

# Research on the Motivations Behind Company B's Share Repurchase

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**Abstract.** Using Company B as a case study, this paper constructs a motivational analysis framework from the behavioral event perspective to examine the true motives behind its share repurchases. Findings reveal that the first repurchase was clearly designed to facilitate major shareholders' share reduction. While the second repurchase implemented an employee stock ownership plan, it also carried the intention of mitigating equity pledge risks. Finally, targeted policy recommendations are proposed based on these findings.

**Keywords:** share repurchase, signaling, opportunism.

## 1. Introduction

Following the 2018 revision of China's Company Law, the scale of share repurchases has grown rapidly. While most companies claim in their repurchase announcements that the move is based on "undervalued stock prices" to convey confidence to the market, impure motives exist in practice. Some companies use repurchases to facilitate major shareholders' share reductions or alleviate equity pledge risks, harming the interests of minority shareholders and undermining the healthy development of capital markets. Company B, a representative enterprise in the PCB industry, conducted share repurchases in both 2021 and 2023, citing "recognition of corporate value" as the motivation in its announcements. However, these repurchase periods coincided with major shareholder sell-offs and equity pledging activities. This paper employs a case study to identify the true motives behind these repurchases, aiming to provide insights for regulatory refinement and investment decision-making.

## 2. literature Review

### 2.1. Signaling Hypothesis

The signaling motive of share repurchases is widely recognized as the primary motivation in both domestic and international academic circles. Vermaelen (1981) demonstrated through the standard signaling model that share repurchases can serve as a means for firms to transmit signals[1].Ma Pengfei and Sui Cong (2021) demonstrated that share repurchases, as a signaling tool, can effectively boost stock prices and convey the message that management believes the stock is undervalued[2]. Additionally, Chen Jingpu and Qi Xiaotian (2021) found that companies with strong performance and high growth potential achieve better signaling effects through share repurchases[3].

### 2.2. Free Cash Flow Hypothesis

Free Cash Flow Hypothesis originates from Under the separation of ownership and management, high levels of corporate free cash flow correspondingly increase internal principal-agent problems. Jensen (1986) proposed the "Free Cash Flow Hypothesis," suggesting that management eliminates excess free cash flow through share repurchases, thereby reducing agency costs[4].Si Gengxu (2024), Gu Xiaolong, and Xu Ziwei (2024), indicated that implementing share buybacks can effectively reduce excess cash flow and lower agency costs[5-6].

### 2.3. Equity Incentive Hypothesis

The equity incentive hypothesis posits that firms can repurchase their own shares for equity incentives. Wu et al. (2014) found that firms in the growth stage are more likely to substitute share repurchases for new share issuances for equity incentives[7]. Wen Liping (2017) indicated that an increasing number of companies have adopted equity incentives as a motive for share repurchases in recent years[8].

### 2.4. Opportunistic Motives

Liu and Ziebart (1997) suggested that the true motives behind corporate share repurchases may not align with those stated in announcements, potentially involving opportunistic motives[9]. Kim et al. (2013) found that controlling shareholders may exploit share repurchases for opportunistic behavior, transforming them into tools for pursuing private interests[10]. He et al. (2021) argued that the higher the equity pledge ratio of major shareholders, the greater their incentive to conduct share repurchases[11]. Li Laifang and Chen Zhanliao (2018), Wang Guojun et al. (2021), and Zhang Hao and Chen Hanbin (2023) all demonstrated a significant positive correlation between major shareholders' equity pledge ratios and share repurchases, with this effect being more pronounced in private enterprises[12-14]. Qin Shuai et al. (2021) and Wang Bo and Gao Xingwei (2023) found that controlling shareholders drive share buybacks to boost stock prices, reduce margin call risks, and maintain control. Higher equity pledge ratios correlate with greater likelihood and magnitude of buybacks[15-16].

## 3. Case Overview

### 3.1. Company Profile

Founded in 1994, Company B is a high-tech enterprise specializing in the R&D, production, and sales of high-precision printed circuit boards (PCBs). Its core business encompasses the development and manufacturing of double-sided, multilayer, flexible, high-frequency, and HDI PCBs, alongside complementary services including PCB assembly, electronic materials R&D, and industrial automation equipment.

