# The factors in shaping credit risk of commercial acceptance bills in supply chain finance in the Chinese real estate industry

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**Abstract:** This study investigates the credit risk associated with Commercial Acceptance Bills (CABs) within the supply chain finance ecosystem of China's real estate industry. As CABs gain prominence in facilitating liquidity, especially for small- and medium-sized enterprises, concerns about their default risk, regulatory gaps, and cascading financial repercussions have grown. Adopting a qualitative research design, this study captures the lived experiences and expert insights of 15 finance and legal professionals directly engaged with CAB issuance and risk management. Through thematic analysis, key risk determinants were identified across internal, external, and reputational dimensions. Findings reveal that poor liquidity management, high leverage, and ineffective governance significantly elevate CAB default risks. Furthermore, policy volatility, market fluctuations, and regulatory opacity intensify these vulnerabilities. Organizational reputation, meanwhile, emerged as a vital intangible asset that mediates trust and financial credibility in CAB transactions. The study contributes to both theory and practice by proposing a multi-dimensional framework for CAB risk governance and calls for integrated strategies to enhance transparency, resilience, and financial discipline in supply chain finance.

**Keywords:** Commercial acceptance bills, Credit risk, Organizational reputation, Real estate industry, Risk management, Supply chain finance.

## 1. Introduction

In recent years, the complexity and interdependence of global supply chains have elevated the importance of innovative financing tools such as commercial acceptance bills (CABs), particularly in capital-intensive industries like real estate [1]. In China, CABs have become a widespread financial instrument, enabling enterprises—especially small and medium-sized firms within the supply chain—to access working capital by leveraging the creditworthiness of core enterprises. However, while CABs are critical in improving liquidity and sustaining supply chain continuity, they also carry inherent credit risks, especially in financial instability and regulatory opacity sectors.

The real estate sector in China, a major driver of the national economy, has experienced unprecedented growth and volatility. This duality has placed mounting pressure on the financial mechanisms underpinning it, especially supply chain finance (SCF). The proliferation of commercial acceptance bills within this context has amplified concerns over credit defaults, reputational damage, and cascading financial disruptions across the supply chain [2]. Weak credit investigation systems, a lack of centralized oversight, and asymmetric information flows have further exacerbated these risks, undermining the reliability of CABs as a stable financing instrument.

The recent wave of defaults by major real estate firms such as China Evergrande has highlighted the systemic vulnerabilities embedded in the overuse and mismanagement of CABs. Many suppliers and subcontractors, who rely heavily on these bills for payment, have been exposed to delayed payments or

outright defaults, leading to financial stress and disruptions across the value chain. Despite their initial intent to enhance liquidity, CABs—when poorly regulated—can become a source of financial contagion, intensifying rather than alleviating credit risks.

This research examines the multi-dimensional risk factors that affect the creditworthiness of commercial acceptance bills in the real estate supply chain. In particular, it explores how internal factors (such as enterprise size, managerial capability, and solvency), external factors (such as macroeconomic instability and political risk), and organizational reputation jointly influence the level of supply chain finance risk, which in turn affects the probability of CAB default [3].

By developing an integrated risk assessment framework, this study contributes to both theoretical understanding and practical strategies for managing credit risk in CAB-centered financing systems. The findings highlight the key determinants of CAB risk and offer actionable insights for policymakers, financial institutions, and real estate enterprises seeking to stabilize and professionalize their supply chain finance practices. Ultimately, this research advocates for a more robust and transparent financial ecosystem that can safeguard the long-term sustainability of supply chain operations in China's real estate industry.

## 2. Literature Review
### 2.1. Supply Chain Finance Risk
Supply chain finance (SCF) has gained significant attention from academic and industrial groups, as evidenced by the growing interest in this field [4]. Despite being studied for approximately 50 years, no universally agreed-upon definition of SCF exists within these groups. Generally, the concept of SCF can be classified into two distinct groups based on its primary functions: finance-oriented and supply chain-oriented. SCF is a financing solution that aims to expedite working capital turnover by managing and overseeing the cash flow of all SCF participants' transaction activities and procedures [2]. SCF is a method that involves turning non-liquid assets, such as raw materials, inventory, and accounts receivable, into cash in order to provide credit and services to SMEs collaboratively and innovatively. SCF is a crucial component of SCM that focuses on the supply chain. Its main feature is integrating financial resources into the physical supply chain. Supply Chain Finance (SCF) is a strategy that enables players in the supply chain to collaboratively generate value by combining financing, logistics management, and supply chain management (SCM) while offering them the flexibility to repay their debts [5].

### 2.2. Internal Risk
Decision-making occurs within certainty, uncertainty, and risk [6]. Certainty can be defined as a state where a decision-maker precisely identifies and knows all the circumstances that contribute to a potential event. On the other hand, uncertainty is the complete opposite, as it refers to a scenario that cannot be described in terms of its likelihood of happening. Risk arises when decisions are made knowing the likelihood of a risky event, indicating that the decision-maker possesses more information than not [7]. Risk may be measured and defined as the difference between the actual outcome of an action and its estimated or forecasted value. Risk can be defined as the potential for experiencing both financial loss and gain [8]. The distinctions between risk and uncertainty events are based on the extent to which their probabilities can be known and their qualities can be quantified. The key to effectively managing risk is to grasp the likelihood of a risk occurring and the potential severity of its negative impact [9]. Risk can be reduced, acknowledged, evaded, or shifted within these two areas. Within the building realm, several hazards can impact factors such as expenses, excellence, security, the ecosystem, and scheduling, among other aspects [10].

