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Analysis of the motivation and effect of Mindray Medical's share repurchase

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Abstract
Since the gradual relaxation of China's stock repurchase policy in 2018, many listed companies have implemented repurchases, among which the phenomenon of "flickering repurchases" has increased, causing the market to worry about insider trading and profit transmission. This paper takes Mindray as the research object to explore the motivation and effect of its share repurchase. The study found that the main motivations for Mindray to repurchase shares include equity incentives, cancellation of shares, reduction of registered capital, and reduction of agency costs. The buyback has a certain boost to the company's stock price in the short term, but its long-term support effect is limited. At the financial level, the buyback optimizes the company's financial indicators to varying degrees.This paper uses the event research method to analyze the short-term impact of the buyback announcement on the stock price, and evaluates the improvement of the buyback on the company's financial position based on the financial data. The results show that Mindray's buyback has diversified goals, but investors need to be alert to potential risks, and should comprehensively examine the buyback strength, process, and special action events to accurately judge the company's true motives.

Keywords : Share repurchase; Repurchase motivations; Marketing effect; Financial effect

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Introduction

Share repurchase originated in the United States in the 70s of the 20th century, and has been developed in the European and American capital markets for more than 50 years. In contrast, share repurchase started late in China, and then has only attracted the attention of domestic scholars and listed companies since 1990. The main reasons for choosing Mindray Medical in this article are as follows: At first, in recent years, China's listed companies have joined the wave of share repurchases, and as the domestic medical leader, Mindray Medical's two large-scale buybacks in half a year are noteworthy. Secondly, from the characteristics of Mindray Medical's share repurchase, not only is the repurchase scale large, the amount of the two repurchases is 1 billion yuan, and the repurchase efficiency is high, and the two repurchases were completed within one month, so the share repurchase cases of Mindray Medical are representative.

Literature review

Current status of domestic research

Reducing state-owned shares. Before the 2005 share split reform, state-owned shares dominated the market, and the main motivation for buybacks at that time was to reduce state-owned shares and non-current shares. At this time, Lan Faqin (2001) was represented by Lan Faqin (2001), who regarded share repurchase as an important tool for reducing state-owned shares in his discussion of the way to reduce state-owned shares. In addition, when Guo Yanchun (2001) talked about share repurchase and state-owned share reduction, he mentioned that the reduction of state-owned shares is a special task of share repurchase in China, and the purpose is mainly to reduce state-owned shares.

Stabilize the stock price. Feng Junxiu (2021) found that share buybacks reflect the confidence of managers in the future development of enterprises, which is conveyed to investors and promotes the return of stock prices to a reasonable range. Xu Sheng and Kan Yiwei (2022) believe that share buybacks promote stock price stability by boosting investor confidence and reducing analysts' forecast bias, and that stock price stability is more significant for buybacks for the purpose of boosting stock prices. In addition, Cui Yinggang (2022) found that the motivation for this round of buybacks is mainly to convey the signal that the company's stock price is undervalued and boost investor confidence by studying the "repurchase wave" of Hong Kong stocks in 2022.

Transfer of interests to shareholders. Chen Daisong and Sun Yanan (2020) believe that buybacks are usually accompanied by the possibility of shareholder reduction, benefit transfer, and risk transfer. Gao Liu (2021) believes that repurchase is a channel for insiders of listed companies to reduce their holdings in a targeted manner, and relevant entities can rely on information advantages to accurately reduce their holdings at a high level. In addition, Deng Quanying, Chen Ning, and Qin Shuai (2021) took the equity pledge of Wanfeng Aowei's controlling shareholder as a case study and found that the real

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purpose of Wanfeng Aowei's share repurchase is to safeguard the interests of the controlling shareholder.Scholars represented by He Weifeng, Li Sihao, and Zhou Zilu (2021) found that increasing the liquidity of shares through buybacks is conducive to resolving the risk of control transfer of controlling shareholders. Yi Xiaohui (2022) found that holding treasury shares through buybacks will have a "crowding out effect" on small and medium-sized shareholders, reducing their influence, thereby leaving room for insider trading by executives and major shareholders.

Current status of research abroad

The financial leverage hypothesis. It was first born in the late 50s and early 60s of the 20th century, when it was accompanied by the discussion of capital structure in MM theory, which believed that enterprises could reduce owners' equity through share repurchase to increase financial leverage to achieve capital structure optimization. Scholars such as Hsuan-Chi Chen, Joel T. Harper, and Subramanian R. Iyer (2018) have found that share buybacks in low-leverage firms are mainly aimed at adjusting the capital structure.

The signaling hypothesis. The signaling hypothesis was first developed in the late 70s of the 20th century, when the U.S. economy was in a depression and investors generally lacked confidence. Among them, scholars such as Drousia Angeliki (2019) have concluded that buybacks of small firms and firms with high book-to-market value ratios are more in line with the signaling motivation.