Currently, the company's products are widely applied in 5G communications, AI servers, new energy vehicles, and other fields, with deep partnerships established with leading enterprises such as Huawei and BYD. Although the company experienced temporary losses in 2024 due to industry competition, its non-GAAP net profit surged by 82.03% year-on-year in Q1 2025, demonstrating robust growth momentum. The company anticipates that upon full production of its new projects, it will achieve an annual production capacity of 3.6 million square meters, further solidifying its technological leadership position in the PCB industry.

### 3.2. Overview of Company B's Share Repurchase

#### 3.2.1 First Repurchase

On February 5, 2021, Company B convened its Eighth Meeting of the Fourth Board of Directors, which reviewed and approved the "Proposal on the Plan for Repurchasing Company Shares through Centralized Auction Trading." Subsequently, on February 6, 2021, the company disclosed the "Announcement on the Plan for Repurchasing Company Shares through Centralized Auction Trading" on the Shanghai Stock Exchange website, announcing its intention to repurchase a portion of publicly held shares through centralized auction trading.

Company B's detailed repurchase process is shown in Table 2. Following the announcement of the share repurchase, the first repurchase was executed via centralized competitive bidding on February 22, 2021. The initial repurchase volume was 389,300 shares, representing 0.08% of the company's total issued shares. The highest transaction price was RMB 12.68 per share, with a minimum transaction price of RMB 12.60 per share. The total repurchase amount was RMB 4.9209 million.

**Table 1.** Details of Company B's First Share Repurchase Plan

Item	Content
Announcement Date of Repurchase Plan	February 6, 2021
Repurchase Period	Not exceeding 12 months from the date the Board of Directors approves this share repurchase plan
Purpose of Repurchase	To safeguard the interests of investors, enhance investor confidence, and fully motivate the Company's employees
Repurchase Method	Centralized competitive bidding
Type of shares to be repurchased	Common shares issued by the company denominated in Renminbi (A-shares)
Repurchase Funding	Company's Own Funds
Purpose of Proposed Share Repurchase	To be used for future implementation of employee stock ownership plans or equity incentive programs
Number of shares to be repurchased	5.3333 million to 10.6667 million shares
Percentage of total issued shares	1.04% to 2.09%
Proposed repurchase price	Not exceeding RMB 15 per share (inclusive)
Total Repurchase Fund	RMB 80 million to 160 million

Additionally, on February 7, 2024, Company B announced a change in the purpose of the first share repurchase from "for employee stock ownership plans or equity incentives" to "for cancellation and corresponding reduction of registered capital." On May 27, 2024, it cancelled 7,625,100 shares repurchased in the first tranche through China Securities Depository and Clearing Corporation Limited. Following the cancellation of the repurchased shares, the company's total share capital would decrease from 638,023,104 shares to 630,398,004 shares.

**Table 2.** Timeline of Company B's First Share Repurchase

Cut-off Date	Cumulative Repurchased Quantity (10,000 shares)	Percentage of Total Shares (%)	Cumulative Amount Paid (RMB 10,000)
February 22, 2021	38.93	0.08	492.09
February 28, 2021	115.33	0.23	1455.60
March 31, 2021	394.27	0.77	4852.99
2021/4/13	570.16	1.12	6,898.49
2021/4/30	570.16	1.12	6898.49
May 31, 2021	570.16	1.12	6898.49
June 30, 2021	690.51	1.35	8,315.80
July 31, 2021	690.51	1.35	8315.80
August 31, 2021	690.51	1.35	8,315.80
September 30, 2021	762.51	1.49	9,310.47

### 3.2.2 Second Repurchase

On September 28, 2023, Company B convened its Second Meeting of the Fifth Board of Directors, which reviewed and approved the "Proposal on the Plan to Repurchase Company Shares through Centralized Auction Trading." Subsequently, on September 29, 2023, the company disclosed the "Repurchase Report on the Plan to Repurchase Company Shares through Centralized Auction Trading" on the Shanghai Stock Exchange website, announcing its intention to repurchase a portion of publicly held shares through centralized auction trading.

