

Theory and Practice of Capital Structure: Evidence from Hundsun Technologies

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Abstract: With the rapid development of the fintech industry, fintech enterprises with light assets and high R&D investment have gradually formed capital structure strategies that are significantly different from those of the traditional manufacturing industry. This paper takes Hundsun Technologies (600570.SH) as the research object, focuses on its long-term "zero leverage" strategy (interest-bearing debt ratio is close to zero), abstracts financial data from 2015 to 2023, calculates key indicators (such as ROIC and WACC), and analyzes the macro environment. Combined with financial statement analysis and data regression analysis, this paper discusses the internal motivation and economic performance of the choice of capital structure. It is found that the low (zero) leverage strategy of Hundsun is a rational choice due to the combination of industry characteristics, corporate strategy and policy market environment. High R&D investment and technical barriers can effectively compensate for the loss of capital efficiency caused by cash redundancy and low interest-bearing debt ratio. This strategy can improve financial conservatism in the short run, but may cause potential loss of capital allocation efficiency in the long run. Therefore, this paper suggests that the management of the firm should dynamically evaluate the value of leverage instruments, appropriately introduce structured debt and realize the synergy between technology and finance. Investors should focus on operational cash flow sustainability and technology iteration responsiveness when evaluating technology companies, rather than a single financial leverage indicator.

Keywords: Financial leverage, Capital structure, Fintech industry, Zero-leverage firms

1. Introduction

Capital structure decisions have always been one of the core issues in corporate financial management. Since Franco Modigliani and Merton H. Miller proposed the Irrelevance Theorem of capital structure in 1958 [1], the academia has conducted extensive discussions on how enterprises choose debt and equity financing. The Trade-off Theory emphasized the balance between the tax-shield effect and the costs of bankruptcy [2], while the Pecking Order Theory explained the financing hierarchy preference of enterprises from the perspective of information asymmetry [3]. In recent years, the Market Timing Theory proposed by Baker and Wurgler [4] and the Enterprise Life Cycle Financing Model proposed by Berger and Udell [5] have further revealed the complexity of capital structure decisions from a dynamic perspective. However, those theories were mainly based on traditional manufacturing and have limited explanatory power for technology enterprises.

Technology enterprises, especially financial technology companies, exhibit distinct capital structure choices owing to their asset-light management, high R&D investment and policy sensitivity. On the one hand, the asset-light model weakens the dependence on debt financing by reducing the proportion of fixed assets [6], even some companies maintained a “zero leverage” strategy. On the other hand, high cash reserves are not only precautionary savings to cope with technological uncertainty [7] but also may become a trigger of agency cost [8]. This trend has led to in-depth thinking on the uniqueness of the financing behavior of fintech companies. Although the existing research has discussed the low-debt tendency of the capital structure of technology enterprises, the discussion of the extreme phenomenon of zero leverage in the existing literature is still insufficient, especially the localized case analysis of Chinese fintech enterprises.

In order to make up for the limitations of previous studies, this paper uses the case study of Hundsun Technologies to answer the following core questions: Why did Hundsun choose zero leverage strategy? What is the effect of zero leverage on firm efficiency? What are the pros and cons of different leverage strategies? The study further expands the capital structure theory in the era of digital economy and reveals the dynamic trade-off mechanism behind the zero leverage phenomenon. At the same time, it provides feasible strategy suggestions for technology enterprises to balance financial security and capital efficiency.

The following sections of this paper are organized as follows: Section 2 introduces the capital structure of Hundsun Technologies; Section 3 analyses Hundsun’s zero-leverage motivation from the perspective of industry characteristics, enterprise strategy and policy; Section 4 verifies the rationality of Hundsun's capital structure; Section 5 concludes the results of the study, provides suggestions for corporate stakeholders and points out the limitations of the study.

