

The Impact of Debt Maturity Mismatch on corporate

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Abstract:

Chinese firms currently face severe financing constraints and debt maturity mismatch problems. Existing literature primarily focuses on the cause and influencing factors of debt maturity mismatch, while the transmission mechanisms and consequences remain lacking a systematic synthesis. Drawing on domestic and international literature, the paper adopts a literature review approach to synthesize the transmission mechanisms and consequences of debt maturity mismatch on firms. These influencing mechanisms proceed through four channels: refinancing pressure, financing costs, cash flow volatility and signaling. In terms of consequences, debt maturity mismatch can lead to a decline in firm operating performance, distortion of investment behavior and impairment of firm value. Based on the above analysis, this paper offers the following implications. Banks could consider increasing the supply of long-term debt for SMEs to avoid refinancing risks when they face cash flow constraints. At the policy level, policymakers could promote the development of bank competition and digital inclusive finance to broaden financing channels and alleviate maturity mismatch problems.

Keywords: Short-term debt for long-term use; refinancing risk; financing constraints.

1. Introduction

Chinese firms have long faced the problem of limited financing instruments. By the end of 2025, the total assets of financial institutions in China reached 538.86 trillion yuan, of which the banking sector accounted for 480.01 trillion yuan, while the securities sector was only 17.54 trillion yuan. This indicates that banks still dominate the allocation of financial resources. However, under a bank loan-dominated system, while firms can obtain a certain level of fi-

nancing, it is mainly in the form of short-term, small-scale, and collateralized loans, with credit loans and long-term loans accounting for a relatively low proportion. Even for listed firms with access to the bond market, they face long approval cycles for medium-and long-term bonds or long-term loans, which often make it difficult to match the maturity of their long-term assets. For SMEs, the financing threshold is higher. Because of a lack of credit history and collateral, and banks prefer short-term working capital loans and provide insufficient support for long-term

projects. SMEs get long-term loans become harder. Therefore, there is a contradiction between the need for long-term loans and only being able to get short-term loans, leading to maturity mismatches. Data from 2025 show that the year-on-year growth fell to 8.7%, and the borrowing term of firms became shorter, indicating that using short-term debt for long-term has become the norm.

Academic research on maturity mismatch generally falls into three categories: the causes, influencing factors and consequences. Studies on the causes indicated that Chinese firms' maturity mismatches are commonly attributable to institutional deficiencies such as the incomplete structure of the Chinese financial market [1]. Moreover, "short-term debt for long-term investment" primarily manifests as an alternative financing mechanism for firms to cope with financial repression, rather than a result of their own choices [2]. Building on causality studies, scholars have further explored the factors that alleviate or worsen debt maturity mismatch. Great bank competition [3], and the development of digital inclusive finance [4] can both alleviate maturity mismatch. While firms' uncertainty perception [5] and cybersecurity risks [6] tend to exacerbate the problem. Existing studies have extensively discussed the cause and influencing factors, yet research on its consequences remains insufficient. Diamond argues that short-term debt exposes firms to rollover risk [7], and some studies show that maturity mismatch has a significant negative impact on stock returns [8]; the transmission mechanisms and consequences of maturity mismatch on firms still require a systematic synthesis.

The paper systematically reviews and summarizes the literature on financing constraints, maturity mismatch, and cash flow risks for firms and synthesizes transmission mechanisms and consequences systematically, then breaks it down into four parts specifically: refinancing pressure, financing cost, cash flow volatility, and signaling. On this basis, the paper further explores the consequences of cash flow risk on firm operating performance, investment behavior, and firm value, forming a logical chain from occurrence to transmission to consequences. Existing research on the transmission mechanisms of maturity mismatch primarily focuses on three pathways: refinancing pressure, financing costs, and cash flow volatility, all of which represent direct transmissions at the funding level. Signaling, by contrast, works differently: it reveals that debt maturity structure itself conveys signals about a firm's credit quality to external stakeholders such as banks, and these signals in turn influence banks' lending decisions and the firm's financing conditions. This paper incorporates signaling into a unified analytical framework alongside the three traditional channels, providing a systematic discussion of how this information-based "soft mechanism" operates in conjunction with the finance-based channels in the context of maturity mismatch. In practice, this paper helps firms

understand the risks of maturity mismatch and provides a reference for preventing liquidity risks.

