



Factors Influencing the Cash Holdings of Manufacturing Companies in China

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Abstract. China has entered a new normal in economic development. Although China continues to maintain the title as the world's largest manufacturing country, the manufacturing companies also faces many difficulties, one of which is to determine an appropriate cash holding level. By combing the domestic and foreign literature, this paper discusses the factors influencing the cash holdings of Chinese manufacturing companies from three aspects: economic environment, macroeconomic policies and corporate governance, and specifically the influence mechanisms of economic cycle, soft budget constraint, monetary policy, fiscal policy, industrial policy, and agency problem are analysed. We find that these factors can affect the cash holding behaviours of Chinese manufacturing companies to a certain extent.

Keywords: Cash holdings · Economic environment · Macroeconomic policies · Corporate governance

1 Introduction

Manufacturing is the pillar industry of the national economy, an important embodiment of national creativity, competitiveness and comprehensive national strength, and provides a broad material foundation for modern economic society. In 2021, China's manufacturing continued to recover, with the added-value output of manufacturing reaching 31.4 trillion yuan, an expansion of 9.8% year-on-year and an average growth of 6.6% in the two years, accounting for 27.4% of the country's GDP. China has maintained its position as the world's largest manufacturing hub for 12 straight years. Cash is the blood of a company. Once a company has a cash crisis, it will face bankruptcy. Many large companies once collapsed due to the rupture of the capital chain. Therefore, companies usually reserve a certain amount of cash to cope with all possible situations. The existing theory holds that the company may hold cash for trading and prevention motivation, speculation motivation or agency motivation. The cash held by a company is the most liquid asset, and its holding level reflects the current actual operating conditions and possible financial risks of the company to a certain extent. Therefore, the cash holding level of companies has always been the focus of the theoretical and practical circles.

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In order to find out which factors influence the cash holdings of Chinese manufacturing companies, this paper discusses it from three aspects: economic environment, macroeconomic policy and corporate governance through literature review and relevant data description. Discussing the influencing factors and mechanism of cash holding level of manufacturing companies can enrich the research of company's cash holding behaviors. In the post COVID-19 era, the research can help Chinese manufacturing companies maintain a more appropriate cash holding level, reduce the cost of cash decision-making, improve the core competitiveness of companies, so as to achieve recovery.

The paper is proceeding as follows. Section 2 analyzes the impact of economic cycle and soft budget constraint on the cash holdings. In Sect. 3, we analyze the influence of monetary policy, fiscal policy and industrial policy on the cash holdings. Section 4 analyzes the influence of corporate governance on the cash holdings. And some conclusions are contained in Sect. 5.

2 Economic Environment

2.1 Economic Cycle

The economic cycle directly influences the external demand and then affects the cash holding decision of companies. At different stages of economic cycle, manufacturing companies have different cash holding behaviors. The adequacy of cash held determines whether the companies can survive the crisis. When the economy is booming, manufacturing companies often operate well, and the cash are mainly used for daily transactions, so often only a small amount of cash is held. But in a recession, while banks significantly reducing loans to companies, and financing costs increasing, companies will increase their cash balances and decrease corporate investment significantly (Almeida et al., 2004 [1]; Ferreira et al., 2005 [2]; Ivashina and Scharfstein, 2010 [3]).

2.2 Soft Budget Constraint

Kornai (1979) points out that the budget constraint of a state-owned enterprise in socialist countries is soft if the state helps the firm out of trouble. There are various means to do so: subsidies; individual exemption from the payment of taxes or other changes; allowance on the centrally fixed price of an input; open increase of the centrally fixed selling price or toleration of a hidden price increase; credit granted at soft conditions; prolongation of the due credit repayment; etc. [4]. The soft budget constraints will lead to a series of economic consequences, such as weakening the effects of capital structure adjustment and corporate debt governance, influencing firm performance [5]. The government's soft budget constraint behaviors can lead to the distortion of credit resource allocation, which weakens the awareness of state-owned companies to prevent financial risks and reduces their cash holdings. This kind of influences do not exist in private companies and foreign-funded companies [6].

3 Macroeconomic Policies

Macroeconomic policies, including monetary policy, fiscal policy and industrial policy, are key influence factors of enterprises' financial policy [7]. Macroeconomic policies influence the investment and financing environment of manufacturing companies through interest rate and credit, tax rate and government public expenditure, investment intention and efficiency, which will change the business decision-making, and ultimately influence the cash holdings of manufacturing companies [8].