On October 31, 2023, Company B announced the completion of its share repurchase via centralized competitive bidding. The initial repurchase volume was 670,000 shares, representing 0.11%

of the company's total issued shares. The highest transaction price reached RMB 10.83 per share, with a minimum transaction price of RMB 10.53 per share. The total repurchase amount was RMB 7,125,688. On February 1, 2024, Company B announced that to further boost investor confidence, it would adjust the total repurchase fund and extend the implementation period. The total repurchase fund was adjusted from no less than RMB 60 million (inclusive) and no more than RMB 120 million (inclusive) to no less than RMB 100 million (inclusive) and no more than RMB 200 million (inclusive). The original repurchase plan was scheduled for completion by March 27, 2024. The revised plan has been extended from March 27, 2024, to September 26, 2024. On February 6, 2024, Company B announced that the repurchase ratio had reached 1%. As of March 4, 2024, the company had completed this repurchase plan, having actually repurchased 13,690,300 shares, accounting for 2.15% of the company's total share capital. The detailed repurchase progress for Company B is shown in Table 4.

**Table 3.** Details of Company B's Second Share Repurchase Plan

Item	Content
Announcement Date of Repurchase Plan	September 29, 2023
Repurchase Period	Not exceeding 6 months from the date the Board of Directors approves this share repurchase plan
Purpose of Repurchase	To safeguard the interests of the Company and its investors, enhance investor confidence in the Company, and effectively align the interests of shareholders, the Company, and employees
Repurchase Method	Centralized competitive bidding
Type of Repurchase	Common shares issued by the company denominated in Renminbi (A-shares)
Repurchase Funding Purpose of Proposed Share Repurchase	Company's Own Funds To be used entirely for the implementation of an employee stock ownership plan in the future
Number of shares to be repurchased	3.75 million to 7.5 million shares
Percentage of total issued shares	0.59% to 1.18%
Proposed repurchase price	Not exceeding RMB 16 per share (inclusive)
Total Repurchase Fund	RMB 60 million to 120 million

**Table 4.** Timeline of Company B's Second Share Repurchase

Cut-off Date	Cumulative Repurchased Quantity (10,000 shares)	Percentage of Total Shares (%)	Cumulative Amount Paid (RMB 10,000)
October 31, 2023	67.00	0.11	712.57
2023/11/30	173.15	0.27	1885.66
2023/12/31	223.30	0.35	2392.34
2024/1/31	632.51	0.99	5495.78
2024/2/2	893.02	1.40	7229.68
2024/3/4	1369.03	2.15	10097.91

Additionally, actual execution shows that the company completed the repurchase on March 4, cumulatively repurchasing 13.6903 million shares (representing 2.15% of total shares outstanding) at a total cost of 100.9791 million yuan. This amount just exceeded the revised minimum commitment of 100 million yuan but did not surpass the original plan's upper limit of 120 million yuan. This operation indicates that although the company increased the repurchase scale and extended the period,

the actual execution was completed swiftly according to the original plan, and the final amount remained within the scope of the initial proposal. Therefore, the subsequent analysis will also examine the motives behind Company B's adjustment of its repurchase plan on February 1, 2024.

## **4. Analysis of Company B's Share Repurchase Motivations**

### **4.1. Theoretical Framework for Analyzing Share Repurchase Motivations**

Opportunistic share repurchases by listed companies are often accompanied by specific behavioral events. Examining the relationship between such events and share repurchases provides crucial insights into identifying the true motives behind these transactions. Before analyzing Company B's specific motives, this paper establishes an analytical framework. For Company B, the first step is to verify the employee stock ownership plan (ESOP) behavior stated in the repurchase proposal. During the repurchase period, shareholder sell-offs and equity pledges were also observed. Therefore, the subsequent analysis will examine these three behavioral events-ESOP, shareholder sell-offs, and equity pledges-to determine whether Company B's two share repurchases were opportunistic.

### **4.2. Employee Stock Ownership Plan**

The 2005 Company Law revised provisions related to share repurchases, including allowing repurchased shares to be used for employee incentives. The 2018 revised Company Law further formalized and expanded this by replacing "incentives" with "employee stock ownership" and "stock options." Consequently, an increasing number of companies conduct share repurchases specifically to implement equity incentive or employee stock ownership plans. Repurchasing shares for employee equity incentive schemes prevents dilution of per-share benefits while aligning employee interests with corporate objectives, thereby enhancing organizational commitment and accountability.