2. Capital structure of Hundsun Technologies

2.1. Company’s Overview

Hundsun Technologies was founded in 1995 and listed on the main board of Shanghai Stock Exchange (600570.SH) in 2003. It is a leading financial technology company in China, focusing on providing comprehensive IT solutions for securities, funds, banks, insurance, trust and other financial institutions. Headquartered in Hangzhou, the company's business covers the whole country and gradually expands to overseas markets.

The business structure of Hundsun is diversified, covering trading systems, asset management, wealth management, risk management and other financial segments, occupying more than 50% of the market share of China's securities IT systems. Table 1 shows the Main Business Revenue and Profit information for fiscal year 2023 (Sources of the research data are the China Securities Market Accounting Research (CSMAR) database, Choice Financial Data Terminal as well as the annual reports of Hundsun):

Table 1: Main Business Revenue and Profit Analysis Table for Hundsun Technologies, FYE 2023

Main Business Composition	Main Revenue (RMB in millions)	Main Profit (RMB in millions)	Profit Proportion (%)
Wealth Technology Services	1733.52	1339.53	25.05
Asset Management Technology Services	1711.61	1430.45	26.76
Operations and Institutional Technology Services	1436.33	1170.44	21.89

Table 1: (continued).

Corporate Finance, Insurance Core, and Financial Infrastructure Technology Services	700.38	254.6	4.76
Innovation Business	556.23	464.26	8.68
Risk and Platform Technology Services	508.91	257.95	4.82
Data Services Business	385.09	257.33	4.81
Others	243.98	171.83	3.21
Totals	7276.05	5346.39	

Hundsun's equity structure is relatively concentrated, with Hangzhou Hengsheng Electronic Group being its controlling shareholder, holding a significant proportion of shares. As of November 19, 2024, the shareholding ratio is approximately 20.79%. Additionally, Hangzhou Hengsheng Electronic Group is a wholly-owned subsidiary of Ant Technology Group, making Ant Technology Group the actual controlling shareholder of Hundsun. Moreover, Hundsun's equity structure also includes some institutional investors and public shareholders, ensuring good liquidity of shares. With the support of Ant Technology Group, the company's management maintains a high degree of independence and professionalism, enabling them to flexibly formulate strategies based on market demands and promote the company's continuous development.

2.2. Static analysis of capital structure

Hundsun adheres to a low-leverage strategy and relies little on interest-bearing debt for financing. As shown in Table 2, before 2019, the interest-bearing debt ratio of Hundsun was 0. After 2019, it began to introduce interest-bearing debt, but the ratio was always less than 3.5%. In 2023, the average interest-bearing debt ratio of the software development industry was 5.06%, while the ratio of all A-share listed companies was 33.26%. It means Hundsun's interest-bearing debt ratio after 2019 was at a very low level as a whole. At the same time, the net cash flow of the enterprise's operating activities continues to be stable, and the free cash flow is abundant, providing financial guarantee for the company's technology research and development and market expansion. Net cash flow from operating activities accounts for a high proportion of net profit for many years, indicating that net profit has a strong ability to convert into cash and high profit quality. In addition, since its listing in 2003, Hundsun has no record of issuing bonds and its main method of financing is equity financing. According to statistics, 16.78% of listed companies in the software development industry have issued bonds. And 33.70% of all A-share listed companies choose to issue bonds for financing.

Table 2: Selected Financial Data for Hundsun Technologies, FYE 2015-2023 (RMB in millions, except per share and ratio data)

Fiscal year	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cash and cash equivalents	302.6	343.5	500.0	566.5	1328.7	1374.8	1727.7	2872.6	2422.0
Trading financial assets	73.4	16.6	39.7	175.8	2694.0	2723.4	1991.5	1497.7	1177.3
Total current assets	1935.0	2361.5	2989.8	2936.4	4542.5	5054.3	5034.7	5953.5	6070.0

Table 2: (continued).