3.1 Monetary Policy

3.1.1 Influence Mechanism of Monetary Policy

Monetary policy can smooth the impact of economic cycle on real economy and promote the investment motivation of manufacturing companies. Monetary policy determines the adequacy of liquidity in the capital markets and the level of interest rates. The adjustment of monetary policy can change the financing environment, affect the financing options of manufacturing companies, and ultimately influence the decision of corporate cash holdings.

The adjustment of monetary policy will change the restrictions on external financing of manufacturing companies. With sufficient capital supply in the financial markets, the restrictions on external financing of manufacturing companies will be reduced, enabling companies to choose appropriate ways to retain cash. During the period when the central bank tightens the monetary policy, the preventive motivation of manufacturing companies to hold cash increases. High growth companies will increase liquidity for reducing the restrictions on external financing, resulting in an increase of the cash holding level. However, there are great differences in the financing methods of increasing cash holdings among companies with different growth degrees. When the central bank relaxes its monetary policy, the financing restrictions on manufacturing companies will be reduced, and companies tend to reduce cash flow to raise funds. When the monetary policy is too loose, the sensitivity of cash flow of companies subject to financing restrictions will be greatly reduced, while for companies without financing restrictions, the impact of cash flow on reducing the sensitivity of cash flow of companies is not obvious (Zhu Zhigao and Lu Zhengfei 2009 [9]; Yu Jingwen, et al., 2019 [10]; Zhong Kai, et al., 2021 [11]).

3.1.2 Monetary Policy Perception Index and Cash Holdings of Manufacturing Companies

The monetary policy perception index is an index reflecting bankers' perception of monetary policy, which is calculated and published by the People's Bank of China after bankers' questionnaire survey every quarter. The calculation method of the index is to calculate the proportion of bankers who believe that the monetary policy in this quarter is "loose" and "moderate" respectively, and then give weights of 1 and 0.5 respectively before summing. In this paper, the monetary policy perception index is used to measure the tightness of monetary policy. In addition, cash holding ratio, which is the ratio of cash and cash equivalents to net assets, adopted by Yang Xingquan (2007) [12] is used to measure cash holding level.

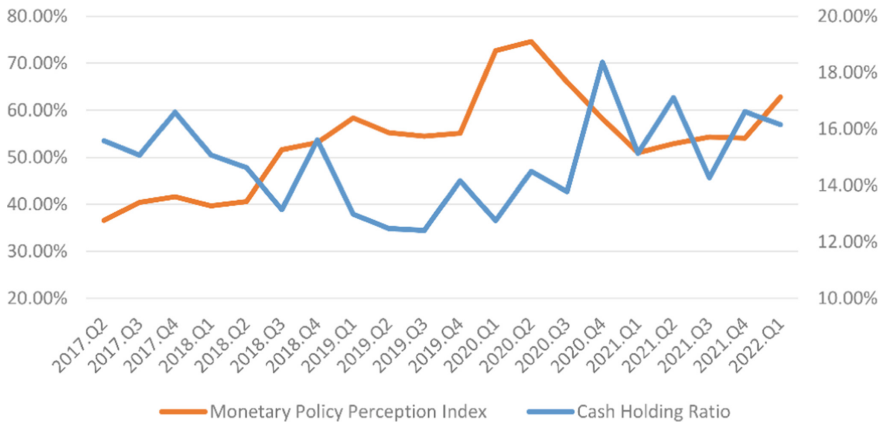


Fig. 1. Monetary policy perception index and Corporate cash holdings

In this paper, we collected the China’s Monetary Policy Perception Index and the average cash holding ratio of 200 manufacturing companies listed on the Shanghai Stock Exchange A-share market (excluding companies with incomplete data, ST companies and PT companies) from June 2017 to March 2022. We depict these two data sequences in a Cartesian coordinate system to get Fig. 1.

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Figure 1 shows that the cash holding ratio of manufacturing companies has a roughly reverse relationship with the monetary policy perception index. Before 2020, with the increase of the monetary policy perception index, which means that the monetary policy is relatively loose, manufacturing companies reduced their cash holdings, and cash holding ratio gradually decreased. After 2020, with the tightening of monetary policy, the cash holding ratio of manufacturing companies showed an overall upward trend.