2. The Concept and Causes of Maturity Mismatch

Maturity mismatch refers to a state where the maturity of a firm's liabilities is shorter than that of its assets. The 2013 liquidity crisis in China clearly illustrates the significance of this issue. Many banks relied on short-term interbank borrowing and wealth management products to fund long-term assets. When the central bank unexpectedly tightened liquidity, the chain of short-term rollovers broke, and long-term assets could not be sold quickly. Interbank interest rates surged above 30%, and some banks nearly failed. This incident highlights the core threat of maturity mismatch: when short-term debt matures and cannot be renewed, companies face the risk of a cash flow disruption. In the early stages of development, firms are small in scale, have low information transparency, and experience unstable cash flows, which make it hard to get external investment [9]. Due to a lack of sufficient collateralizable assets, the availability of long-term debt is extremely low; firms can only opt for short-term debt [1,2]. Regarding why firms adopt "short-term debt for long-term use", there are two main theoretical explanations in the academic literature. The first is the active choice theory, which suggests that firms with higher credit quality voluntarily choose short-term debt to reduce financing costs or signal their quality to the market [7]. The second is the alternative financing hypothesis, which suggests that firms may be affected by external constraints such as policy shocks, the COVID-19 pandemic, or financial market conditions. Banks driven by risk control and performance assessment pressures tend to provide short-term rather than long-term loans, and resulting in maturity mismatch [3]. For most firms, however, the active choice is less feasible due to limited credit access and higher refinancing uncertainty, making the alternative financing hypothesis more applicable. But no matter the cause, firms may face refinancing pressure due to debt maturity mismatch. The following section will examine how this pressure is transmitted.

3. The Transmission Mechanism of Debt Maturity Mismatch on Cash Flow Risk

3.1 Refinancing Pressure

Bolton's research points out that maturity mismatches can lead to liquidity demand [10]. This demand can only be met two ways: consuming internal cash reserves or selling

assets for cash. For firms with tight financing constraints, both options are hard to sustain, which creates refinancing pressure. Refinancing pressure is the primary way that maturity mismatches impact a firm. When short-term debt is due, if a firm's long-term projects haven't generated enough cash flow, the cash reserves aren't sufficient to pay off the debt [7]. At this point, the only way for the firm is to apply for a new loan from the bank before the debt matures to repay the old debt. However, whether the loan can be successfully renewed mainly depends on the bank's assessment of the firm's future cash flow stability. If the bank thinks the firm's operational risk is high or anticipates insufficient cash flow, it may refuse to renew the loan, and the firm will face refinancing risk [3]. Once the loan renewal fails, the firm's already fragile cash flow will break down directly, potentially causing a debt crisis or even insolvency. In fact, the concerns of investors and banks about the firm's liquidity risk are the main reason for the negative impact of maturity mismatch [8].

3.2 Financing Cost

Refinancing pressure isn't just about the uncertainty of whether a loan can be renewed; it also shows the extra costs incurred even after a successful renewal. This means that even if a firm passes the bank's renewal review, it still faces the ongoing erosion of rising financing costs. When short-term debt is due, even if the firm can renew it, it still faces cash flow problems. Rolling over the loan itself requires paying interest, and sometimes banks might also charge fees in the process. The costs of each renewal add up and accumulate more and more [11]; these accumulated costs put continuous pressure on the firm's cash outflow. After cash flows out, the firm's disposable cash decreases, and long-term investments are limited. If long-term investment lags, the firm's development will be restricted. Wang and others' study actually reinforces the logic from the opposite perspective—extending debt maturity can reduce financing costs and relieve liquidity pressure, showing that frequent short-term debt rollovers do indeed increase a firm's actual financing costs [12].

3.3 Cash Flow Volatility

The accumulation of rollover costs can reduce the cash flow available to a firm, making its working capital highly unstable. This instability happens because the maturity dates of short-term debt are uncertain, renewal conditions are unpredictable, and the cyclical fluctuations of firm's operating cash flow. Cash flow volatility will increase a firm's financial difficulties and the risk of default, weakening the firm's ability to repay debt. Studies have found a significant negative correlation between cash flow volatility and debt maturity structure—firms with high cash flow volatility tend to have short debt maturity [13]. The

finding shows that rolling over short-term debt will lead to cash flow fluctuations, and these fluctuations further exacerbate the reliance on short-term debt and make it hard to obtain long-term debt, forming a vicious cycle. Conversely, reducing short-term debt can increase a firm's cash flow and reduce future cash flow volatility [14]. Once this cycle forms, banks will be concerned about the firm's ability to repay debt, and this concern in turn intensifies the volatility.