Net fixed assets	315.5	337.4	319.2	292.5	490.4	472.5	1679.5	1617.8	1568.9
Total assets	3975.3	4548.5	5852.1	6216.3	8359.5	9971.1	12079.9	13004.6	14353.7
Short-term borrowings	0.0	0.0	0.0	0.0	21.0	46.7	178.0	55.0	305.8
Total current liabilities	1284.2	1956.1	2483.5	2718.0	3175.9	4616.3	5489.1	5245.2	5222.3
Long-term borrowings	0.0	0.0	0.0	0.0	202.2	206.1	228.5	115.8	137.9
Total liabilities	1423.0	2031.0	2566.4	2801.9	3466.1	4933.4	5864.6	5530.1	5509.0
Total equity	2552.3	2517.5	3285.8	3414.4	4893.4	5037.8	6215.3	7474.5	8844.7
Operating revenue	2225.5	2170.2	2666.1	3262.9	3871.8	4172.6	5496.6	6502.4	7281.2
Net profit	448.8	-52.2	433.3	678.4	1415.4	1363.2	1490.1	1119.8	1443.2
Net cash flow from operating activities	991.7	439.9	804.9	937.1	1070.8	1397.9	956.8	1138.2	1261.3
R&D expenditure	862.6	1050.9	1292.4	1404.7	1560.0	1496.1	2139.3	2346.3	2661.2
Capital expenditure	112.0	172.5	97.8	146.6	367.1	482.2	684.1	293.7	904.7
Free cash flow	879.7	267.5	707.1	790.4	703.7	915.7	272.7	844.5	356.6
Interest-bearing debt ratio (%)	0.00	0.00	0.00	0.00	2.67	2.54	3.36	1.31	3.09
Debt-to-asset ratio (%)	35.80	44.65	43.85	45.07	41.46	49.48	48.55	42.52	38.38
Ratio of R&D expenditure to operating revenue (%)	38.76	48.43	48.48	43.05	40.29	35.85	38.92	36.08	36.55
Ratio of net cash flow from operating activities to net profit (%)	220.96	-842.15	185.76	138.14	75.65	102.55	64.21	101.64	87.40
EPS (RMB)	0.73	0.03	0.76	0.80	1.36	0.90	0.77	0.57	0.75
ROE (Net Profit Excl. Extraordinary) (%)	20.71	7.52	7.91	15.85	23.35	17.52	19.47	18.21	19.59

2.3. Dynamic analysis of capital structure

According to the data analysis in Figure 1, Hundsun's ROE experienced a sharp decline in 2016 and then fluctuated again, and EPS also showed the same trend. Hundsun Technologies performance plunged, mainly from the holding subsidiary Hundsun Network received regulatory penalties. This penalty caused Hundsun Network to face great financial pressure, which ultimately affected the financial position and operating ability of Hundsun Technologies.