Free cash flow hypothesis. The free cash flow hypothesis, coined in 1986, argues that excess free cash flow can cause managers to prioritize their personal interests over shareholder interests, such as using that cash for investments and inefficient acquisitions, thereby increasing agency costs. Therefore, share buybacks can be used to consume some cash to reduce agency costs. Later, scholars such as Gerald J. Lob and Ashok Robin (2020) supported share buybacks through empirical studies and proved that share buybacks and conservatism are potential mechanisms to counter management's overinvestment of free cash flow.

Equity incentive hypothesis. At that time, in the 90s of the 20th century, stock options began to rise, and this hypothesis was born, which believed that the purpose of corporate stock repurchase was to implement stock option plans, so as to motivate employees and tie the interests of employees and the interests of the company. Among them Cook Douglas Oand Zhang Weiwei (2022) found that the high sensitivity of CEO options to stock prices leads to more share buybacks.

Analysis and discussion

Company profile

The full name of Mindray Medical is Shenzhen Mindray Biomedical Electronics Co., Ltd., which was established in 1991. Mindray was listed on the New York Stock Exchange in 2006 but later underwent a privatization delisting in 2016. Subsequently, it returned to the A-share market and was successfully listed on the GEM of the Shenzhen Stock Exchange in 2018.

Since its establishment in 1991, Mindray has continued to invest in research and development. After more than 30 years of development, Mindray Medical has gradually developed into a leading medical device in China by virtue of its own product and R&D advantages. Mindray Medical is mainly engaged in the research, development, manufacturing, marketing and service of medical devices. The Company offers three main product categories, namely Life Information and Support, In Vitro Diagnostics and Medical Imaging. According to the 2021 annual report, life information and support products accounted for the highest proportion of operating income, reaching 44.14%, followed by in vitro diagnostic products and medical imaging products, accounting for 33.43% and 21.47% respectively.

Mindray Medical's share repurchase process

1. The first share repurchase process

First share buyback: August 26, 2021 – September 1, 2021. At that time, the stock price was volatile, and Mindray had abundant cash flow, so in order to enhance investor confidence, Mindray decided to complete the buyback within 12 months. On August 26, 2021, Mindray disclosed its first share repurchase plan, according to which the upper limit of the repurchase price is 400 yuan per share, the repurchase amount is 1 billion yuan, and the number of repurchases accounts for 0.2056% of the total share capital, all of which are used to implement equity incentives or employee stock ownership plans.

From the perspective of the repurchase process, the first share repurchase was completed on September 1, 2021, which took only one week. On August 31, 2021, Mindray Medical repurchased 1,649,938 shares for the first time through centralized auction transactions, accounting for 0.14% of the total share capital on the announcement date, with a repurchase amount of 537 million. The day after the repurchase, Mindray disclosed the "Announcement on the Progress of the First Repurchase of the Company's Shares and the Repurchase of Shares" according to the progress of the shares, which showed that as of September 1, 2021, it had repurchased a total of 3,048,662 shares, accounting for 0.25% of the company's total share capital, with a repurchase amount of 999,990,78617 yuan, which has reached the maximum executable amount of 1 billion. At this point, the first share repurchase of 1 billion yuan was officially completed.

2. The second share repurchase process

Second share buyback: January 13, 2022 – February 23, 2022. Mindray Medical released a buyback plan on January 13, 2022. The buyback, which is mainly based on Mindray's future growth prospects and operating performance, will subsequently cancel the repurchased shares, and the company's registered capital will also be reduced, and the company seeks to increase investor confidence by demonstrating its commitment to long-term growth and increasing the value per share. According to the plan, the upper limit of the repurchase price is 400 yuan per share, the repurchase amount is 1 billion yuan, and the repurchase number accounts for 0.2056% of the total share capital.

From the perspective of the repurchase process, the second share repurchase was completed on February 23, 2022, and it took about one month. Mindray's first repurchase was on February 11, 2022, when it repurchased 950,328 shares, accounting for 0.08% of the total share capital on the announcement date, with a repurchase amount of RMB 285 million. Subsequently, as of February 23, 2022, a total of 3,249,872 shares of the company have been repurchased, accounting for 0.25% of the company's total share capital, and the repurchase amount is 999,944,451.22 yuan, which has reached the maximum executable amount of 1 billion. So far, the second share repurchase of 1 billion yuan has been implemented.

Analysis of Mindray's Share Repurchase Motivation

1. Employee equity incentives

As a long-term mechanism, employee equity incentive is not only conducive to mobilizing the enthusiasm of employees, establishing a mechanism for connecting the interests of employees and the company, but also reducing the company's talent loss and escorting the company's long-term development. Mindray uses the repurchased shares for the employee stock ownership plan, which ensures that the value per share of shareholders is not diluted, which is more shareholder-friendly and takes into account the interests of the company, shareholders and employees.

