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The Impact of Shorting Mechanism on Cash Holding Levels and Asset Utilization of Firms: A Case Study of Luckin Coffee's Shorting Incident

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Abstract:
this study takes Muddy Waters' shorting of Luckin Coffee as a typical case, and explores the impact of the shorting mechanism on firms' cash holding level and asset utilization from the perspectives of risk resistance and agency problems. By analyzing the financial data before and after the shorting of Luckin Coffee through the event study method, it is found that the shorting mechanism prompts firms to increase their cash holding level and strengthen their risk resistance by enhancing the pressure of market surveillance, and forces them to alleviate the internal agency problem and optimize their asset utilization rate. this study further suggests that firms need to balance high cash risk resistance and efficient asset utilization, and regulators need to improve the disclosure rules of shorting information to prevent malicious shorting.

Keywords: Shorting mechanism, Economy, Market orientation, Asset utilization

Introduction

In the social background of the current bad economic environment, many enterprises are still facing problems such as stocks being shorted and enterprises closing down due to insufficient degree of cash reserves and cash flow breaks. These problems exist in our real life and have certain importance. If they cannot be solved, these problems will directly affect the healthy development of major listed companies. In order to solve these problems, it is necessary to study the short-selling mechanism to reveal the impact of short-selling mechanism on corporate cash holding decisions and asset utilization decisions. The shorting phenomenon, as a prevalent market operation means, can expose enterprise operation problems, play the role of market supervision, and promote the management to optimize decision-making. Taking Luckin Coffee as an example, although the company has made a momentary remarkable achievement in the low-cost coffee market and rapid expansion, it later triggered the shorting behavior of Muddy Waters and strong market concern due to the problems of cash

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flow breakage and financial falsification. However, corporate cash decisions are in reality full of contradictions. On the one hand, holding sufficient cash reserves can help companies cope with drastic changes in the economic environment and potential management risks. On the other hand, excessive cash holdings may be interpreted by investors as a lack of effective use of funds by management, resulting in agency problems and harming shareholders' interests. As an external governance mechanism, the short-selling mechanism plays a certain governance role for enterprises, thus influencing their financial decisions such as regulating the level of cash holdings. Under the pressure of shorting, some enterprises will increase their cash holding level to maintain their own anti-risk ability. Thus, the short-selling mechanism not only has a regulatory effect on the external market environment, but also has a certain impact on the firm's cash holding level and asset utilization.

this study proposes two hypotheses from the perspective of risk and capital utilization, and adopts the event study method to study the event of Muddy Waters' shorting of Luckin Coffee, to measure the causal relationship of the short-selling mechanism on the level of cash holding of the enterprise, and to verify the hypotheses. Most of the existing studies have examined the impact of short-selling mechanism on the Chinese stock market or the impact of external governance environment on corporate cash holdings, but there are fewer studies examining the impact of a focused short-selling mechanism on the level of corporate cash holdings. In this study, we will take the Muddy Waters shorting of Luckin Coffee as an example, start from the agency problem of enterprises, and analyze the shorting mechanism to study the impact of shorting on the level of corporate cash holdings and the utilization of assets, and then put forward the corresponding countermeasures to promote the development of China's economy. The study of the governance effect of the shorting mechanism on corporate cash holdings contributes to the adjustment of corporations' own financial policies as well as the discussion of policy makers on the impact of the shorting mechanism.

Literature Review

The shorting mechanism plays an effective governance effect on the external market environment. Tong Aiqin and Ma Huixian (2019) take the multiple rounds of batch expansion of China's financing and financing securities as a quasi-natural experiment to study the governance effect of the shorting mechanism on the corruption situation with the management of enterprises. The study shows that the shorting mechanism has a certain inhibitory effect on the corrupt behavior of executives and can significantly reduce their on-the-job consumption level. Among other things, the short-selling mechanism improves the level of investor and shareholder supervision of management, prompting management to improve the effective utilization of funds. This will have a certain impact on the enterprise's cash holding level. Accounting disclosure serves as the main basis for investors' investment decisions, Fanghui (2021) analyzes the shorting events of Chinese stocks between 2014 and 2020 and finds that the shorting mechanism effectively improves the quality of accounting disclosure of enterprises. Zhao Tianhao and Zhang Xinke (2024) analyze the incident of Muddy Waters' shorting of Luckin Coffee Company in the light of the lack of domestic shorting mechanism. The short-selling mechanism has a regulatory role in corporate disclosure, inhibits financial fraud to a certain extent, and prompts companies to optimize their internal management systems.