Both Repurchase Reports for Company B's two share repurchases explicitly stated that repurchased shares were intended for employee stock ownership plans. The first repurchase announcement clearly indicated that repurchased shares would later be used for employee stock ownership or equity incentive programs. However, two key facts emerged upon observation: First, the company did not launch any equity incentive programs for a considerable period after completing the repurchases; Second, on February 7, 2024, the company announced its decision to cancel the shares held in a special account under the 2021 repurchase plan. This indicates that the repurchased equity was not utilized according to the plan's stated purpose. Such inconsistency suggests that Company B may have engaged in opportunistic behavior by leveraging the repurchase announcement.

Six months after its second share repurchase announcement, Company B released the "Employee Stock Ownership Plan Management Measures." The implementation of this employee stock ownership plan aligns with the stated purpose of "employee incentives" outlined in its repurchase plan. The company promptly launched the shareholding plan on March 23, 2024, granting employees 13.69 million shares (representing 2.15% of total shares) repurchased earlier at a price of RMB 4.8 per share. The share transfer was completed in May. The entire process was standardized and transparent, strictly adhering to regulatory requirements mandating the use of repurchased shares within 36 months. Thus, the second share repurchase was driven by the motivation to "closely align shareholder interests, company interests, and individual employee interests."

### **4.3. Shareholder Reductions**

Major shareholder reductions refer to the sale of shares held by a company's controlling shareholder, actual controller, or principal shareholders holding over 5% of shares through secondary market transactions or block trades. Their motivations may include capital needs, investment adjustments, or risk diversification. However, if lacking reasonable justification or accompanied by information asymmetry, such actions may trigger market concerns about the company's prospects, leading to stock price volatility. When share reductions exhibit significant temporal, scale, or price correlations with corporate share buybacks, it may indicate that the buybacks are not purely for market

capitalization management or equity incentive purposes. Instead, they could provide liquidity support or price stabilization for major shareholders' reductions, potentially forming a channel for benefit transfer.

From an opportunistic perspective, if major shareholders exploit share buybacks to signal positive developments while simultaneously offloading holdings at inflated prices, this constitutes classic market manipulation. The essence of this strategy is to inflate stock prices using corporate funds for buybacks, creating favorable conditions for major shareholders to reduce holdings, ultimately harming the interests of small and medium investors. Therefore, this section primarily analyzes the temporal and spatial coupling, price linkage, and differences in announcement texts between buybacks and share reductions to determine whether Company B's two share buybacks had opportunistic motives to facilitate major shareholders' cash-out through share reductions.

### 4.3.1 First Share Repurchase

#### (1) Share Reduction Plans Prior to the Announcement of the Buyback Proposal

Company B announced on January 30, 2021, that shareholder Gongqingcheng Haoxiang and its concerted parties (holding a combined 5.95% stake) plan to reduce their holdings by no more than 3.9034 million shares through centralized bidding between March 1 and August 27, 2021. This represents 0.76% of the total share capital. The shares to be sold were acquired through share issuance for asset purchases and other means. The reason stated for the reduction was "personal capital needs."

As shown in Figure 1, the stock price trended downward following the announcement of the reduction plan. On the first trading day after the announcement (February 1), the stock price fell from RMB 11.02 to RMB 10.76, a daily decline of 2.4%. The decline continued thereafter, with the stock price accumulating a 6.9% drop over just five trading days. This rapid downturn fully reflects the market's interpretation of the major shareholder's reduction as a significant bearish signal, triggering a concentrated release of investor concerns.



**Figure 1.** Stock Price Movement Around Company B's First Share Repurchase Announcement

Following the announcement of the share repurchase plan on February 6, the stock price trajectory underwent a significant reversal. Within three trading days after the plan's release (February 8 to February 10), the stock price rebounded rapidly from RMB 10.26 to RMB 10.81, marking a cumulative increase of 5.4%. By February 24, Company B's stock price had risen to RMB 12.76, indicating that the market viewed the repurchase plan as a strong supportive signal. The timing of the repurchase announcement—just five trading days after the share reduction notice and coinciding with a critical 6.9% cumulative stock price decline—clearly signaled market stabilization intent. Thus, Company B's share repurchase plan likely aimed to counteract the adverse market impact of the reduction plan.