3.2 Fiscal Policy

According to the trade-off theory, the cash holding level of a company is determined by the earnings and cost of cash holdings. The research of Kim et al. (1998) [13] shows that when the company is subject to strict financing constrains, its cost of external financing is high, so the company will choose to hold more cash, so as to reduce the financing cost as a whole. Proactive fiscal policy influences the financing constraints of companies through two channels: crowding-in effect and crowding-out effect.

The crowding-in effect influences the financing constraints of companies through direct and indirect channels. In terms of direct channels, proactive fiscal policies can increase the supply of productive public capital to relevant companies, and provide a lot of financial support for companies, including direct subsidies, loan discounts, financing guarantees, etc., so as to reduce transaction cost of external financing in the credit market and capital market, and thus effectively alleviate the financing constraints of companies. In terms of indirect channels, proactive fiscal policies can significantly improve the

external financing environment and optimize the external financing conditions of companies, that is, alleviate the financing constraints of companies, by stimulating social demand, promoting private investment, driving social consumption and increasing export potential.

The crowding-out effect mainly influences corporate financing constraints through interest rate transmission and credit rationing. In terms of the interest rate transmission mechanism of crowding-out effect, when implementing the proactive fiscal policy, the government increased financing in the credit market and capital market to realize its own expansionary investment, changed the supply and demand of funds in the markets, increased the financing cost of private companies, and weakened the private investment motivation. The final result is that the expansion of public investment stimulated by proactive fiscal policies is offset by the reduction of private investment. In terms of credit rationing mechanism of crowding-out effect, when fiscal policy is proactive, public investment has generated a large amount of capital demand. Due to credit rationing, state-owned enterprises can more easily obtain huge and low-cost credit funds, and the degree of financing constraints is significantly alleviated. At the same time, private enterprises can obtain less loans, and the degree of financing constraints is significantly increased.

According to the agency theory, due to the conflict of interest between the management and the shareholders, the company may obtain a large amount of non-operating income from the outside when the government increases subsidies to manufacturing companies. For the purpose of seeking private interests, the management will make the company hold a large amount of cash to facilitate their abuse or transfer of the company's cash assets.

In short, according to the above two theories, the relationship between active fiscal policy and the cash holding level of manufacturing companies may be negative or positive. (Cheng Jianwei and Zhou Weixian, 2007 [14]; Zhang Wenjun, 2015 [15]; Tang Decai and Ma Tingyu, 2016 [16]).

3.3 Industrial Policy

Industrial policy is the sum of a series of policies and institutional arrangements that have a significant impact on industrial development. It is dominated and regulated by the national development strategy. For a long time, the Chinese government has paid attention to the guiding and supporting role of industrial policies in promoting economic system reform.

Industrial policy can influence the difficulty of companies to obtain funds by changing the allocation of financial resources (Bernanke & Gertler, 1995) [17], which in turn influences the motivation of companies to hold cash. Industrial policies provide more financial support to the industries and enterprises encouraged in China. Industries supported by industrial policies can not only enjoy preferential measures in terms of tariff policies, land concessions, government subsidies, etc., but also are more likely to be favored by external investors. The opportunities for obtaining bank credit, Initial Public Offering (IPO), equity refinancing and issuing corporate bonds are significantly higher than other industries not supported by industrial policies. They have advantages in equity financing and debt financing. The degree of financing constraints has been significantly reduced. Therefore, manufacturing companies supported and guided by