Firms' cash holdings are affected by a variety of factors, such as some firms hold large amounts of cash to cope with economic uncertainty and financial difficulties, while some firms choose to maintain low levels of cash holdings due to agency problems or to avoid inefficient use of capital. sample of 11,000 firms from 45 countries and find that firms in countries with poorly protected shareholders' rights hold twice the level of cash as firms in countries with well-protected shareholders' rights. For firms in countries with weak shareholder rights protection, investors are unable to force management to distribute more cash, making firms' cash holdings higher. The agency problem between shareholders and management is one of the key factors that create such a situation. In addition, studies have shown that firms are more inclined to hold more cash when access to funds is less difficult.Amess,-

Banerji and Lampousis (2015) reviewed and synthesized various literatures and after empirical studies, suggested two motives for holding cash: precautionary and agency. In addition, they examined the effectiveness of various corporate governance mechanisms in reducing the level of cash holdings to provide investors with confidence that funds will be utilized efficiently.

Research hypotheses

this study focuses on the impact of shorting mechanism on firms' cash holding level and asset utilization. It is analyzed from two perspectives, one is the risk perspective and the other is the agency problem perspective. First is the risk perspective, faced with the pressure of shorting, many enterprises may cope with the risks in daily business activities by holding a large amount of cash to prevent them from going bankrupt due to cash flow breaks. So out of the motivation to increase the level of risk resistance, firms will increase their level of cash holding. Therefore, hypothesis H1 is set: the short-selling mechanism motivates enterprises to increase the level of cash holding.

Secondly, from the perspective of agency problem, the emergence of shorting mechanism makes the shareholders of the enterprise pay more attention to the governance and operation of the enterprise in order to prevent the problem of stock decline risk. Due to the agency problem within the enterprise, under the pressure of shareholders, the management needs to do something, so the enterprise management is more inclined to use the cash for investment, so as to improve the efficiency of the utilization of cash and expand the profitability of the enterprise. Also based on the agency problem, corporate managers make firms hold more cash for private gain motives. However, as the short-selling mechanism plays a governance role and firms become more regulated, corporate managers need to weigh private gains in cash against the economic losses from a decline in the share price of their holdings or other factors, and thus such private gains in cash are reduced accordingly. Management not only has to worry about the decline in the share price of their holdings but also needs to consider the risk of their own dismissal, so in terms of operation, management will reduce operating costs, use corporate funds more rationally, and apply more cash to other aspects of the company. To sum up, hypothesis H2 is set up: the short-selling mechanism prompts firms to improve the utilization of assets.

Case study

Since its establishment in 2017, Luckin Coffee has rapidly risen to become one of the largest coffee chain brands in China by virtue of its operational model combining internet and digital retailing and its low price strategy. Luckin uses online ordering to reduce users' queuing time; uses big data to analyze customers' consumption habits and give targeted product recommendations to improve customer stickiness; and accurately reaches customers through corporate WeChat, community marketing, and other methods. In order to seize the market, Luckin attracted users through weekly specials and other low-priced strategies in the early days to expand the range of consumers. In addition, Luckin has introduced new types of coffee such as Raw Coconut Latte and Orange Juice Americano to cater to the tastes of Chinese consumers and lower the threshold of consumer acceptance of coffee. Luckin has started store expansion with low cost as the core, and most of them are small stores, which mainly serve self-pickup and takeaway to reduce rent and operating costs.

On January 31, 2020, Muddy Waters released an anonymous report accusing Luckin Coffee of financial fraud and business model flaws (Muddy Waters Shorting Luckin Coffee Full Report, 2020). Muddy Waters found through the investigation of surveillance video, Luckin daily product sales in the third and fourth quarter of 2019 were exaggerated by at least 69% and 88% respectively; through the collection of customer receipts, compared with the value-added tax figures reported by Luckin, Luckin in the third quarter of 2019, the contribution of the revenue from the "other products" is only 6%, nearly four times exaggerated. This is nearly four times overstated. Muddy Waters asserts that Luckin's business model is flawed. The first is Luckin's low price strategy. Most of Luckin's customers are highly price sensitive. It would be very difficult for Luckin to lower its discounts in order to increase store profits. The second is that China's coffee market has not matured and is still in the rising stage, with a small demand for coffee from national consumers.On June 29,

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2020, Luckin Coffee was delisted from NASDAQ.

In this study, the ratio of cash held by enterprises to total assets measures the level of cash held by enterprises, and the ratio of operating income to total assets measures the asset turnover of enterprises. To isolate the impact of the epidemic, this study will use 2021 data for comparison.