### 2.3. External Risk
The global community is undergoing a significant transformation towards intelligence and efficiency in various aspects such as materials, urban areas, administration, and environmental

responsibility [7]. A smart city is defined by its ability to intelligently address several requirements, including industrial and commercial operations, daily interactions among citizens and resources, livelihood, public safety, environmental preservation, and urban services [11]. A smart city encompasses intelligent citizens, advanced technologies, efficient governance, optimized transit systems, and adequate infrastructure management, among other intelligent components, to facilitate comprehensive city administration [10]. The application, network, and perception are three prevalent technology layers in smart cities. The presence of these layers enhances the value, quantifiability, and interconnectedness of smart cities through the use of interoperability and intelligence. Smart cities encompass various interconnected elements such as wireless connectivity, intelligent homes, efficient transportation, advanced public services, social management, effective urban management, healthcare systems, environmentally friendly initiatives, tourism innovations, modern infrastructure, efficient governance, intelligent policies, agricultural advancements, education enhancements, economic advancements, environmental sustainability, industrial advancements, energy efficiency, feedback systems, and other important innovative functions [12]. Therefore, mitigating risks by decreasing the likelihood and consequences of adverse risks or threats is imperative while enhancing the likelihood and consequences of favorable risks or opportunities.

### 2.4. Organization Reputation

Establishing an organizational reputation is widely recognized as a crucial intangible asset. However, a comprehensive understanding of its development is currently lacking. Studies have consistently found that a positive reputation positively impacts customer satisfaction and loyalty [13]. However, the literature has various synonyms for reputation, indicating that academics have tried to comprehend this element. According to resource-based theory, firms can achieve a competitive edge by possessing tangible and intangible resources. These resources transform into distinctive organizational competencies, challenging competitors to replicate rapidly. A positive reputation is a form of intangible asset that can give a business a competitive edge. Organizations can engage with consumers immediately by offering a variety of mobile commerce (m-commerce) service applications in the current era of m-commerce, which is an improvement over the previous period of e-commerce [6]. Organizations can now conveniently reach out to previously challenging to engage during the e-commerce era. Customers can conveniently interact with enterprises using a variety of mobile commerce service applications. Organizations may enhance their reputation and achieve a competitive edge by ensuring the effectiveness of their m-commerce service apps and delivering exceptional consumer shopping experiences. Hence, it is imperative to investigate the impact of organizational endeavors in m-commerce service applications on organizations [14].

Additionally, examining how these efforts create a barrier to entry that is difficult for competitors to replicate is crucial. This study utilized the cues-images-impressions model to investigate the process of organizational reputation development in e-commerce. Based on our research findings, the aim is to assist firms in comprehending how to establish a difficult-to-replicate entry barrier.

### 2.5. Credit Risk of Commercial Acceptance Bill

Strategic and financial risks are associated with real estate, particularly corporate real estate [15]. As identified by various researchers, these risks can significantly impact value creation. Risks are a crucial aspect to consider when aiming to optimize the performance of any organization. They also play a crucial role in the real estate industry, especially considering the volatility and unpredictability that usually define this sector. Risk is a fundamental aspect to consider when investing in real estate. Moreover, it can manifest in several ways, possibly complicating its identification. Several risks are inherent in all processes, such as market, counterparty, and compliance [16].
Additionally, there are risks specific to real estate investments, management, and disinvestment. It is necessary to effectively manage all potential risks to ensure that an appropriate level of return

adequately offsets them. Risk management systematically identifies, analyzes, treats, and monitors risks using appropriate processes, methods, and instruments [17].

## 3. Methodology

This study employs a qualitative approach to comprehensively investigate the factors influencing credit risk in commercial acceptance bills (CABs) within the context of supply chain finance in China's real estate industry. The rationale for this methodological choice lies in the complex, multifactorial nature of credit risk, which requires both statistical validation and contextual insight.

### 3.1. Research Design

This research adopts a qualitative research design to explore the underlying factors contributing to credit risk in using Commercial Acceptance Bills (CABs) within the supply chain finance framework of China's real estate industry. Given the complex, dynamic, and context-sensitive nature of financial risk, particularly in a sector marked by regulatory flux and organizational opacity, a qualitative approach offers the flexibility and depth necessary to capture real-world managerial perspectives and practices that quantitative metrics alone may fail to illuminate.

The study is grounded in an interpretivist paradigm, which values subjective meanings and lived experiences. This lens is particularly appropriate for understanding how professionals perceive and manage CAB-related credit risks, how institutional reputation shapes financial interactions, and how external macroeconomic uncertainties influence day-to-day operational decisions. Rather than strictly testing hypotheses empirically, this design seeks to generate nuanced insights that deepen conceptual understanding and inform practical strategies. Participants are to elaborate on emergent topics and contextual subtleties. Participants were purposefully selected based on their direct involvement with CABs in various capacities—including issuance, evaluation, regulation, and risk mitigation—ensuring the sample reflects a diverse and experienced cross-section of industry practitioners.

