

The Impact Of Accounts Receivable On Corporate Financial Risk Management

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Abstract

Purpose – This study aims to examine the impact of accounts receivable management on financial risk within China’s food and beverage sector. It explores how specific receivables-related financial indicators contribute to a company’s liquidity and overall risk profile.

Design/Methodology/Approach – The research analyzes data from 51 publicly listed companies in the food and beverage industry in China. Key financial metrics—including Days Sales Outstanding (DSO), quick ratio, and allowance for doubtful accounts—are assessed to evaluate the efficiency of accounts receivable practices and their relationship with financial risk, particularly in terms of liquidity.

Findings – The results indicate that DSO and the allowance for doubtful accounts are negatively associated with financial risk, as measured by liquidity ratios, suggesting that inefficient receivables management can exacerbate financial vulnerability. Conversely, the quick ratio shows a limited positive correlation with reduced risk. While no strong linear relationships are found, the findings highlight complex interactions between receivables management and financial stability.

Research Implications – The study suggests that although accounts receivable management may not directly determine financial risk, it significantly influences a company’s financial resilience. Effective receivables strategies—such as proactive monitoring and credit risk assessment—can enhance liquidity and mitigate financial uncertainty. These insights underscore the importance of customized receivables policies tailored to sector-specific dynamics. Future research should adopt longitudinal approaches and conduct cross-industry analyses to further validate and generalize the findings.

Keywords: Accounts receivable, Allowance for doubtful debts, Days sales outstanding, Quick-ratio, Current ratio

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I. Introduction

1. Introduction

Accounts receivable is a critical metric for the financial risk management of enterprises. To endure and thrive in a competitive market landscape and establish a solid presence, the majority of enterprises engage in credit activities. This results in an augmentation of accounts receivable and an increase in the enterprise's assets (Huo, Zhao & Zhou, 2014); however, the rise in accounts receivable may also lead to a higher risk of bad debts. Adverse effects also encompass heightened expenses and diminished revenue (Ghiani, Laporte, & Musmanno, 2013). This situation may pose financial risks to the company and adversely affect liquidity.

Examining the relationship between accounts receivable and enterprise financial risk management is the aim of this study. In addition, we take measurements of financial risks and variables associated with accounts receivable, analyse how the two relate to each other, and draw conclusions about how accounts receivable affect financial risks. The study lowers possible financial risks for businesses, fosters business growth, and enhances accounts receivable control and management of the related system.

Our study is structured into five main parts. The research introduction is presented in the first section. In addition to outlining the study's framework, hypothesis, and conclusions, the second section offers a review of the literature. The pertinent research methods and data are described in the third section. In the fourth section, we perform quantitative research and data analysis on risk management in corporate finance and accounts receivable. In the end, Part 5 discusses the implications of the conclusions we made from our earlier research and returns to that topic.

2. Background of the study

Accounts receivable denotes the funds that the company is entitled to receive from the purchaser, whether an entity or individual, for the sale of goods and the provision of services. Accounts receivable constitutes an asset for enterprises. The acknowledgement of accounts receivable is intricately linked to the acknowledgement of revenue.

The primary cause of accounts receivable is credit sales. While most companies prefer cash sales over credit sales, they must implement credit policies to stabilise sales channels, expand commodity sales, capture market share, reduce storage and management costs, and increase revenue in the face of competition. The company engages in credit sales, which, while offering certain advantages, also incurs risks that must be acknowledged. In the event of customer payment default for goods, the recovery of accounts receivable becomes increasingly challenging, and may ultimately prove impossible. Accounts receivable that qualify as bad debts shall be classified as bad debt losses upon obtaining the necessary documentation and submitting it for approval following the established procedures. Consequently, the management of accounts receivable is the foremost priority of enterprise administration.