## ① Share Reductions During the Buyback Period

This section details the specific share reduction activities by major shareholders during Company B's first buyback period. As shown in Table 5, major shareholders and related parties executed multiple rounds of share reductions.

**Table 5.** Major Shareholder Reductions During Company B's First Buyback Period

Shareholder Name	Method of Reduction	Date of Reduction	Number of Shares Reduced (Shares)	Average Sale Price (CNY)	Amount of Reduction (CNY)	Reduction Ratio (%)
Gongqingcheng Haoxiang	Centralized Auction Trading	2021/3/26 - -	3,903,324	12.38	45,120,896.68	0.76
Gongqingcheng Haoxiang	Centralized Auction Trading	2021/9/6- 2021/12/27	7,464,820	14.69	104,898,177.40	1.46
Moderate	Block Trading	2021/9/27 - -	10,220,000	12.275	125,914,500.00	2
Xiaomei Xie	Block Trade	2021/12/9 2022/1/14 - -	6,710,000	14.525	94,077,900.00	1.31
Yanping Liu	Block Trade	2022/1/18 2022/1/4- 2022/1/4	1,070,000	15.48	16,563,600.00	0.21
Jianzhong Xie	Block Trade	2021/12/2 0- 2022/1/18	5,380,000	14.05	78,770,800.00	1.05

From March 26 to August 12, 2021, Gongqingcheng Haoxiang reduced its holdings by 3.9033 million shares through centralized competitive bidding at an average price of RMB 12.38 per share. Subsequently, from September 6 to December 27, 2021, it further reduced its holdings by 7.4648 million shares at an average price of RMB 14.69 per share. From September 2021 to January 2022, shareholders Huan Xu, Jianzhong Xie, Xiaomei Xie, and Yanping Liu collectively reduced holdings through block trades. Specifically: Jianzhong Xie sold 5.38 million shares between December 20, 2021, and January 18, 2022, while Xiaomei Xie and Yanping Liu completed their reductions between January 4 and 18, 2022. Additionally, the average selling price for reductions after September 2021 was generally higher than those in earlier periods. Notably, Yanping Liu's January 2022 reduction averaged RMB 15.48 per share, approaching the company's RMB 16 repurchase price ceiling.



**Figure 2.** Stock Price Trend During Company B's First Buyback Period

analyzing further from a price perspective, Figure 2. shows that the stock price rose rapidly after the repurchase plan was announced, climbing from 10.54 yuan to 13.41 yuan. During the subsequent repurchase period, the stock price also exhibited an overall upward trend. Major shareholders' sell-offs were concentrated in the higher price range. Between September and December 2021, the average selling price was ¥14.23, representing a 16.5% premium over the average repurchase price of ¥12.21. Notably, between December 28, 2021, and January 14, 2022, the stock price reached historical highs of RMB 16 to RMB 17.3. During this period, major shareholders intensively reduced their holdings through block trades at an average price of RMB 15.48, approaching the upper limit of the repurchase price of RMB 16. This pattern—where the timing of reductions closely coincided with peak share prices and the average reduction price significantly exceeded the repurchase price—indicates the company may have used share repurchases to artificially inflate the stock price, thereby creating favorable conditions for major shareholders to offload shares at elevated levels. Consequently, it is reasonable to conclude that Company B's first share repurchase likely involved opportunistic motives aligned with major shareholders' reduction activities.

#### 4.3.2 Second Share Repurchase

Analysis of Company B's share reduction activities reveals that no reductions occurred during the second repurchase period. Major shareholder Yanping Liu and his concerted parties first announced the reduction plan on June 3, 2023, and completed the actual reduction between July 11 and 14. Furthermore, the share reduction occurred in July, while the share repurchase was announced in late September and commenced in late October. These events did not overlap temporally. Moreover, after completing the share reduction, the company issued a no-further-reduction announcement, with no clear evidence suggesting the repurchase was used to mask the reduction. Additionally, the company released a commitment on September 27 to "refrain from further share reductions for the next year," effectively concluding the reduction cycle. Therefore, it is concluded that Company B's second share repurchase lacked opportunistic motives to coordinate with the major shareholder's share reduction.