The qualitative design further integrates a thematic analysis strategy to interpret the rich narrative data from interviews. The software for qualitative data analysis were coded inductively, allowing themes to emerge organically rather than imposing a predetermined framework. This aligns with the research objective of understanding how internal risks (such as managerial capabilities and solvency), external factors (such as policy changes and market instability), and organizational reputation converge to influence credit outcomes in CAB practices. Importantly, the qualitative design does not function in isolation but complements the broader mixed-methods structure of the study, validating and contextualizing quantitative findings through real-world testimony.

Ultimately, this research design reflects a deliberate commitment to capturing the complexity of CAB-related credit risk from an insider's perspective. It acknowledges the social, organizational, and regulatory forces at play and foregrounds the voices of those who navigate these challenges daily, thus contributing both empirically and conceptually to the discourse on risk in supply chain finance.

### 3.2. Purpose and Rationale

To deepen the understanding of managerial perspectives on CAB credit risk, semi-structured interviews were conducted with experienced real estate and finance professionals. The qualitative phase explored real-world experiences, perceived challenges, and strategic responses to risk management in commercial acceptance bills.

#### 3.2.1. Participants and Sampling

A purposive sampling was employed to recruit 15 industry experts, including CFOs, finance managers, legal advisors, and supply chain directors from major real estate development firms and financial institutions. Participants were selected based on their direct involvement in issuing, managing, or evaluating commercial bills within supply chain finance.

### 3.2.2. Data Collection Procedure

Interviews were conducted face-to-face or via online video conferencing platforms. Each interview lasted approximately 45–60 minutes and followed a semi-structured interview guide. Key areas of inquiry included: Perceptions of CAB credit risk and its sources; Risk evaluation and due diligence practices; Effectiveness of regulatory and internal controls; Case examples of bill defaults and their consequences; Recommendations for improving CAB risk governance. All interviews were audio-recorded with participant consent and transcribed verbatim for analysis.

### 3.2.3. Data Analysis

Thematic analysis was employed to analyze qualitative data. Coding was conducted using qualitative data analysis software. An inductive approach was used to identify emergent themes, which were then categorized into broader dimensions aligned with the conceptual model. Patterns were examined across participants to validate and expand upon the findings.

### 3.3. Ethical Considerations

The Ethics Committee of the Graduate School reviewed and approved the research protocol. Participation in both the survey and interviews was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality were ensured throughout the research process. Data were stored securely, and participants were informed of their right to withdraw at any stage without consequence.

## 4. Research Result

### 4.1. Descriptive Analysis

The study conducted a qualitative analysis based on semi-structured interviews with senior professionals in China's real estate and financial sectors. This phase explored managerial insights, real-world experiences, and contextual factors influencing credit risk management in commercial acceptance bills (CABs) within supply chain finance. By engaging practitioners directly involved in bill issuance, discounting, and risk assessment, the research obtained a deeper understanding of how risk is perceived, managed, and mitigated at the operational level. The analysis of the interview transcripts followed a thematic approach, in which common patterns and recurring ideas were identified, coded, and grouped under broader categories aligned with the conceptual framework. The data were examined for coherence with the quantitative model and for emerging insights that could refine or expand upon the statistical results.

**Table 1.**
Information on commercial acceptance bills.

| No. | Informant | Job Title | Age | Gender |
|-----|-----------|-----------|-----|--------|
| 1 | Informant 1 | Chief Financial Officer | 52 | Male |
| 2 | Informant 2 | Supply Chain Finance Manager | 39 | Female |
| 3 | Informant 3 | Credit Risk Analyst | 31 | Male |
| 4 | Informant 4 | Legal Advisor | 45 | Female |
| 5 | Informant 5 | Deputy Finance Director | 47 | Male |
| 6 | Informant 6 | Procurement Head | 36 | Female |
| 7 | Informant 7 | Risk Control Manager | 42 | Male |
| 8 | Informant 8 | Credit Officer | 29 | Female |
| 9 | Informant 9 | Senior Treasury Analyst | 34 | Male |
| 10 | Informant 10 | Financial Compliance Officer | 40 | Female |
| 11 | Informant 11 | Strategic Sourcing Manager | 38 | Male |
| 12 | Informant 12 | Internal Auditor | 33 | Female |
| 13 | Informant 13 | Risk and Compliance Director | 50 | Male |
| 14 | Informant 14 | Project Finance Specialist | 41 | Female |
| 15 | Informant 15 | Head of Legal Risk Management | 46 | Male |

Based on the profile of the 15 informants in Table 1, several patterns emerge that offer insight into the diversity and relevance of the sample for a qualitative study on credit risk in Commercial Acceptance Bills (CABs) within China's real estate and financial sectors.

First, the sample reflects a balanced representation across functional roles critical to CAB issuance and management. Key positions such as Chief Financial Officer, Risk Control Manager, Legal Advisor, Credit Officer, and Internal Auditor are well represented. This ensures a comprehensive perspective from both strategic and operational levels—from high-level financial decision-making to day-to-day risk and compliance practices monitoring. Such diversity supports a multi-dimensional exploration of credit risk, where informants can offer insights from both the issuing and evaluating ends of the CAB process.