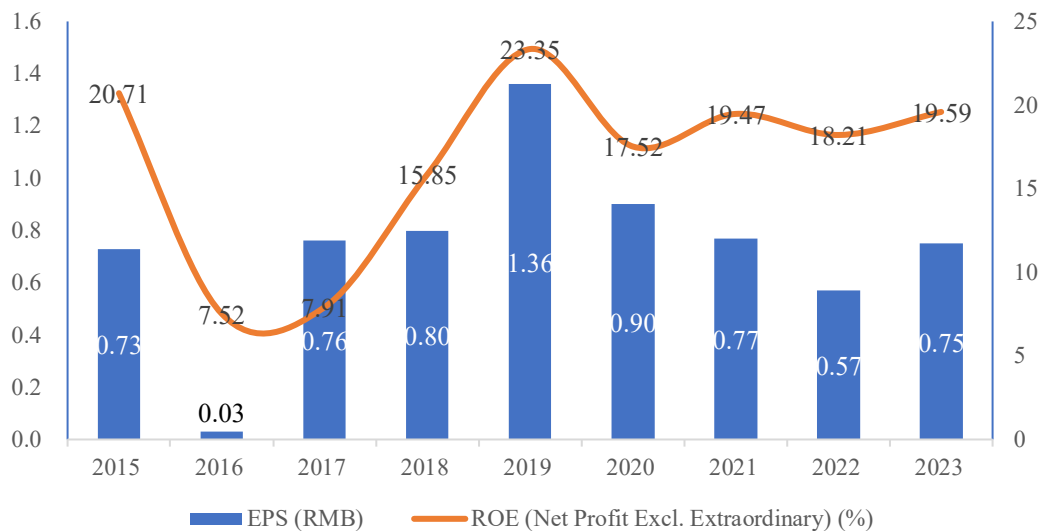


Figure 1: EPS & ROE for Hundsun Technologies, FYE 2015-2023

Photo credit: Original

Yuan and Wang pointed out through empirical research that enterprises with more R&D investment have a higher level of cash holdings, and cash holdings play a role in providing funds for R&D investment and also reflect the precautionary motivation of enterprises [9]. Zhang Kan and other scholars believed that enterprises smooth R&D investment through cash holdings, that is, when enterprises encounter financial difficulties, they use cash reserves to maintain the smooth progress of R&D investment [10]. It is worth noting that Hundsun is gradually increasing its R&D investment, and it can be seen in Table 2 that the Ratio of R&D expenditure to operating revenue for Hundsun remains at a high level of 30%-40%. Using the data of cash holdings and R&D investment of Hundsun over the years, the regression analysis shows that the cash holdings and R&D investment of Hundsun have a positive relationship. The linear regression results are shown in Figure 2. The result indicates that the enterprise has sufficient funds to support R&D activities and can invest more resources in technological innovation and product development, so as to enhance the core competitiveness of the enterprise. It reflects the importance enterprises attach to innovation and the planning for future development. Hundsun maintains the stability of R&D spending in the face of cash flow fluctuations by holding cash as a buffer. This smoothing effect helps to reduce large fluctuations in R&D expenditures, reduce the adjustment costs of R&D activities, and ensure the persistence and stability of Hundsun's R&D activities.

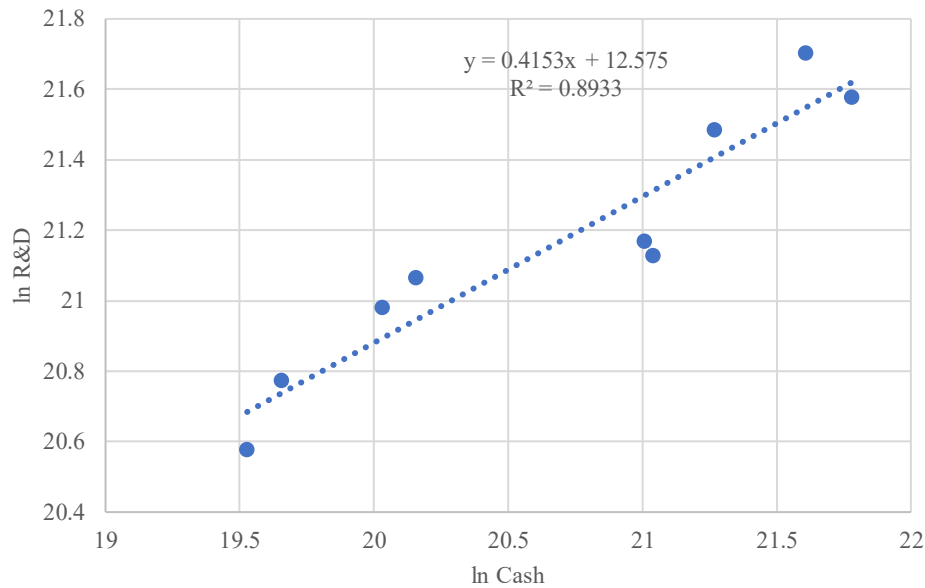


Figure 2: Scatter Plot of the Association between Cash Holdings and R&D Investment of Hundsun Technologies, FYE 2015-2023
Photo credit: Original

3. Motivation analysis with zero leverage

According to Table 2, Hundsun did not use interest-bearing debt before 2019, and although interest-bearing debt was introduced after 2019, the interest-bearing debt ratio did not exceed 3.5%, indicating that Hundson adopted zero and low leverage strategies. Next, the motivation analysis will be carried out from three factors: industry characteristics, enterprise strategy, policy and market environment.