Table 1 Changes in metrics before and after the shorting of Luckin Coffee

Indicator(Thousands of RMB)	before the short selling incident(31/12/2019)	after the short selling incident(30/06/2021)	rate of change(%)
Cash and equivalents	4,865,824	5,083,040	4.5%
Operating Income	3,024,934	3,182,451	5.2%
Total Assets	9,762,261	9,328,060	-4.4%
Cash/Total Assets	49.8%	54.5%	4.7%
Operating Income/Total Assets	31.0%	34.1%	3.1%%

Data taken from the official website of Luckin Coffee

this study measures the level of cash holdings of a company in terms of its ratio of cash to total assets.Between the end of 2019 and the end of 2020, Luckin Coffee's cash holdings rose from RMB 4,865,824,000 in 2019 to RMB 5,083,040,000, an increase of about 4.5%, but total assets only declined by about 4.4%. The cash to total assets ratio of Luckin rose from 49.8% to 54.5%, a change of 4.7%. This indicates that Luckin has increased its cash holdings after the short-selling incident. Meanwhile, operating income rose from RMB 3,024,934,000 to RMB 3,182,451,000, and the ratio of operating income to total assets increased by 3.1%. As a result, Luckin Coffee's asset turnover ratio has also improved.

From a risk perspective, the short-selling mechanism forces companies to increase their cash holdings to cope with changes in the external economic environment as well as unknown risks by increasing the pressure of external scrutiny. After the short-selling incident, Luckin faced a $180 million fine from the U.S. Securities and Exchange Commission (SEC) and various charges, which will make Luckin increase its precautionary cash reserves. At the same time, the interruption of equity financing due to the delisting also makes Luckin more reliant on internal cash flow. Therefore, this short-selling event pushes Luckin to increase its cash holding level, consistent with Hypothesis H1.

From the perspective of asset utilization, the short-selling mechanism optimizes corporate asset utilization by influencing corporate asset disposal decisions. Luckin has a serious internal agency problem, and its management has made false behavior of financial falsification to the detriment of shareholders in order to enhance its share price and financing success. As a result of being shorted and exposing itself to financial loopholes that led to delisting, Luckin closed about 800 stores in 2020, clustering stores in first- and second-tier from urban shopping districts and office areas, which demonstrated the inefficiency of management's previous investment decisions. This move reduces the impact of inefficient investments resulting from rapid expansion in the early stages, improves store profitability, and optimizes asset utilization to a certain extent. The Muddy Waters short-selling report disclosed that Luckin inflated advertising costs by $380 million, and Luckin optimized this inflated cost. According to Luckin's 2021 financial report, Luckin's marketing expenses decreased by RMB 57,113,000 in 2021 compared to 2020, accounting for a 3.4% decrease in the proportion of total operating expenses. This provides room to fund Luckin's recovery after the short-selling event.

V. Research Insights and Limitations

5.1 Theoretical Implications

For firms' short-term development, the Luckin case shows that the short-selling mechanism exposes strong firms' financial fraud and business model flaws, forcing firms to increase their level of cash holdings to cope with risks. This verifies the theory proposed by Bates (2009) that firms increase their cash ratios to prevent cash flow risks. In addition, the shorting mechanism contributes to the improvement of long-term corporate governance. After the short-selling event, Luckin has carried out management change, optimized the independent director system, closed the loss-making stores, increased the financial disclosure entries and other actions to optimize the internal management, etc. Jensen and Meckling (1976) also verified that the middle and external monitoring mechanism has a corrective effect on the internal governance of the enterprise.

5.2 Practical Implications

In today's volatile economic environment, firms need to balance high cash against risk and efficient asset utilization. While retaining sufficient cash, enterprises can invest in digital systems, artificial intelligence and other cutting-edge technologies to improve operational and management efficiency and enhance the effectiveness of decision-making. In addition, companies need to optimize their internal management systems and set up early warning mechanisms for agency problems, such as monitoring financial ratios to maintain a reasonable corporate financial structure; strengthening the internal audit system to enhance audit independence; and making management payroll transparent to monitor the selfishness of executives. Starting from March 31, 2010, the China Securities Regulatory Commission (CSRC) has allowed financing and financing transactions on designated stocks, and short-selling controls in China have been gradually relaxed. This requires regulators to set up a monitoring system to review shorting evidence and prevent false allegations.

5.3 Research Limitations

this study analyzes the Muddy Waters shorting of Luckin, and the representativeness of a single case is yet to be verified. Some large enterprises have better governance systems and may be less affected by shorting. Coffee retailing is an asset-light industry, and there are differences in the management and operation mode between it and other asset-heavy industries such as manufacturing, so multi-industry case comparisons are needed in the future. The time span of this study is relatively short, and the long-term impact of the short-selling mechanism still needs to be observed and studied.

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