On August 26, 2021, Mindray Medical made it clear in its first share repurchase announcement that the repurchased shares will be used for equity incentives or employee stock ownership plans. If the company has unused repurchased shares within 36 months after the completion of the repurchase, these shares will be cancelled. Subsequently, on January 20, 2022, Mindray Medical released the 2022 Employee Stock Ownership Plan (Draft), which stipulates that the repurchased shares will be used entirely for Mindray's 2022 employee stock ownership plan. The draft makes it clear that this move is to mobilize the enthusiasm of employees and promote the long-term and healthy development of the company. Therefore, judging from the timeliness of the disclosure of the employee stock ownership plan, Mindray's first share repurchase was indeed used for equity incentives.

Further analysis of the reasons behind equity incentives shows that Mindray Medical is in an industry that requires continuous innovation, and Mindray Medical has been attaching importance to R&D investment for many years, investing about 10% of its revenue in R&D every year. Mindray realizes that in order to achieve long-term development, it must invest more time and resources in talents, and equity incentives are one of the important ways. This is not only conducive to aligning the interests of the company and employees, improving the enthusiasm and cohesion of employees, but also reducing the loss of talents such as core employees and technical backbones.

2. Cancellation and reduction of registered capital

On January 13, 2022, Mindray Medical stated in the second share repurchase announcement that the repurchased shares will be cancelled in accordance with the law and the registered capital will be reduced. As of February 23, 2022, the company completed the second share repurchase, and issued the "Announcement on the Implementation Results of Share Repurchase and Share Changes" on the next day according to the completion of the repurchase. With the release of Mindray's 2021 annual report, the company's operating income and performance growth have slowed down, and the market believes that Mindray's performance is less than expected, which affects investor confidence and further causes the stock price to fall. Therefore, in this context, the cancellation can directly reduce the company's share capital and increase earnings per share, and ultimately safeguard the interests of investors.

3. Reduce agency costs

In order to verify whether the company's repurchase is for the purpose of managing idle funds and reducing agency costs, this article will analyze the net cash flow of monetary funds and investment activities in combination with the two repurchases of 1 billion yuan.

First of all, from the perspective of monetary funds, Mindray Medical's monetary funds before the two share repurchases exceeded 15 billion yuan, which indicates that the company's monetary funds are sufficient, even if the repurchase amount is as high as 1 billion yuan, it only accounts for 6.40% of the monetary funds in Q2 2021, accounting for a small proportion, and the share repurchase will not bring great financial pressure to Mindray Medical At the same time, it can consume part of the cash to promote the management to make prudent decisions, thereby alleviating agency costs. Therefore, Mindray's buyback is likely to be due to the consideration of reducing agency costs.

Secondly, from the perspective of cash flow from investment activities, the net cash flow from Mindray Medical's investment activities before the two buybacks was less than 0. In the quarter before the first repurchase (Q2 2021), the net investment flow was -371 million yuan, and in the second repurchase quarter (Q4 2021), its net investment flow was -336 million yuan. It can be seen that the input of Mindray's investment activities before the two buybacks is greater than the output, indicating that the company's investment efficiency is not optimistic, and it cannot be ruled out that the management abused its power to use idle funds for inefficient investment. Therefore, the consumption of part of the funds through share repurchase is conducive to curbing the inefficient investment behavior of Mindray Medical's management, thereby further reducing agency costs.

In short, Mindray had abundant cash flow and idle funds before the buyback. Based on this, for this part of the idle funds, the company will use them for share repurchase, which is not only conducive to improving the efficiency of capital use, but also reducing agency costs.

Analysis of the Effect of Mindray Medical's Share Repurchase

1. Market Effects

(1) The first share repurchase

The basic method of event research refers to understanding the impact of a specific economic event on the stock price of listed companies through regression analysis, and its basic method is to first calculate the event date, window period and estimated period, and then calculate the AR and CAR of the window period based on the regression equation of the estimated period, so as to judge the impact of the event on the company's stock price.

In the analysis of the case of Mindray, this paper first selects the date of Mindray's buyback announcement as the event date and denotes it as t=0, then takes the 10 days before and after the event as the window period and denotes it as t=(-10, 10), and then takes the 120 days before the window period as the estimation period and denotes it as t=(-130, -10). Then, linear regression was performed on the estimation period data, and the linear regression equation of Mindray was obtained, and finally the AR and CAR in the window period were calculated.

Since Mindray is listed on the Shenzhen Stock Exchange, the Shenzhen Component Index is used as the market yield, and Excel is used to perform linear regression on the estimated period data, and finally the linear regression equation of Mindray Medical is obtained as follows:R_{it} = 1.3510R_{mt}-0.1029, where R_{it} represents the expected rate of return and R_{mt} represents the market rate of return.