3.1. Industry characteristic factor

In the current Internet era, more and more technology-intensive enterprises adopt the asset-light operation mode in practice, and achieve development by tapping the market to develop business and seize the business opportunities brought by radical new technologies [11]. The summary results of the financial data of software development service enterprises organized in Table 3 show that the cash reserve of the industry is relatively high, which not only maintains the flexibility of assets but also provides the liquidity of funds; A lower ratio of inventories to fixed assets means that these companies rely less on physical assets, such as property, plant and equipment, and more on intangible assets, such as technology, data and intellectual property, to monetize and transfer risks; The debt level is low, the proportion of interest-free liabilities such as advance payments is large and interest-bearing liabilities is small among enterprises in the industry. Enterprises in the industry have a strong ability to respond to market changes. The asset-light model naturally reduces the demand for debt financing and promotes enterprises to move towards low debt. Fintech companies such as Hundsun need to maintain a high degree of cash flow flexibility to cope with technological advances and changes in asset management regulations, and can quickly allocate resources to new projects or technologies without being bound by fixed financial obligations. Low leverage also enables companies to reduce liquidity risk and reduce the financial risk of debt repayment.

Table 3: Financial Data of Software Development Industry Average and Hundsun Technologies, FYE 2023 (Ratios Relative to Total Assets)

	Industry Average	Hundsun Technologies
Cash Ratio	29.88%	16.82%
Inventory Ratio	6.93%	4.13%
Current Asset Ratio	68.20%	42.15%
Fixed Asset Ratio	6.83%	10.90%
Interest-bearing Liability Ratio	14.56%	3.08%

3.2. Corporate strategic factor

Hundsun's choice of low (zero) leverage is both a financial defensive tool (against uncertain risks) and a strategic offensive tool (to shore up technology output). Maintain operational flexibility through high liquidity and low debt service pressure. At the same time, technical barriers should be used to replace capital leverage to realize the transformation from "capital-driven" to "capacity-driven". Hundsun attaches great importance to patented technology development to build technical barriers. By the end of 2013, Hundsun had applied for 408 invention patents, 212 of which had been certified (Data source: TIANYANCHANG). As a leading fintech enterprise, Hundsun must guarantee ongoing investment in the research and development of AI, blockchain, cloud computing and other core technologies to form differentiated competitiveness in the industry. It requires Hundsun to maintain strong financial resilience and reduce the occupation of debt expenses on capital flow. This strategy provides the underlying security for sustainable growth in the fintech sector against a backdrop of high uncertainty.

In recent years, Ant Technology Group, Hundsun's actual holding company, has provided cloud computing, AI, big data and other technical and infrastructure support to Hundsun, partially replacing the external financing function and promoting its transformation to "big Medium Platform" and SaaS services. Ant Technology Group has a close strategic cooperation with Alibaba Group, which brings a lot of resources and opportunities to Hundsun. For example, Hundsun, together with Ant Financial and Aliyun, jointly released JRES3.0 powered by Ant platform [12]. Based on the leading cloud native technology of Aliyun, the new generation of securities core trading system UF3.0 under Hundsun has basically completed the transformation and upgrading of cloud native architecture [13].

3.3. Policy and market environment factor

As a leading fintech enterprise in China, Hundsun has benefited from a number of national tax preferential policies. Since 2005, Hundsun has been identified as a "key software enterprise in the national planning layout". It has obtained preferential tax policies such as income tax reduction and exemption, VAT refund upon collection and refund, and additional deduction of R&D expenses [14], which has brought high cash flow supplement to the enterprise. Meanwhile, the tax reduction and exemption enjoyed by Hundsun has weakened the value of tax shield of interest expense. The financial risk of taking on debt may outweigh the tax savings. This has pushed companies such as Hundsun to opt for low (zero) leverage strategies.