#### 4.4. Equity Pledge Activities

Equity pledging refers to shareholders using their shares as collateral for financing, essentially a financial maneuver to obtain liquidity by leveraging equity value. When shares are pledged, the disposal rights over these shares belong to the pledgee. If the company's stock price continues to decline and breaches the warning line, the pledgee will notify the pledgor to add collateral or supplement margin. When the price falls below the liquidation line, the controlling shareholder must

supplement the pledged shares or margin to the warning line level before the next trading day's close. If the pledging shareholder fails to replenish the position or repay the pledged funds in time, the pledged shares face the risk of forced liquidation. Additionally, if a major shareholder has a high equity pledge ratio, the liquidation risk may trigger a potential transfer of control. Consequently, controlling shareholders have an incentive to take actions to boost the stock price and mitigate the risk of forced liquidation from equity pledges.

#### 4.4.1 First Share Repurchase

First, we reviewed Company B's equity pledge status prior to its initial share repurchase, as shown in Table 6. Before the first repurchase, major shareholders had pledged shares: shareholder Gongqingcheng Haoxiang pledged 5.06 million shares, accounting for 11.92%; while Huan Xu, as the controlling shareholder and actual controller, had accumulated equity pledges reaching 38.95% prior to the first repurchase. Should the stock price plummet to trigger the liquidation threshold, this could not only result in Huan Xu losing partial control but also spark market doubts about the stability of corporate governance. This, in turn, would exacerbate stock price volatility, creating a vicious cycle. Therefore, the following section further analyzes the liquidation risk associated with Company B's equity pledges.

**Table 6.** Equity Pledges of Company B Prior to the First Repurchase

Pledgor	Cumulative Pledged Shares (Shares)	Pledge Start Date	Pledgee	Percentage of Total Shares Held (%)	Purpose of Pledge Funds
Huan Xu	23,800,000	2019/11/21	Huachuang Securities	29.43	Individual Demand
	31,500,000	2019/11/28	Huachuang Securities	38.95	Individual Demand
Gongqingcheng Haoxiang	5,060,000	2020/7/6	Shenzhen High-Tech Investment and Financing Guarantee Co., Ltd.	11.92	Personal Needs

According to relevant regulatory provisions, securities companies must adhere to strict risk control standards when conducting stock pledge business. Among these, the ratio of loan principal to the market value of pledged stocks-the equity pledge ratio-shall not exceed 60%. For risk monitoring, two lines of defense must be established: the warning line shall not be lower than 135%, and the liquidation line shall not be lower than 120%. In actual business operations, financial institutions typically dynamically adjust risk control parameters based on market conditions and individual stock characteristics. They generally maintain the pledge ratio within the 30%-60% range, set the warning line between 150%-170%, and keep the liquidation line at 130%-150%. Due to the lack of disclosed information, this paper adopts a pledge ratio of 50% based on capital market practices and relevant research. Additionally, referencing the Choice Financial Terminal, the warning line is set at 160% and the liquidation line at 140%. The closing price on the pledge date serves as the basis for calculating the pledged stock value. This approach estimates whether Company B's shares still under pledge prior to the share repurchase reached the warning and liquidation lines. The specific calculation formula is as follows:

$$\text{Warning line price} = \text{closing price on the day of pledge} \times \text{pledge ratio} \times \text{warning line ratio} \quad (1)$$

$$\text{The liquidation line price} = \text{the closing price on the pledge date} \times \text{the pledge ratio} \times \text{the liquidation line ratio.} \quad (2)$$

Based on the above formula, the calculated results are shown in Table 7. The warning line prices for the three equity pledges are RMB 10.58, RMB 9.55, and RMB 12.12, respectively, while the liquidation line prices are RMB 9.25, RMB 8.36, and RMB 10.61, respectively. The stock price on the day before the repurchase announcement was ¥10.26, which was below the warning lines for the pledges made in July 2020 and November 2019. Notably, the July 2020 pledge had already fallen below its warning line and was approaching its liquidation line.