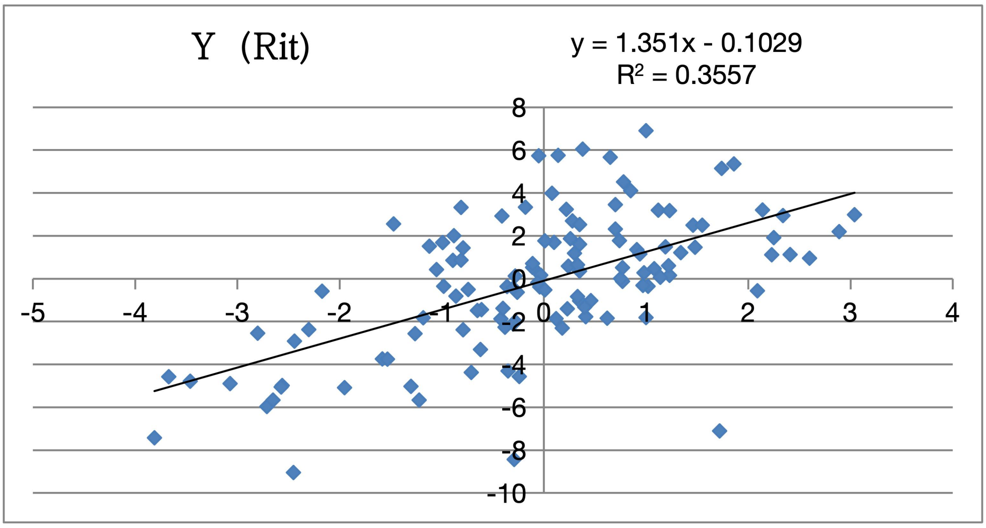

Figure 1 Mindray's first share repurchase regressed linearly
Data source: Excel processing according to the tide information

From Table 1, it can be seen that Mulitiple R = 0.596426, and its value is generally between -1 and 1, and the closer Mulitiple R is to 1, the stronger the correlation, which is greater than 0.5, indicating that the correlation is strong in this repurchase analysis. The Significance F-value is 6.58×10^{-13} (less than 0.0001), and the smaller the value, the better, which shows that the regression results have a high degree of confidence and reach more than 99.99%, so the repurchase results are trustworthy. In addition, from the P-value, it can be found that the t-test of variable X is also significant, with a value of 6.58×10^{-13}, which is much less than 0.01, that is, there is a significant relationship between market return and expected return.

Table 1 Linear regression analysis of Mindray's first share repurchase

Regression parameters	numeric value
Multiple R	0.596426
Significance F	6.583512E-13
R Square	0.355724
Adjusted R Square	0.350264
standard error	2.552299
Observations	120
P-value	6.583512E-13

Data source: Excel processing according to the tide information

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After obtaining R_{it}=1.3510R_{mt}-0.1029, Mindray Medical's excess rate of return AR_t and cumulative excess rate of return were calculated based on AR_t=R_t-RitCAR_t, the calculation results are shown in the following table:

Table 2 Calculation results of AR and CAR for Mindray's first share repurchase

t	Real rate of return R_t (%)	Expected rate of return Ri_t (%)	Excess rate of return AR_t (%)	Cumulative excess rate of return CAR_t (%)
-10	-2.54	-1.17	-1.37	-1.37
-9	-2.75	-1.04	-1.71	-3.08
-8	0.70	-1.06	1.76	-1.32
-7	-6.22	-3.25	-2.97	-4.29
-6	0.76	0.87	-0.11	-4.40
-5	-3.44	0.21	-3.65	-8.05
-4	-17.05	-2.28	-14.77	-22.82
-3	8.13	2.57	5.56	-17.26
-2	1.61	1.09	0.52	-16.74
-1	4.34	0.21	4.13	-12.61
0	0.83	-2.70	3.53	-9.08
1	0.56	0.10	0.46	-8.62
2	-1.31	-0.22	-1.09	-9.71
3	2.82	-0.99	3.81	-5.89
4	0.91	-0.24	1.15	-4.74
5	-1.92	-0.45	-1.47	-6.21
6	2.01	-1.02	3.03	-3.18
7	7.68	3.40	4.28	1.11
8	-2.99	1.34	-4.33	-3.23
9	-3.75	-0.24	-3.51	-6.74
10	0.35	-0.01	0.36	-6.38

Data source: Excel processing according to the tide information

As shown in Figure 2, comparing the excess rate of return and cumulative excess rate of return before and after Mindray's first share repurchase, it can be found that before the first repurchase (August 26, 2021), the AR as a whole showed a downward trend and remained below 0 for a long timeand reached its lowest point at t(-4), with an AR value of -14.77%. Then t(-3) rebounded to 5.56%, followed by t(-2, -1) AR fell first and then rose. Among them, the increase in t(-1) was mainly due to Mindray's announcement on August 25, 2021 that the company intends to repurchase 2.5 million shares, which stimulated market confidence and pushed the stock price up.