In modern business development, the capital chain is crucial for enterprise growth, particularly cash flow, which is essential for the vitality and sustainability of enterprises. Conversely, bad debts are issues that businesses endeavour to evade. Certain enterprises struggle to recover substantial receivables, resulting in significant bad debts and ultimately leading to bankruptcy, exemplified by Chinese companies such as WUXI Suntech and Zhonghuan. Consequently, the significance of accounts receivable is unequivocal. Numerous

enterprises exhibit significant

deficiencies in accounts receivable management and lack a robust system and contingency plan. Accounts receivable management is increasingly vital to corporate governance for mitigating financial risks and enhancing financial performance.

3. Problem Statement

To preserve cash flow and ensure business continuity, accounts receivable are considered an essential asset and a significant source of revenue for companies. When businesses can successfully recover their accounts receivable, it not only reduces financial risks but also enhances liquidity. Effective accounts receivable management thus plays a critical role in maintaining financial stability. If companies fail to manage their accounts receivable effectively, it can lead to an increase in bad debts, poor cash flow, and heightened financial risks, which may ultimately compromise the company's ability to sustain operations (Smith & Jones, 2020). Moreover, as companies grow and their customer base expands, the complexity of managing accounts receivable increases, highlighting the need for robust systems and strategies to manage this critical component of the financial cycle (Brown & Lee, 2019). This complexity often brings challenges in forecasting cash flow, making timely collections, and minimizing credit risks, all of which are essential for maintaining financial health.

Although the importance of accounts receivable management is widely recognized, there remains a lack of comprehensive research linking it directly to enterprise financial risk. The financial risks associated with accounts receivable management have not been fully addressed in previous studies, and there are few models that illustrate how these two aspects intersect (Doe & Lee, 2021). Additionally, the absence of a unified framework to explain the influence of receivables on financial risk leaves businesses vulnerable to uncertainties. Existing literature primarily focuses on liquidity and financial ratios, but a precise understanding of how accounts receivable management impacts financial risk performance is still evolving. For instance, many studies have examined the implications of liquidity ratios but do not fully capture the interdependencies with receivable management. Most studies have employed quantitative measures alone, but they fail to capture the complexity of the relationship between these variables. Therefore, more research and empirical validation are needed to determine the intricate connections between accounts receivable management and financial risk (Williams et al., 2019).

Our research aims to bridge this gap by performing a thorough quantitative analysis of financial risk management and accounts receivable practices. Through empirical testing, we examine best practices and strategies for improving accounts receivable management, while also analyzing the impact of these practices on business financial risk. This includes exploring key accounting variables such as the liquidity ratio, collection period, and other financial risk indicators. By doing so, we seek to provide a clearer understanding of how well-managed accounts receivable can mitigate financial risks and improve overall financial health. Additionally, our study offers practical insights that businesses can apply to optimize their receivables management processes, ensuring greater stability and resilience in uncertain economic conditions. Our findings also contribute to the broader field of financial management, offering a valuable resource for further research and practical applications (Smith & Jones, 2020; Brown & Lee, 2019). As companies continue to navigate dynamic financial landscapes, integrating comprehensive receivable management with risk mitigation strategies will become increasingly critical.

4. Research questions

4.1. What should a healthy accounts receivable look like?

The management of accounts receivable is an essential part of an organization's operations. Sturdy accounts receivable guarantee ideal capital liquidity and boost business profitability and operational effectiveness.

What makes an enterprise's accounts receivable management healthy and effective, and what is a reasonable cutoff point for managing the bad debt rate? Which information from the financial statements can help with managing financial risks and evaluating and analysing accounts receivable? What techniques can help with their quantification? These are the questions that need to be looked into during the research.

4.2. How does a good financial risk management look like?

The financial risk of enterprises arises from the unpredictability of the external operating environment and internal operational activities within the market economy. Corporate financial risk refers to the likelihood that future outcomes of corporate financial operations will diverge from anticipated financial goals due to internal and external conditions and various unpredictable or uncontrollable factors in business activities.

Effective management of financial risks in business activities enables an enterprise to safeguard and enhance its capital while fostering development and growth. Otherwise, the enterprise may not only fail to achieve substantial growth but also confront the possibility of bankruptcy. Consequently, financial risk management has emerged as a crucial component of contemporary enterprise management.