**Table 7.** Calculation Results for Margin Call Risk of Equity Pledge Before Repurchase

Pledge Date	Pledgee	Closing Price on Pledge Date (CNY)	Number of Shares Pledged (Shares)	Warning Line (CNY)	Liquidation Threshold (CNY)
2019/11/21	Huachuang Securities	13.22	23,800,000	10.58	9.25
2019/11/28	Huachuang Securities	11.94	31,500,000	9.55	8.36
2020/7/6	Shenzhen High-Tech Investment and Financing Guarantee Co., Ltd.	15.15	5,060,000	12.12	10.61

Following the announcement of the share repurchase plan, the stock price immediately corrected downward. Taking shares pledged on November 21, 2019 as an example, Table 8 shows that the subsequent stock price increase alleviated the liquidation risk stemming from equity pledges. Therefore, based on the timing analysis, the company's announcement of the repurchase plan when the stock price approached a critical threshold may have been motivated by the intent to stabilize the stock price and mitigate pledge risks.

**Table 8.** Pledge Liquidation Risk Situation After Company B's First Repurchase

Transaction Date	Closing Price (CNY)	2019/11/21 Pledge Share Warning Line Price (CNY)
2021-02-05	10.26	10.58
2021-02-08	10.54	10.58
2021-02-09	10.65	10.58
2021-02-10	10.81	10.58
2021-02-11	10.81	10.58
2021/2/12	10.81	10.58
2021/2/18	11.5	10.58
2021/2/19	12.65	10.58

#### 4.4.2 Second Share Repurchase

Table 9. details Company B's share pledge status prior to the second repurchase announcement. It reveals three major share pledges by key shareholders. Controlling shareholder Huan Xu pledged a cumulative 35,330,000 shares on November 21 and November 28, 2019, representing 21.72% and 28.28% of his holdings, respectively. Shareholder Xiaomei Xie pledged 10,500,000 shares to China Merchants Securities on December 13, 2022, representing 26.90% of her holdings. All three pledges were designated for personal needs. These pledges occurred prior to the launch of the company's first share repurchase plan in February 2021, with Huan Xu's pledge being the earliest and largest in scale.

**Table 9.** Share Pledges Prior to Company B's Second Buyback

Pledgor	Cumulative Pledged Shares (Shares)	Pledge Start Date	Pledgee	Percentage of Total Shares Held (%)	Purpose of Pledge Funds
Huan Xu	15,350,000	2019/11/21	Huachuang Securities	21.72	Individual Demand
	19,980,000	2019/11/28	Huachuang Securities	28.28	Personal Needs
Xiaomei Xie	10,500,000	2022/12/13	China Merchants Securities	26.90	Personal Needs

Based on the criteria and formula outlined earlier, the results for the second repurchase's equity pledge warning line and liquidation line are calculated as shown in Table 10. For Company B's three equity pledges, the warning lines are RMB 10.58, RMB 9.55, and RMB 10.94, respectively, while the liquidation lines are RMB 9.25, RMB 8.36, and RMB 9.57, respectively. On September 28, 2023, the trading day prior to Company B's repurchase announcement, the stock price stood at RMB 10.87. This had already fallen below the pledge warning line of RMB 10.94 set on December 13, 2022, and was also approaching the warning lines for the other pledges.

**Table 10.** Equity Pledge Liquidation Risk Calculation Results for Second Repurchase

Pledge Date	Pledgee	Closing Price on Pledge Date (CNY)	Number of Shares Pledged (Shares)	Warning Line (CNY)	Liquidation Threshold (CNY)
2019/11/21	Huachuang Securities	13.22	15,350,000	10.58	9.25
2019/11/28	Huachuang Securities	11.94	19,980,000	9.55	8.36
2022/12/13	China Merchants Securities	13.67	10,500,000	10.94	9.57

Additionally, taking shares pledged in December 2022 as an example, Table 11 shows that the stock price rose shortly after the repurchase plan was announced, mitigating equity pledge risks to some extent. Therefore, considering the timing, the company's repurchase announcement coincided with critical pledge risks, suggesting a potential motive to stabilize the stock price through repurchases and alleviate margin call risks.

Furthermore, Company B adjusted its share repurchase plan on February 1, 2024, yet completed the repurchase according to the original timeline and amount. Moreover, the preceding analysis of motives indicates this adjustment was not driven by signaling purposes. Consequently, the subsequent analysis will specifically examine whether this repurchase plan adjustment was motivated by opportunistic factors.