In addition, from the perspective of CAR, CAR generally fell first and then rose during the window period, but due to the fact that AR fell more and rose less, the CAR during the window period was negative for a long time, until t(7) successfully turned positive, and the CAR reached 1.11%, and then fell to negative again. It can be seen that Mindray's first repurchase has a short-term effect on stopping the decline, but the effect is very limited.

In general, before and after the first buyback, Mindray Medical mainly generated significant excess returns in the three days before and after the event, which indicates that the market may have reacted to Mindray's share repurchase announcement in advance, which stimulated the rise of the stock price, but the share repurchase had a limited role in supporting the stock price.

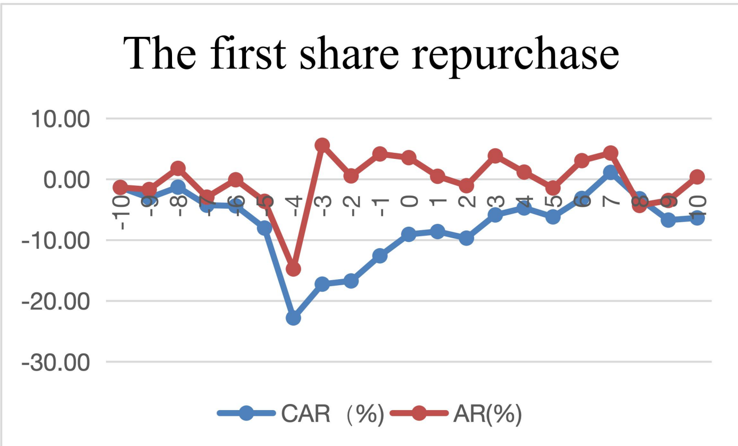

Figure 2 Trend chart of Mindray's first share repurchase of AR and CAR
Data source: Excel processing according to the tide information

(2) The second share repurchase

In this paper, the data of the second share repurchase is regressed according to the same method, and the regression equation of Mindray Medical for this repurchase is as follows: R_{it}=1.3473R_{mt}-0.1061.

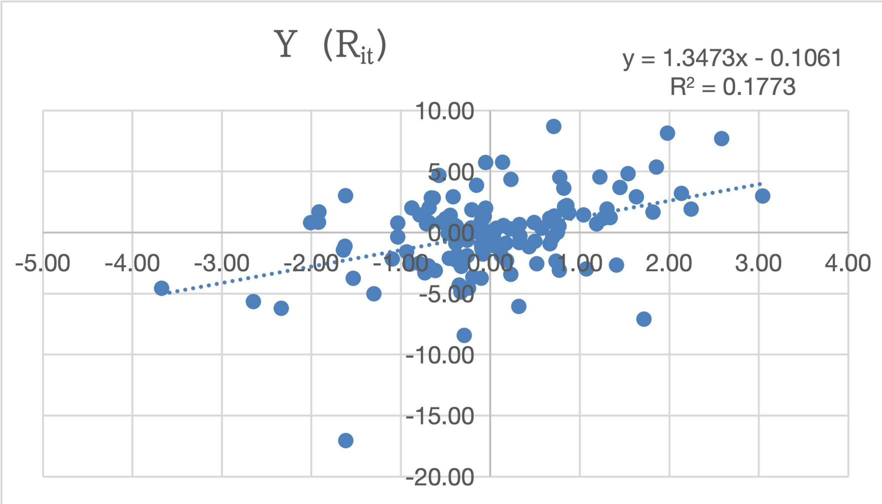

Figure 3 Linear regression of Mindray's second share repurchase
Data source: Excel processing according to the tide information

From the regression results of Mindray's second share repurchase, it can be seen that Mulitiple R=0.421123, which is less than 0.5, indicating that the correlation between the two variables of expected return and market return during this period is weak, and the Significance F value is 1.67×10^{-6}, which is less than 0.0001 at this time, which shows that the confidence level is still more than 99.99%, indicating that the regression results have a high degree of confidence. In addition, the P-value value is 1.67×10^{-6}, which is less than 0.01, which means that the t-test of the X variable is significant, that is, the market return has a significant impact on the expected return.

After obtaining the linear regression equation R_{it}=1.3473R_{mt}-0.1061, Mindray calculated AR_t and CAR_t according to the AR_t=R_t-R_{it} formula, and the calculation results are shown in Table 4.