3.4 Signaling

Signaling refers to the path through which internal issues such as refinancing risk, financing costs, and cash flow volatility are perceived by external parties, and in turn increase a firm's cash flow risk. Under information asymmetry, a firm's borrowing choices will send signals to banks. High-quality firms actively choose more short-term debt to signal their quality to the market [15]. On the other hand, for firms that are forced to borrow frequently, banks and other suppliers observing frequent short-term debt rollovers and unstable cash flows tend to interpret these as signals of deteriorating credit quality. This will make banks tighten loan conditions and shorten debt maturities [7]. As a result, the firm's cash flow fluctuations aren't eased by refinancing; they may actually worsen as banks further tighten credit. When banks assess the firm as risky, banks may demand shorter repayment period and higher collateral ratios. These external reactions work together to place greater pressure on the firm, ultimately increasing the firm's cash flow risk.

4. Effects on Financial Risk

4.1 Operating Performance

Debt mismatched maturities affect a firm's profitability and return by refinancing pressure, financing costs and cash flow volatility. This logic has been validated in existing empirical studies. Hu finds that maturity mismatch negatively affects firm operating performance by using data from Chinese listed firms, and pointed out that maturity mismatch is one of the main transmission mechanisms through which economic policy uncertainty affects firm performance, with a greater effect on non-state-owned enterprises [16]. Yan further finds that the negative impact of maturity mismatch on financial performance is more pronounced in small-scale firms [17]. This indicates that improving short-term debt management can help boost operating performance and reduce financial risks.

4.2 Investment Behavior

Maturity mismatch not only affects operating performance, but also leads to distorted long-term investment

decisions. For asset-heavy firms, short-term debt for long-term investment will increase agency costs, reduce investment efficiency, and mess up investment decisions. Managers may pursue high-risk projects or engage in excessive expansion to boost performance, and intensify the tendency for overinvestment [18]. While supply chain finance can effectively reduce a firm's short-term debt for long-term use, improve the firm's investment efficiency [19], and enhance operating performance. Notably, firms with high ownership concentration and close institutional attention are more effective at controlling the negative effects of maturity mismatch compared to asset-heavy firms. However, for firms that are low in institutional attention, the negative impact of short-term debt for long-term investment to investment efficiency is more severe, as the lack of external monitoring makes it easier for managers to use short-term funds for high-risk investments.

4.3 Firm Value

Firm value is measured by total factor productivity (TFP). The higher the TFP, the stronger the firm's long-term value creation capacity. Zhang and others find that maturity mismatch significantly inhibits firm total factor productivity by increasing agency costs and reducing capital allocation efficiency [20], and corporate financialization will amplify this negative effect. When firms face profit shrinkage, investment distortion, and a decline in value-creation ability due to maturity mismatch, market expectations for the firm's future cash flows drop, lower firm valuation and higher financing costs, further exacerbating cash flow pressure.

5. Conclusion

This paper identifies four channels through which maturity mismatch transmits to cash flow risk: refinancing pressure, financing cost, cash flow volatility and signaling. These four pathways progress step by step, forming a complete causal chain from "debt maturity" to "external reaction". The ultimate consequences of maturity mismatches appeal on three levels: a decline in operating performance, investment behavior's distortion and an erosion of firm value. Implications: for SMEs, it's important to proactively optimize the debt maturity structure and avoid over-reliance on rolling short-term debt. For financial institutions, they should carefully assess a firm's refinancing ability and cash flow volatility risk, avoiding sudden withdrawal of loans when the firm's cash flow is already stressed. For policymakers, they should further improve the mechanism of long-term credit supply and broaden the long-term financing channels for SMEs. Policy-based financing tools can be considered, and pay attention to two moderating factors of maturity mismatch: bank competition and digital inclusive finance.

This paper has certain limitations when it comes to analyzing the impact of maturity mismatches on cash flow risk. First, as a literature review, this paper does not empirically test the framework with real data. The relative importance of the four transmission channels, and how they affect each other, need to be examined in future research. Second, this paper does not discuss whether the impact of maturity mismatch on cash flow risk might differ under different institutional environments. There are significant differences between China and other developed countries on financial systems, legal environments, and policy interventions, which may lead to different features in the transmission mechanisms of maturity mismatch. Third, this paper does not consider industry-level differences. The firms in different industries also differ in asset structure, debt maturities, and cash flow patterns. Future research could conduct cross-country comparisons or directly examine the impact of maturity mismatch on SME cash flow risk using micro-survey data of SMEs.

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