As for the market environment factors, the high activity of the stock market and the convenient financing environment of the Science and Technology Innovation Board have pushed up the stock valuation of technology companies. This allowed Hundsun to issue shares at a higher price and thus obtain large amounts of capital at a lower cost through equity financing. This reduces the reliance on debt financing. It not only reduces the financial risk of enterprises, but also enhances their financial

flexibility, enabling them to better respond to market changes and investment opportunities. Figure 3 shows historical stock price of Hundsun from its listing in 2003 to 2023.

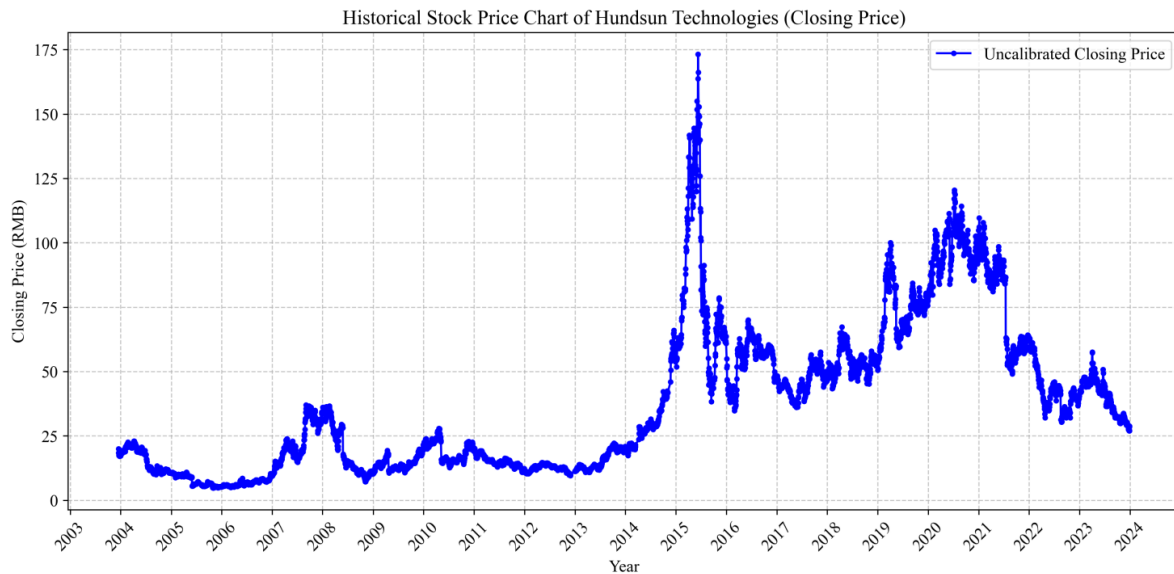


Figure 3: Historical Stock Price Chart of Hundsun Technologies (Closing Price)
Photo credit: Original

4. Verification of the rationality of low leverage

4.1. Financial efficiency analysis

According to the WACC and ROIC data of Hundsun over the years in Table 4, it can be concluded that ROIC is significantly higher than WACC in all years except 2016 (when the subsidiary Hundsun Network was fined for violation of regulations). It shows that Hundsun's income generated by the capital invested in operation is higher than its financing cost, which confirms the high efficiency of its capital allocation and the competitive advantage of its core business. This continuous value creation capability means that companies have advantages such as technology and brand, which can obtain capital at lower cost and translate into higher returns, thus enhancing shareholder value, attracting long-term investors, and providing a solid foundation for expanding reinvestment or dividends.

Table 4: WACC & ROIC for Hundsun Technologies, FYE 2015-2023

Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022	2023
WACC (%)	9.20	11.62	9.87	10.68	11.19	7.03	7.59	9.81	10.81
ROIC (%)	19.27	-2.13	14.88	20.12	32.96	26.02	24.54	15.35	16.76

4.2. Agency cost analysis

In order to study the rationality of Hundsun leverage, it is necessary to test it from the perspective of agency cost. In the previous financial efficiency analysis, $WACC < ROIC$, it can be seen that there is no agency cost caused by overinvestment in Hundsun.