**Table 11.** Margin Call Risk Status After Company B's Second Repurchase

Trading Date	Closing Price (CNY)	2022/12/13 Pledge Share Warning Line Price (CNY)
2023-09-28	10.87	10.94
2023-10-09	10.28	10.94
2023-10-10	10.69	10.94
2023-10-11	10.97	10.94
2023-10-12	11.07	10.94
2023-10-13	11.31	10.94

First, as shown in Table 12, based on the equity pledge status prior to the adjusted repurchase plan, Huan Xu did not supplement the pledge. Xiaomei Xie supplemented the pledge twice on December 14, 2023, and January 24, 2024, with 1,140,000 and 500,000 shares respectively, and there were no pledge release activities.

**Table 12.** Equity Pledge Status of Company B Before Adjusting the Repurchase Plan

Pledgor	Cumulative Pledged Shares (Shares)	Pledge Start Date	Pledgee	Percentage of Total Shares Held (%)	Purpose of Pledge Funds
Huan Xu	15,350,000	2019/11/21	Huachuang Securities	21.72	Individual Demand
	19,980,000	2019/11/28	Huachuang Securities	28.28	Personal Needs
Xiaomei Xie	12,140,000	2022/12/13	China Merchants Securities	31.10	Personal Demand

The warning line and liquidation line prices were calculated earlier. Prior to the repurchase plan adjustment, Company B's stock price had been in a continuous decline, plunging to RMB 6.98 on January 31, 2024. This breach of all pledged equity liquidation thresholds indicates Company B faced imminent liquidation risk, corroborated by its frequent supplementary pledging activities. Announcing the share repurchase plan adjustment at this juncture was largely aimed at mitigating this risk. Moreover, the actual repurchase amount fell short of the adjusted lower limit, and the final repurchase amount barely reached the adjusted lower limit. This further confirms that the repurchase plan adjustment may have been opportunistically motivated.

## 5. Conclusions and Recommendations

### 5.1. Research Findings

Both instances of repurchases by Company B exhibited opportunistic motives. During the first repurchase, despite tight cash flow and the stock price not being undervalued, the company proceeded with the repurchase. The repurchased shares were not genuinely allocated to the employee stock ownership plan. The timing and pricing of the announcement were highly correlated with the major shareholder's share reduction. This not only inflated the stock price to facilitate shareholder cash-outs but also mitigated risks when the equity pledge ratio was high and the stock price approached the liquidation threshold, indicating opportunistic motives as the primary driver. In contrast, the second buyback proceeded without concurrent shareholder sales and successfully implemented the employee stock ownership plan, reflecting more standardized motives. However, the timing of its announcement remained closely tied to equity pledge risks. Notably, despite announcing an increased repurchase scale in 2024, the company completed the buyback within the original timeframe, exposing an intent to use "empty signals" to stabilize market expectations and alleviate pledge risks. Thus, both buybacks reflect opportunistic motives, differing primarily in that the first more prominently served the interests of major shareholders' share reductions, while the second incorporated dual considerations of employee shareholding and mitigating pledge risks.

### 5.2. Relevant Recommendations

Regulators should curb opportunistic share repurchases by listed companies through a combination of institutional improvements, dynamic oversight, and penalties for violations. This approach will protect investor rights and safeguard the healthy development of the capital market.

Companies should establish robust internal decision-making and oversight mechanisms to strictly control the sources and usage of repurchase funds. Prior to repurchases, they must comprehensively evaluate key indicators such as financial condition, operational quality, and market valuation to avoid initiating repurchase plans during periods of significant operational pressure. This ensures repurchases do not compromise normal business operations or debt-servicing capacity. During the repurchase process, a dynamic monitoring mechanism should be implemented. This includes regularly disclosing repurchase progress, promptly alerting to abnormal situations, and regulating shareholder behavior. This prevents scenarios like Company B's first repurchase period, where "repurchases were conducted while simultaneously reducing holdings." Such measures guard against suspicions of benefit transfer and protect the rights of minority shareholders. After completing repurchases, companies should conduct specialized effectiveness evaluations. This involves analyzing financial impacts, tracking market reactions, and summarizing lessons learned to inform future capital operations.

Investors should remain vigilant against potentially misleading signals in share repurchase announcements and avoid blindly following investment trends. As analyzed earlier, some listed companies announce repurchase plans despite poor financial health. Their true motives often lie not in signaling positive developments, but in opportunistic aims such as facilitating major shareholders' share reductions or alleviating equity pledge pressures.

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