The age distribution of participants—ranging from 29 to 52 years old—adds depth to the analysis by combining experienced senior managers with younger professionals more attuned to recent regulatory and technological changes. Notably, many informants fall within the 35–45 age range, a demographic likely to possess managerial experience and active involvement in financial innovation and digital risk management systems.

Gender representation in the sample is reasonably balanced, with 7 female and 8 male participants. This contributes to a broader understanding of perspectives and risk management styles that might differ subtly across gender lines, although that is not the focus of this study.

Overall, the composition of informants ensures credibility and richness in data collection, enabling the research to capture institutional-level strategies and individual professional experiences regarding credit risk assessment and governance in CABs. This variety enhances the trustworthiness of the findings and reinforces the relevance of the qualitative insights drawn from their narratives.

*4.2. Thematic Analysis*
Theme 1: The internal risk of enterprises with the risk of supply chain finance

The debt-to-asset ratio was frequently cited as a critical internal risk factor affecting supply chain finance. A high debt-to-asset ratio, indicative of excessive leverage, was identified as a key contributor to financial strain and subsequent disruptions in supply chain operations. Another interviewee explained, "When an enterprise's liabilities far outweigh its assets, it reduces financial flexibility and undermines the confidence of supply chain partners."

Managerial decision-making and leadership quality emerged as significant determinants of internal risk. Managers with foresight and robust risk management strategies were able to mitigate supply chain finance risks more effectively. For example, a participant remarked, "Our management's proactive

approach in reducing debt exposure and aligning short-term liabilities with revenue cycles has been instrumental in maintaining stability in our supply chain."

One of the most compelling findings was the consistent acknowledgment of financial mismanagement as a supply chain finance risk driver. Interviewee 1 highlighted, "A lack of synchronization between cash inflows and outflows has led to significant delays in supplier payments. This creates a ripple effect, as suppliers lose confidence and either withdraw credit terms or charge higher rates, further straining the system." This evidence points to the direct impact of internal financial practices on the broader supply chain.

High levels of leverage were frequently linked to elevated supply chain finance risks. A manager mentioned, "The debt-to-asset ratio indicates an enterprise's financial health. When this ratio crosses a certain threshold, it compromises the company's ability to meet its obligations, destabilizing the supply chain." This observation is consistent with prior research emphasizing the importance of maintaining optimal leverage levels to ensure financial stability.

Several participants credited effective managerial oversight with reducing supply chain risks. Interviewee 6 remarked, "Our leadership's focus on liquidity management and maintaining a conservative debt profile has allowed us to weather external shocks and sustain operations seamlessly." This underscores the role of managerial quality in influencing internal risk factors and, by extension, supply chain finance risk.

While most participants acknowledged the significance of internal risks, some highlighted external factors as more influential. For instance, Interviewee 5 argued, "External risks such as fluctuating interest rates and policy changes have a far greater impact on supply chain finance than internal issues. Even with robust internal controls, these external shocks can destabilize operations." This perspective suggests that internal risks cannot be analyzed in isolation but must be considered alongside external dynamics.

However, the interplay between internal and external risks warrants further consideration. While internal risks are controllable to a large extent, external factors such as market volatility and regulatory changes often amplify these risks. For instance, enterprises with high leverage are more vulnerable to interest rate hikes, which can exacerbate supply chain disruptions. This highlights the need for an integrated risk management approach that addresses internal vulnerabilities and external uncertainties.

The findings also underscore the importance of managerial quality in mitigating risks. Effective leadership ensures sound financial practices and fosters a culture of accountability and strategic planning. By prioritizing liquidity management and maintaining a balanced debt profile, managers can enhance the resilience of supply chain finance systems.

Theme 2: The external risk of enterprises, with the risk of supply chain finance

One Interviewee remarked, "The government's sudden restrictions on real estate financing severely affected our supply chain. Suppliers struggled to adjust, and it became challenging to maintain liquidity." This underscores the ripple effect of policy changes on supply chain finance systems.

Market risks, including fluctuations in demand and supply, price volatility, and competitive pressures, were highlighted as significant external risks. Managers noted that market instability impacts operational decisions and increases financial uncertainty across the supply chain.

One of the interviewees commented, "Unlike other industries, real estate is heavily influenced by interest rates and government policies. Even a minor policy change can significantly impact our cash flows and, in turn, our supply chain operations."

Regulatory uncertainty was one of the most frequently cited external risks. Another interviewee explained, "The frequent changes in land acquisition policies and financing restrictions create significant challenges. Suppliers hesitate to commit resources without clarity, disrupting the entire supply chain." This illustrates how policy shifts create an environment of unpredictability, straining financial arrangements.

Economic downturns exacerbate supply chain finance risks by reducing liquidity and increasing borrowing costs. Interviewee 12 shared, "During economic slowdowns, access to credit becomes more

expensive, and suppliers face delayed payments. This forces them to reduce operations or seek alternative financing, increasing risks."