The other component of agency cost is executive excess on-duty consumption, which is usually calculated by management cost in accounting practice. Therefore, referring to Luo's practice [15],

this paper constructs a measurement method of excess management fees. The specific model is as follows:

$$\frac{Perk_{i,t}}{Asset_{i,t-1}} = \beta_0 + \beta_1 \frac{1}{Asset_{i,t-1}} + \beta_2 \frac{\Delta Sale_{i,t}}{Asset_{i,t-1}} + \beta_3 \frac{PPE_{i,t}}{Asset_{i,t-1}} + \beta_4 \frac{Inventory_{i,t}}{Asset_{i,t-1}} + \beta_5 \ln(Employee_{i,t}) + \epsilon_{i,t} \quad (1)$$

In the formula, Perk is the adjusted management expense (excluding non-on-duty consumption items such as executive compensation and amortization of intangible assets); Asset refers to the total assets at the beginning of the year; $\Delta Sale$ denotes the change in main business income; PPE refers to net fixed assets; Inventory is the amount of inventory; Employee is the total number of employees; The residual after model regression is excess on-duty consumption (Abperk). The research employs A-share enterprises in Shanghai, Shenzhen and Beijing from 2015 to 2023 as research samples, and carries out the following screening processing: (1) Samples of financial industry listed firms are excluded; (2) Eliminating the samples of listed companies that have been ST; (3) Eliminating the observations with missing data of key variables; (4) To mitigate the impact of outliers, apply 1% bilateral Winsorization to all quantitative variables; (5) In order to alleviate the potential cross-section correlation problem, clustered standard errors are used at the company level. Finally, 43328 annual observations of companies are obtained. After regressing the observed values, the extracted annual results for Hundsun are shown in Table 5.

According to the results, it can be found that Hundsun has the problem of excess on-duty consumption (Abperk>0 from 2015 to 2023). But Abperk plummeted in 2018 and stayed low in subsequent years. This indicates that the problem of on-duty consumption is clearly contained in Hundsun.

Table 5: Data for years with positive residuals in the regression results

Fiscal Year	Abperk (Residual)
2015	0.2791
2016	0.2877
2017	0.3235
2018	0.0197
2019	0.0230
2020	0.0195
2021	0.0191
2022	0.0272
2023	0.0305

4.3. Comparative analysis of different leverage strategies

Since Hundsun's WACC<ROIC, theoretically speaking, Hundsun's underutilization of leverage leads to the loss of potential value, and increasing debt may bring more benefits to the enterprise. But is this really the case? Table 6 shows pro forma figures at a 30 percent interest-bearing liability ratio to total capital structure. This pro forma assumes that the company would increase its interest-bearing liabilities by ¥3429399336.893 and use it together with ¥1 billion in excess cash and all interest-bearing liabilities to repurchase its shares.

Table 6: Pro Forma 2023 Results for Alternative Capital Structures

	Actual 2023	Pro Forma 2023 30% Interest-bearing debt ratio
Sales	7,281,202,979.92	7,281,202,979.92
Operating profit	1,437,137,550.79	1,437,137,550.79
Interest income a	34,063,204.59	19,999,115.66
EBIT	1471200755.38	1,457,136,666.45
Interest expense b	18,598,062.93	162,366,780.27
Profit before taxes	1,452,602,692.45	1,294,769,886.18
Taxes c	9,392,133.62	8,371,629.66
Profit after tax	1,443,210,558.83	1,286,398,256.53
EPS—basic	0.76	0.74
Average shares outstanding—basic	1,900,006,442.00	1,729,799,323.10
Cash and equivalents e	2,421,998,664.08	1,421,998,664.08
Total interest-bearing liabilities	443,630,477.20	3,873,029,814.09
Total repurchase amount f	-	4,873,029,814.09
Shareholders' equity	8,844,722,112.75	3,971,692,298.66
Common stock price (12/29/23)	28.63	28.63
Market value of common stock	54,397,184,434.46	49,524,154,620.37
Shares repurchased	-	170,207,118.90
Interest coverage ratio	79.10505309	8.974352168
Index of risk g	3.746038896	3.600684226
Return on equity	16.32%	32.39%

