such as high current liabilities, excessive indirect financing, and excessive non-performing debts. The research on the mechanism of debt structure optimization with state-owned enterprises, guided by innovation, draws development suggestions for the optimization of debt structure of state-owned enterprises, proposes a series of solutions, and hopes to play a certain role in deepening the reform of state-owned enterprises and promoting the further supply-side reform. The role of theory.

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