Market dynamics, such as price volatility and demand fluctuations, further intensify risks. Interviewee 8 observed, "When market demand drops, it creates a chain reaction. Cash inflows slow down, affecting payments to suppliers, who then struggle to maintain their financial commitments."

While most participants emphasized the importance of external risks, a few argued that internal risk factors are more critical in shaping supply chain finance risk. One Interviewee stated, "External risks are beyond our control, but internal financial mismanagement often worsens the situation. A well-managed enterprise can weather external shocks better." This perspective highlights the interdependence between internal and external risks, suggesting that robust internal controls can mitigate some external vulnerabilities.

Moreover, the industry-specific nature of external risks in real estate highlights the need for targeted strategies. The sector's dependency on long-term financing and susceptibility to policy changes require enterprises to monitor external factors and proactively build resilience through strategic planning.

Theme 3: The reputation of enterprises with the risk of supply chain finance

One Interviewee explained, "Our high credit rating has enabled us to secure better terms with suppliers and financiers. This reduces risks and ensures a more stable supply chain." Conversely, organizations with poor credit ratings were reported to face higher borrowing costs and strained supplier relationships, increasing financial risks.

A recurring theme across interviews was the role of reputation in mitigating supply chain finance risk. Another Interviewee stated, "Suppliers are more willing to extend credit to companies with a strong reputation because they trust that payments will be made on time." This trust reduces the need for stringent financial controls, lowering transaction costs and risks.

Social responsibility was frequently cited as a factor that stabilizes financial interactions. For example, one Interviewee highlighted, "Our investments in environmentally friendly projects have not only improved our reputation but also attracted favorable terms from financial institutions. They view us as a low-risk partner." This underscores how ethical practices enhance financial stability within the supply chain.

Several managers noted that a strong reputation creates positive spillover effects, influencing stakeholders beyond the immediate supply chain. One Interviewee remarked, "Our reputation has helped us build strong relationships with regulators and financial institutions, further reducing risks in supply chain finance."

While most participants supported the link between organizational reputation and supply chain finance risk, a few highlighted its limitations. One Interviewee argued, "Reputation matters, but it cannot fully insulate us from external shocks like market downturns or regulatory changes." This perspective suggests that while reputation mitigates risks, it is not a standalone solution and must be complemented by robust internal controls and external risk management strategies.

Additionally, some participants noted that building and maintaining a strong reputation requires significant investment, which may strain resources in the short term. Another interviewee explained, "While reputation is valuable, the costs associated with social responsibility initiatives and image-building campaigns can increase financial pressure, especially for smaller enterprises."

These insights underscore the need for a balanced approach integrating reputation management with other risk mitigation strategies. Organizations should leverage their reputation to enhance financial stability while investing in robust internal controls and proactive external risk management.

*Theme 4: The enterprises' internal risk significantly influenced the commercial acceptance bill's credit risk*

The debt-to-asset ratio was identified as a critical internal risk indicator. High leverage reduces financial flexibility and increases the likelihood of default on commercial acceptance bills. One Interviewee explained, "When the debt-to-asset ratio is high, enterprises struggle to meet their financial

commitments, including commercial bills. This often leads to renegotiations or outright defaults." This highlights the direct correlation between high leverage and increased credit risk.

Operational efficiency and managerial practices emerged as significant factors influencing the credit risk of commercial acceptance bills. Inefficient operations and poor management were frequently cited contributors to financial instability, affecting bill payments. One Interviewee remarked, "Inadequate oversight of operational costs and delays in project execution create financial strain, making it difficult to honor commercial bills on time." Effective management practices were essential to maintaining financial discipline and reducing credit risk.

Multiple participants emphasized the role of cash flow planning in minimizing credit risk. Another interviewee noted, "Our company has a strict policy of aligning cash inflows with payment obligations, especially for commercial acceptance bills. This proactive approach has helped us avoid defaults." This statement illustrates how disciplined financial planning mitigates credit risk.

Effective managerial oversight was frequently cited as a mitigating factor. Another interviewee explained, "Strong leadership ensures that financial commitments, including commercial acceptance bills, are prioritized. This reduces the likelihood of defaults, even during periods of financial strain." This highlights the role of management in maintaining financial discipline and minimizing credit risk.

While most participants supported the link between internal risks and the credit risk of commercial acceptance bills, a few highlighted external factors as more influential. One interviewee argued, "Market fluctuations and policy changes have a more significant impact on credit risk than internal factors. Even well-managed enterprises can default if external conditions deteriorate." This perspective suggests that internal risks are not the sole determinant of credit risk and must be analyzed alongside external influences.

Additionally, some managers noted that credit risk is often a systemic rather than an individual enterprise problem. One Interviewee remarked, "When an entire industry faces liquidity challenges, even financially healthy companies struggle to meet their obligations."

Operational efficiency and managerial practices further influence credit risk by shaping the enterprise's financial discipline. Effective leadership and oversight enhance financial stability and foster trust among stakeholders, reducing the likelihood of defaults on commercial acceptance bills.

However, the findings also highlight the interplay between internal and external risks. While internal factors are critical, external market volatility and regulatory changes can exacerbate credit risks. This underscores the need for a holistic risk management approach that addresses internal vulnerabilities and external uncertainties.