Table 4 Calculation results of AR and CAR for Mindray's second share repurchase

t	Real rate of return Rt (%)	Expected rate of return Rit (%)	Excess rate of return ARt (%)	Cumulative excess rate of return CARt (%)
-10	-0.75	-1.78	1.02	1.02
-9	1.82	1.20	0.62	1.64
-8	-0.57	0.45	-1.02	0.62
-7	-10.22	-0.70	-9.52	-8.90
-6	0.97	-2.52	3.50	-5.40
-5	-2.09	-1.00	-1.09	-6.49
-4	-2.96	-0.91	-2.05	-8.54
-3	-0.47	0.49	-0.96	-9.50
-2	-2.28	-1.82	-0.46	-9.96
-1	3.42	1.77	1.66	-8.30
0	-1.95	-2.75	0.80	-7.50
1	4.42	0.01	4.41	-3.09
2	-0.27	1.92	-2.19	-5.28
3	1.18	0.15	1.02	-4.26
4	-1.66	-1.83	0.17	-4.08
5	5.88	-0.19	6.07	1.99
6	-3.58	-1.71	-1.88	0.11
7	-1.39	0.40	-1.78	-1.67
8	1.04	-3.91	4.96	3.29
9	-2.16	0.84	-3.00	0.29
10	-2.28	-3.84	1.55	1.84

Data source: Excel processing according to the tide information

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For the second buyback released on January 13, 2022, AR had already rebounded before the buyback event date, suggesting that the market may have reacted early to the buyback of Mindray Medical's shares. The AR after the buyback announcement date fluctuated around 0 but was generally positive, indicating that the market has reacted positively to the share buyback of Mindray Medical. From the perspective of CAR, its value has been below 0 for a long time, and it does not turn positive until t(5), indicating that even if there is a short-term stop effect, the effect is very limited.

In general, after the second share repurchase, Mindray Medical generated excess returns, and the cumulative excess return turned positive, which indicates that the market has reacted positively to the second share repurchase announcement to a certain extent.

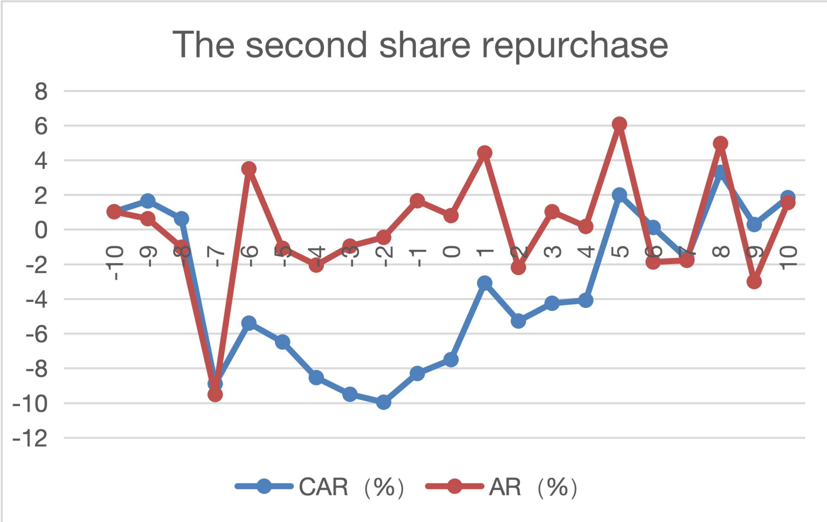

Figure 4 Trend chart of AR and CAR of Mindray's second share repurchase
Data source: Excel processing according to the tide information

2. Market Effects

（1）The first share repurchase

As shown in Figure 5-9, Mindray's current ratio, quick ratio, and cash ratio all fluctuated and decreased in the quarter following the first share repurchase. Among them, the current ratio was 2.77 in the quarter before the buyback, and it dropped to 2.41 during the buyback period, which was a significant decline, but the current ratio rose to 2.47 in the quarter after the buyback, and the overall change was not much. At the same time, the quick ratio is also declining, from 2.34 before the first repo to 1.99 during the first repo, a decrease of 14.96%, and then the quick ratio has rebounded. In addition, the cash ratio also experienced a downward trend and then an upward trend, from 2.00 as at 30 June 2021 to 1.63 as at 30 September 2021, before edging up to 1.78 on 31 December 2021. The decline was mainly due to the fact that Mindray Medical used 1 billion yuan to repurchase shares, which led to a decrease in the company's cash holdings, which affected Mindray's short-term solvency.

In short, Mindray's current ratio, quick ratio, and cash ratio have all decreased after the first repurchase, while the asset-liability ratio has generally increased and is close to the industry average. It can be seen that the first share repurchase has weakened Mindray's short-term and long-term solvency to a certain extent. However, due to Mindray's sufficient liquidity and zero interest-bearing liabilities, the buyback will weaken the company's solvency less.