- The pro forma interest income has been modified to take into account the reduction in cash balances.
- Hundsun's blended interest expense rate for debt is estimated to be 4.19%.
- According to actual results for 2023, the tax rate is assumed to be 0.65%.
- Assuming that the firm maintains a policy of not paying dividends.
- Cash and equivalents decline by ¥10 billion as excess cash is reduced.
- Includes interest-bearing liabilities and excess cash.
- The risk index is based on the Altman Z-score model proposed by Edward I. Altman.

According to the data in Table 6, although the interest-bearing debt ratio of 30% can enable the enterprise to obtain the tax shield protection of ¥1020503.964, the EPS of the enterprise is reduced without any improvement. Hundsun's Interest coverage ratio decreased from the original 79.11 to 8.97, indicating a significant decrease in solvency and a significant increase in debt service risk. The Z-score model [16] also shows that the probability of financial distress will increase. In addition, using large amounts of cash flow for share repurchase would take away funds needed for research and development investment, hindering the long-term health of Hundsun. Because the tax may increase owing to the reduction of R&D investment. Therefore, it can be seen that high financial leverage policy is not suitable for Hundsun's current situation. However, since share repurchase improves ROE, Hundsun can appropriately increase interest-bearing liabilities from the perspective of shareholders' interests.

5. Conclusion

5.1. Research conclusion

Hundsun's low (zero) leverage financial strategy is the result of the joint action of industry characteristics, policy drive and enterprise strategic choice. From the perspective of the industry, technology iteration in the fintech field is fast, and the asset-light operation mode naturally weakens the dependence on debt financing. More tax incentives enjoyed by Hundsun make the tax shield effect of debt no longer significant. Combined with the prudential supervision orientation of the policy level on the leverage ratio of fintech enterprises in recent years, the space for the expansion of high debt is further limited. At the same time, the high activity and the financing convenience of the stock market enable Hundsun to obtain a large amount of capital through equity financing at a lower cost. Hundsun, through strengthening R&D investment and the support of resource sharing of the holding group for a long time, has formed the endogenous capital accumulation ability and reduced the demand for external financing. In the short term, low (zero) leverage strategy significantly improves financial soundness. Sufficient cash flow reserve and no debt pressure give Hundsun stronger ability to resist risks. In the long run, however, excessive debt avoidance may lead to potential losses in capital allocation efficiency. On the one hand, it weakens the potential of shareholder return. On the other hand, it may aggravate the agency problem, leading to resource misallocation and insufficient innovation momentum. Therefore, Hundsun needs to dynamically evaluate the strategic value of leverage instruments while maintaining financial security. Optimize the cost of capital and improve shareholder returns by appropriately introducing structured debt. At the same time, improve the governance mechanism to balance efficiency and risk. Achieve long-term synergy between technological moats and financial sustainability.

5.2. Theoretical contributions

The theoretical contribution of this study is to reveal the limitations of capital structure theory in asset-light technology firms. It also emphasizes the important role of industry characteristics, corporate strategy, policy and market environment in shaping the capital structure of firms. It provides a new perspective and theoretical support for understanding the financing behavior and capital structure decision of asset-light technology enterprises.

5.3. Limitations

Although this study selects representative cases for in-depth analysis when exploring the capital structure of asset-light technology companies, it must be acknowledged that the findings of a single case study do not fully represent the general situation of the entire industry. In addition, this study fails to fully cover the impact of off-balance sheet financing when analyzing capital structure. Future research needs to adopt a wider sample and more comprehensive data to improve the universality and accuracy of research conclusions.

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