Theme 5: The supply chain finance risk with the credit risk of the commercial acceptance bill

Liquidity constraints were consistently identified as a critical driver of SCF risk, particularly when enterprises rely heavily on short-term financing to manage cash flows. Several participants noted that increased financing costs during periods of financial stress significantly elevate the credit risk of commercial acceptance bills.

Another interviewee remarked, "When liquidity dries, enterprises resort to expensive financing options. This increases the financial burden and the risk of defaulting on commercial bills." This underscores the direct link between liquidity challenges and credit risk.

Several managers highlighted the interconnected nature of supply chain finance and its impact on commercial bill credit risk. Interviewee 6 stated, "The credit risk of commercial bills is not just about our company; it depends on the financial health of our entire supply chain. One weak link can destabilize the whole system." This evidence underscores the systemic nature of SCF risks.

Liquidity shortfalls were frequently cited as a driver of default on commercial bills. One Interviewee noted, "When upstream suppliers delay payments, it creates a domino effect. The lack of liquidity forces us to delay our payments, including commercial acceptance bills, which damages our creditworthiness." This highlights how SCF risks translate into heightened credit risk.

Participants frequently mentioned the rising cost of borrowing during financial distress as a factor exacerbating credit risk. Interviewee 8 explained, "High-interest short-term loans used to bridge

liquidity gaps increase our financial burden, making it harder to honor commercial bills." This illustrates how SCF risks can intensify credit challenges.

While most participants supported the link between SCF risk and the credit risk of commercial acceptance bills, a few highlighted the role of internal and external factors in mediating this relationship. One Interviewee argued, "While SCF risks are important, they are often a symptom of deeper issues, such as poor internal financial management or external market volatility." This suggests that SCF risk may not always be the root cause of credit challenges.

Theme 6: The reputation of enterprises with the credit risk of commercial acceptance bills

Social responsibility, reflected in ethical business practices and community engagement, was another key aspect of reputation that emerged from the interviews. Participants noted that socially responsible enterprises are perceived as more stable and reliable, which enhances their financial relationships. One Interviewee explained, "Our commitment to sustainability and transparency has strengthened our reputation, making negotiating favorable terms with suppliers and financial institutions easier. This significantly lowers the risk associated with our commercial bills." This illustrates how social responsibility reinforces trust and reduces credit risk.

The historical credit performance of an enterprise was consistently linked to its reputation and, by extension, the credit risk of its commercial bills. A strong track record of timely payments builds credibility, while defaults or delays tarnish reputation and elevate credit risk. One Interviewee remarked, "Maintaining a flawless payment history has been critical in establishing our reputation. It reassures our partners that we will honor our commitments, even in challenging times." This highlights the direct relationship between past performance and perceived credit risk.

Participants frequently emphasized that reputation is a trust-building mechanism, reducing perceived credit risk. one Interviewee noted, "Suppliers and banks are more willing to extend favorable terms to companies with a strong reputation because they trust that payments will be made on time." This trust directly reduces the financial uncertainty associated with commercial bills.

Socially responsible initiatives were frequently linked to reduced credit risk. For example, one Interviewee shared, "Our investments in green building projects have enhanced our reputation and attracted better financing options for our commercial bills. Financial institutions view us as a low-risk partner." This demonstrates how ethical practices positively influence credit risk perceptions.

Several participants highlighted the importance of maintaining a strong payment history. One Interviewee explained, "Commercial acceptance bills heavily rely on the drawer's reputation. A single instance of default can tarnish that reputation and make it difficult to negotiate terms in the future."

Additionally, some managers noted that building a strong reputation requires significant investment, which may increase financial strain in the short term. One Interviewee observed, "Reputation-building initiatives, such as social responsibility projects, are resource-intensive. For smaller companies, this can create financial pressure that increases credit risk."

Theme 7: The internal risk of enterprises significantly influenced their reputation

Operational efficiency, including timely project delivery and cost control, was consistently linked to reputation. Inefficient operations often lead to delays, cost overruns, and unmet expectations, which tarnish an organization's image. One Interviewee remarked, "Delays in project completion strain finances and affect how stakeholders perceive us. Consistent inefficiencies lead to a reputation for unreliability, which is hard to recover from." This highlights how operational lapses contribute to reputational risks.

Leadership quality and adherence to ethical practices emerged as significant internal factors influencing reputation. Strong, transparent leadership fosters stakeholder trust, while unethical behavior or poor decision-making can quickly erode credibility. Another interviewee observed, "Good leadership sets the tone for how the organization is perceived. When leaders prioritize transparency and ethical practices, it builds a positive reputation. Conversely, scandals or mismanagement at the top can irreparably damage our image."

Several participants highlighted instances where financial mismanagement negatively affected reputation. One Interviewee noted, "When our cash flow issues became public, it led to a significant loss of confidence among suppliers and investors. Rebuilding that trust took years." This illustrates the direct impact of financial instability on stakeholder perceptions.

Operational failures, such as project delays, were frequently cited as sources of reputational harm. One Interviewee shared, "A high-profile project delay due to mismanagement not only caused financial losses but also led to negative media coverage, which tarnished our reputation in the industry." Leadership integrity was consistently linked to reputation. One Interviewee explained, "When leaders act with integrity and prioritize ethical practices, it creates a positive image of the organization.