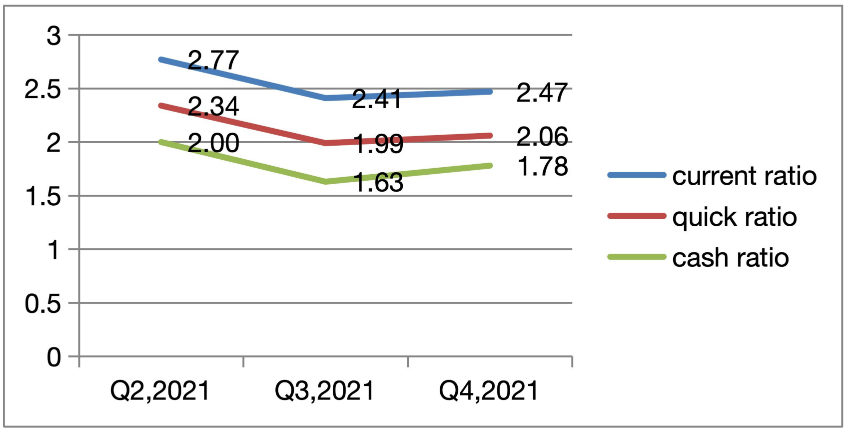

Figure 5 Short-term solvency indicators before and after Mindray's first repurchase
Data source: Juchao Information Network

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(2) The second share repurchase

From the perspective of short-term solvency indicators, Mindray's current ratio, quick ratio and cash ratio were all declining before and after the second share repurchase. Specifically, Mindray's current ratio decreased from 2.47 in Q4 2021 to 2.03 in Q2 2022, and at the same time, the quick ratio continued to decline before and after the second share buyback, from 2.06 in the quarter before the buyback to 1.63 in the quarter after the buyback, a decrease of 20.87%. In addition, the cash ratio also showed a downward trend, from 1.78 before the buyback (Q4 2021) to 1.24 after the buyback (Q2 2021). The decline was mainly due to the reduction of corporate capital and liquid assets by the second repurchase, which led to a decline in short-term solvency.

Overall, Mindray's current ratio, quick ratio, and cash ratio all decreased after the second repurchase, and the decline was greater than that of the first repurchase, indicating that Mindray's second share repurchase weakened its short-term solvency even more.

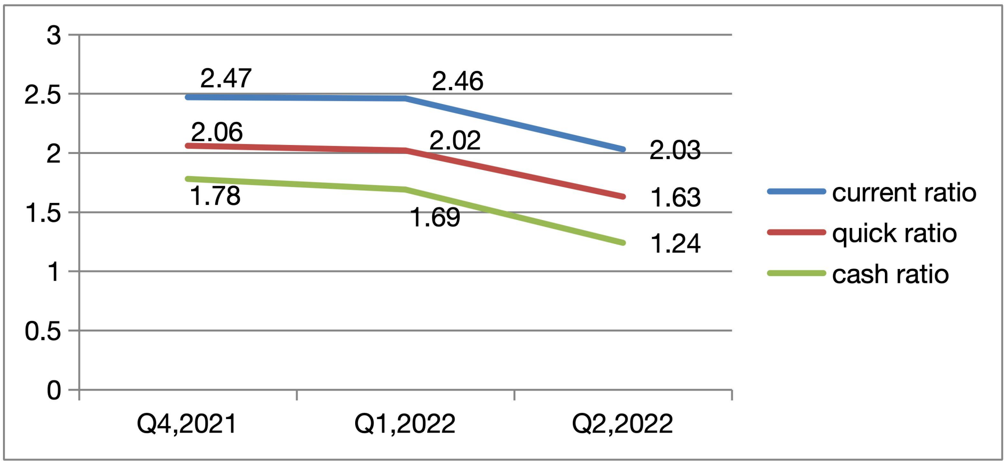

Figure 6 Mindray's short-term solvency indicators before and after the second repurchase
Data source: Juchao Information Network

In short, Mindray's current ratio, quick ratio, and cash ratio have all decreased after the second repurchase, while the asset-liability ratio has increased overall. It can be seen that the second share repurchase has weakened Mindray's short-term solvency to a certain extent, and has little impact on its long-term solvency.

Conclusion

The motives for share repurchase are diversified.

In terms of repurchase motivation, combined with the research on Mindray's repurchase motivation in Chapter 4, it is not difficult to find that Mindray's share repurchase motivation is diversified. First of all, one of the main motivations is to use share repurchase for equity incentives, avoid the loss of core employees and technical backbones, and improve the cohesion of employees and the competitiveness of the company. Secondly, from the perspective of free cash flow, reducing idle funds and reducing agency costs is a major motivation. Finally, combined with Mindray's buyback strength and repurchase process, it can be seen that Mindray's two buybacks were supported by abundant cash flow and were successfully completed in a short period of time, indicating that Mindray's buyback execution is relatively high. In short, Mindray's share repurchase motives are diversified, not only to stimulate market confidence, employee stock ownership incentives, but also opportunistic motives, so it is necessary to identify the real motives of share repurchase from multiple perspectives.

Share repurchase has a short-term supporting effect on the stock price.