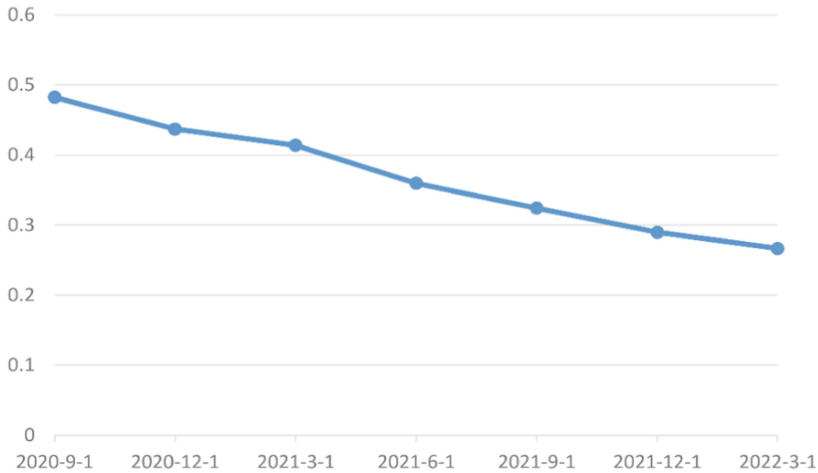


Fig. 2. CATL's proportion of monetary funds in total assets

industrial policies do not need to hold more cash to alleviate financing constraints, so their cash holdings will be low. However, when manufacturing companies do not belong to the industries supported and guided by industrial policies, the financing constraints will be more serious, and the external financing ability is relatively weak. Holding cash can alleviate financing constraints and help companies cope with environmental uncertainty, so their cash holdings will be higher (Zhu Jigao, Han Feichi, and Lu Zhengfei 2015 [18]; Du Li, 2019 [19]). For example, in 2020, the Chinese government issued 20 national policies to increase support for the new energy vehicles (NEVs) industry. As a representative of the new energy vehicles industry, Contemporary Amperex Technology Co., Limited (CATL) has seen a significant decline in the proportion of monetary funds in total assets since September 2020, as shown in Fig. 2.

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4 Corporate Governance

In recent years, scholars also explored the factors that influence the cash holdings of companies from the perspective of corporate governance. Agency problem are the focus.

In the practice of corporate governance, due to the separation of ownership and management rights, there is a potential conflict of interest between the agent and the principal, so the company managers may realize their personal interests at the expense of shareholders' interests. All the daily business activities of the company are in the charge of the managers, and the cash holding decision is also made by the managers, which gives rise to the agency motivation of corporate cash holdings. Jensen (1986) first pointed out that agency motivation was positively related to the level of corporate cash holdings. He believed that cash was easy to be embezzled so that managers could meet their own interests or establish their own business empire. Subsequent researches show

that the agency problem often causes corporate cash holdings to deviate from the normal value, but the agency cost may increase or decrease the level of corporate cash holdings [20, 21].

According to the agency theory, when the agency problem is serious, the management will often abuse their power, and the company will hold more cash driven by private interests of management. In order to improve the company's performance during the term of office, the management usually chooses to increase cash holdings to reduce operating costs. From the perspective of the company, in order to avoid the company's operating difficulties or even bankruptcy due to the management's wrong decisions on operation and investment, the company often holds enough cash to deal with it. However, on the other hand, the emergence of agency problem may cause the companies to actually hold less cash due to improper behaviors of management such as excessive investment and inefficient mergers and acquisitions. For example, in order to maintain the amount of resources under their control, or enhance the company's dependence on the management, the managers acquire companies that can only operate effectively by relying on the special capabilities of the management. In recent years, the empirical researches of Chinese scholars mainly support the former view, that is, the more serious the agency problem, the higher the level of corporate cash holdings.

5 Conclusions

Through combing the relevant literature, we discuss the factors influencing cash holdings of manufacturing companies from three aspects: economic environment, macroeconomic policies and corporate governance, which can help Chinese manufacturing companies maintain a more appropriate cash holding level. The main conclusions include:

(1) The economic environment has an important impact on manufacturing companies' cash holding behaviors. During the boom period, the companies will reduce their cash holdings, while during the recession, they will increase the cash holdings. The soft budget constraint reduces the cash holdings of state-owned enterprises.

(2) Monetary policy, fiscal policy and industrial policy have a certain impact on manufacturing companies' cash holding behaviors. Loose monetary and fiscal policies will make companies reduce their cash holdings. The companies supported by industrial policies tend to hold less cash.

(3) Corporate governance has an important impact on the cash holdings of manufacturing companies. The companies with serious agency problem maintain a high level of cash holdings, while the companies with less serious agency problem tend to hold less cash.

There are many factors that can influence the cash holdings of manufacturing companies. These factors include the internal factors of the company, such as the capital structure, and the financial situation. There are also external factors, such as domestic and foreign economic situation, economic cycle, macroeconomic policies, etc. However, more empirical research is needed in order to analyze the difference of these factors in the different industries, development stages, economic environment and policy background of manufacturing companies.

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