On the other hand, even minor lapses in judgment by leadership can lead to widespread reputational damage." While most participants emphasized the impact of internal risks on reputation, a few highlighted external factors as equally, if not more, influential; one Interviewee argued, "Reputation is not just about what happens internally; external events, such as market downturns or regulatory changes, also shape how we are perceived." This suggests that while internal risks play a significant role, external dynamics must also be considered.

Additionally, some participants noted that a strong reputation can act as a buffer against internal lapses. One Interviewee remarked, "Our long-standing reputation for reliability has helped us weather internal challenges. While internal risks matter, a strong foundation of trust can somewhat mitigate their impact."

Figure 1 summarizes the need, barriers, facilitators, and benefits of Commercial Acceptance Bills.
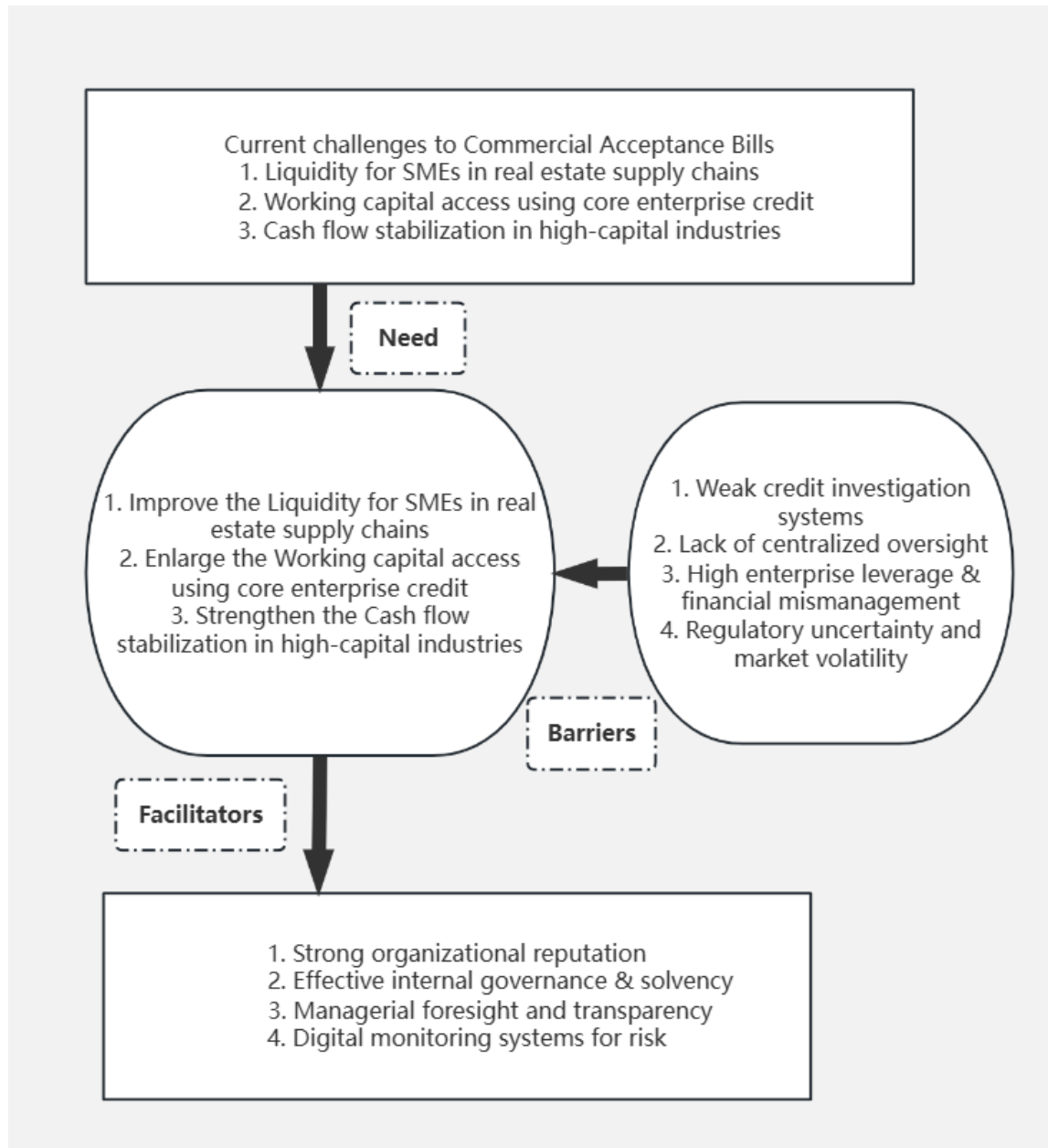
**Figure 1.**
The summary of the findings.

## 5. Discussions

This study focuses on the complex interplay between internal risks, external factors, organizational reputation, and supply chain finance in shaping the credit risk of Commercial Acceptance Bills (CABs) within China's real estate industry. The findings from qualitative interviews underscore the multifaceted nature of credit risk and reaffirm the proposed conceptual framework, while offering new insights into the operational realities that influence financial behavior and stability.