As mentioned in Chapter 3 of Mindray Medical's share repurchase characteristics, Mindray's two share buybacks were launched during the downward phase of the stock price. Mindray's share price experienced a long period of decline before the share buyback, and since the implementation of the buyback, Mindray's share price has begun to rebound locally, indicating that the share buyback has a certain stimulating effect on Mindray's share price. Subsequently, after the analysis of market effects, it can be seen that in the two buybacks, Mindray Medical's AR and CAR both had a clear upward trend during the window period, but soon began to fluctuate and fall again. It can be seen that the share repurchase has a certain stimulating effect on Mindray's stock price in the short term, but the effect is limited.

Share buybacks have improved the company's financial performance

According to the "Analysis of the Financial Effect of Mindray Medical", the share repurchase has weakened Mindray's solvency on the one hand, and promoted the company's operating ability and profitability on the other hand, and optimized its capital structure. Overall, the impact of Mindray's share buyback on the company is basically positive.

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First of all, after Mindray implemented the share repurchase, the current ratio, quick ratio, and cash ratio all decreased, which shows that the share repurchase has weakened Mindray's short-term solvency. Secondly, after the share repurchase, Mindray's accounts receivable turnover, inventory turnover, and total asset turnover have all increased to varying degrees, indicating that Mindray's operating capacity has been improved. In addition, the increase in return on equity and net profit margin on sales represents an increase in profitability. Overall, Mindray share buybacks have improved the company's financial performance.

On the other hand, the company should promote the construction of a long-term mechanism for share repurchases. At present, most of the share repurchases carried out by Chinese companies are based on stabilizing the stock price, and when the company's stock price is in a downturn, the share repurchase is used as a "first aid medicine" to quickly stabilize the stock price. Compared with stabilizing the stock price, share repurchase has more far-reaching significance for the company to improve the equity structure, reduce agency costs, and replace cash dividends. In the case of Mindray Medical, the company reduced agency costs and increased employee motivation through share repurchase, which is conducive to promoting the company's long-term development. Therefore, the company can tap the long-term mechanism of share repurchase according to its own actual situation, so as to promote the share repurchase to play a longer-term role.

Revelation

Listed companies: Optimize repurchase strategies by category.

Share repurchase is a common corporate governance tool in the capital market, and listed companies should formulate a reasonable repurchase strategy based on their own needs and market environment. Different types of enterprises need to pay attention to different core issues when buying back.

(1) Large enterprises: pay attention to long-term mechanisms to improve the efficiency of capital operation.

For enterprises with abundant funds and greater market influence, share buybacks should go beyond short-term stock price management and pay more attention to capital structure optimization and long-term incentive mechanisms. For example, Mindray reduces agency costs through share buybacks and improves the incentive effect of management and employees, thereby promoting the sustainable development of the company. Therefore, large enterprises can incorporate buybacks into their long-term capital operation strategies to optimize their equity structure, enhance shareholder returns, and form a comprehensive capital management system in combination with equity incentives and cash dividends.

(2) Small and medium-sized enterprises: rational repurchase to avoid the pressure of capital chain.

For small and medium-sized businesses, cash flow management is even more critical. If the company is financially sound and undervalued, a modest buyback can convey market confidence and enhance shareholder value. However, if the buyback consumes too much cash, it may lead to liquidity constraints and affect the normal operation of the enterprise. Therefore, when formulating a buyback plan, SMEs should fully assess their financial situation to ensure that the buyback will not affect the development of their main business, and at the same time avoid missing out on high-quality investment opportunities due to short-term stock price management.

Investors: identify the motivation for repurchase in multiple dimensions.

As the motives for share buybacks become increasingly diversified, investors, especially small and medium-sized shareholders, need to rationally analyze the true intentions of buybacks and avoid blind investment.

(1) Pay attention to the company's financial situation and judge the feasibility of repurchase

Investors can assess the sustainability of buybacks based on a company's cash flow position, debt level and profitability. In general, companies with abundant cash flow and stable earnings are more likely to buyback, while large buybacks by cash-strapped companies with high debt ratios may be risky. For example, if a company announces a large-scale buyback amid declining earnings and tight cash flow, investors need to be wary of whether it has an incentive to maintain its share price or hide its financial problems.

(2) Evaluate the company's integrity based on the implementation of the buyback

Investors should pay attention to the implementation of the company's repurchase plan, including whether the repurchase amount has shrunk and whether it has been completed as planned. If the company's buybacks are frequently postponed or the amount is much lower than the announced plan, it may mean that the management lacks integrity and even has the potential to manipulate the market.

(3) Pay attention to special events and be alert to potential risks

Share buybacks are often accompanied by other capital market behaviors, such as the increase or decrease of major shareholders' holdings, the pledge of a high proportion of shares, or the lifting of the ban on large-scale restricted shares. If the buyback occurs before the major shareholder reduces its holdings, investors need to be wary of whether the buyback is used to increase the stock price and facilitate the withdrawal of the major shareholder. In addition, if the company's equity pledge ratio is too high, the buyback may be to stabilize the stock price and avoid the pledge liquidation, rather than to protect the interests of small and medium-sized shareholders.

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