One of the most salient themes to emerge from the data is the critical role of internal risk factors—particularly liquidity management, financial structure, and managerial decision-making—in determining the creditworthiness of CABs. Informants consistently pointed to poor internal

governance, excessive leverage, and a lack of foresight in aligning cash flows with financial obligations as key contributors to payment delays and defaults [18]. This echoes existing literature that links internal financial health to operational resilience. Enterprises that implemented strong internal controls and prioritized risk assessment exhibited higher levels of financial discipline, leading to better repayment performance and lower exposure to supply chain disruptions.

External risk factors also exerted a strong influence on CAB stability, particularly in the context of policy volatility, macroeconomic fluctuations, and market uncertainty. Several participants described how abrupt regulatory changes—such as financing restrictions or policy shifts in real estate investment—exacerbated liquidity crises, forcing firms to redirect funds away from CAB settlements to more urgent obligations. This suggests that even well-managed firms may become vulnerable in volatile policy environments, revealing the importance of regulatory predictability and market transparency in reducing systemic risk. The data also emphasized the sector-specific sensitivity of real estate to economic cycles and interest rate shifts, which makes it especially prone to cascading supply chain effects during downturns.

Organizational reputation emerged as both a mitigator of credit risk and a facilitator of favorable financial interactions. Firms with established reputations for reliability and timely payments were more likely to maintain stable supplier relationships and gain access to lower-cost financing. Participants indicated that stakeholders—particularly subcontractors and financial institutions—rely heavily on reputational cues when evaluating the credibility of commercial bills. This finding aligns with resource-based theory, which posits that intangible assets like reputation can serve as durable sources of competitive advantage. However, maintaining a strong reputation was reported to require significant investment in ethical practices, transparency, and public communication, highlighting a potential trade-off between short-term financial pressure and long-term trust-building.

The discussion also highlights the systemic nature of supply chain finance (SCF) risks. Informants provided numerous examples of how financial strain at one node in the chain can rapidly propagate throughout the network, increasing the credit risk of CABs issued at multiple levels [4]. This cascading effect points to the need for coordinated oversight, digital monitoring tools, and real-time risk evaluation frameworks that can detect and contain disruptions before they spread. Furthermore, while CABs were introduced to improve liquidity, they have become vehicles for credit contagion when mismanaged.

Overall, the study highlights the necessity of adopting an integrated approach to risk management that addresses internal and external vulnerabilities, leverages reputational capital, and ensures transparency throughout the supply chain. These insights validate the conceptual model and offer practical guidance for firms and policymakers seeking to professionalize CAB practices and safeguard financial sustainability in China's real estate ecosystem.

## 6. Conclusions

This study concludes that the credit risk associated with Commercial Acceptance Bills (CABs) in the Chinese real estate supply chain finance system is shaped by a dynamic interplay of internal financial conditions, external market forces, and organizational reputation. The findings confirm that CABs, while intended to enhance liquidity and support supply chain continuity, can become sources of financial vulnerability when deployed without robust internal controls or under conditions of macroeconomic instability.

Internal risk factors—liquidity management, debt-to-asset ratios, and managerial effectiveness—emerged as primary determinants of whether enterprises could meet CAB obligations on time. Enterprises with proactive financial planning and conservative debt structures were more likely to maintain operational stability, whereas those with high leverage or poor governance faced heightened credit risk. This highlights the need for enterprises to strengthen internal risk governance frameworks and embed financial discipline into their decision-making processes.

Externally, fluctuating market conditions, regulatory uncertainty, and policy shifts significantly affected the reliability of CABs as a financial instrument. Even enterprises with sound internal controls were not immune to disruptions triggered by sudden economic downturns or changes in regulatory policy. This underlines the importance of policy consistency and macroprudential oversight in stabilizing the broader financial ecosystem in which CABs operate.

The research also emphasizes the critical role of organizational reputation in reducing perceived credit risk. A positive reputation fosters trust among suppliers and financial institutions, facilitates access to better financing terms, and enhances the credibility of issued bills. However, reputational capital must be actively managed and maintained through ethical practices, transparency, and performance reliability.

Thus, the study advocates for a more integrated and transparent approach to CAB governance that combines internal control, external adaptability, and reputational stewardship. Such a comprehensive framework is essential for sustaining trust, preventing systemic defaults, and ensuring the long-term viability of supply chain finance in China's volatile real estate industry.

## 7. Future Study
Future research should explore the impact of digital technologies, such as blockchain and AI-driven risk analytics, on enhancing the transparency and traceability of Commercial Acceptance Bills (CABs). Longitudinal studies examining the evolution of credit risk over time would offer deeper insights into cyclical patterns in the real estate finance system. Comparative studies across different industries or regions could also reveal how contextual variables influence CAB risk profiles. Expanding the sample size and including perspectives from regulators, investors, and smaller subcontractors would also enrich the understanding of systemic vulnerabilities and support the development of more inclusive and adaptive risk management frameworks.

## Institutional Review Board Statement:
The study was conducted following the Declaration of Helsinki and approved by the Institutional Review Board of Dhonburi Rajabhat University

## Transparency:
The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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