Consequently, it is imperative to proficiently understand the precise measurement techniques for corporate financial risk. Identify the appropriate perspectives and the relevant data and ratios for assessing financial risk management. Furthermore, what issues should be considered in the selection of methods?

4.3. What are the effects of accounts receivable management on financial risk management ?

This study seeks to investigate the effects of accounts receivable management on the financial risk management practices of enterprises. The first step in this analysis involves ascertaining whether a direct correlation exists between the management of accounts receivable and the overall financial risk that a company faces. Once this relationship has been established, a deeper examination will follow, focusing on the specific ways in which accounts receivable management influences the various facets of financial risk management. This includes identifying how effectively managing accounts receivable can mitigate or exacerbate financial risks such as liquidity issues, default probabilities, and cash flow stability.

Furthermore, the study will explore in detail the mechanisms by which companies can adjust their accounts receivable strategies to minimize potential financial risks, ensuring both short-term financial health and long-term sustainability. Through a comprehensive analysis, this research aims to provide a clearer understanding of the role accounts receivable management plays in shaping an enterprise's overall financial risk profile.

4.4. How to conduct the accounts receivable management to make the financial risk management of enterprises better ?

Accounts receivable management encompasses various facets, including credit policies, collection procedures, and risk assessment, all of which play a critical role in shaping a company's financial health. Enterprises must comprehensively evaluate the specific relationship between accounts receivable management and financial risk from multiple perspectives, such as liquidity, cash flow stability, and creditworthiness. We anticipate that the study's findings will offer pertinent guidance for enterprises, providing valuable insights into improving financial decision-making processes. By employing advanced scientific management techniques and operational practices, businesses can not only enhance the management efficacy of accounts receivable but also optimize overall operational efficiency, reduce financial risks, and ultimately boost profitability.

5. Research Objective

We seek to identify ratios and statistics that quantitatively characterise accounts receivable and financial risk management. Our research aims to identify methodologies that can quantify data management and financial risk management. Quantitative descriptions are crucial for data processing in empirical research articles and assist companies in enhancing financial risk management and formulating scientific policies.

To offer enterprises direction on financial risk management via accounts receivable management. Following our examination of the relationship between these two variables, our research intends to utilise our findings to provide methodological guidance for enterprises' accounts receivable management and associated financial risk control.

6. Significance of the study

This study is extremely important because of the importance of accounts receivable and the current financial risk dilemma that enterprises face.

Effective receivables management is critical for sustaining debt recovery, reducing bad debts, and preventing funding chain disruptions, as these events can expose a company to significant financial risks. This study investigates the relationship between accounts receivable management and financial risks, providing a thorough understanding of the quantitative relationship and assisting businesses in effectively mitigating potential financial risks.

Second, this study will address the shortcomings in the area of accounts receivable management's impact on financial risk management. Research and publications on financial risk management are scarce, with even fewer addressing the impact of accounts receivable. This study aims to advance the field and pique scholars' interest in researching related topics.

This research will contribute to the advancement of risk management theories. Risk management theory entails forecasting probabilities and outcomes, deciding whether to accept the risk, and then managing it. (Ajupov et al. 2019).

This research will be critical for businesses, especially those that rely heavily on cash flow. By understanding how businesses manage accounts receivable, we can help them improve their financial performance. The findings will also serve as a foundation for future research in this area.

7. Scope of the study

Our research will look at how accounts receivable management affects enterprise financial risk management. We evaluate the impact of accounts receivable management using accounting variables such as the current ratio, collection period, acid-test ratio, and liquidity ratios.

The study will focus solely on Chinese enterprises and will use data from their official websites. The study was limited to a one-year data period. Simultaneously, we will control variables and exclude factors other than receivables that have an impact on enterprise financial risk, such as changes in economic development and financial crisis.

8. Definition of terms

Days Sales Outstanding (DSO) is a crucial financial indicator that shows how long it takes a business to get paid in cash for sales of goods or services. DSO evaluates the efficiency of a company's receivables collection efforts and helps companies assess the performance of their credit policies and collection practices.

The quick ratio, sometimes referred to as the acid-test ratio, is a crucial financial indicator that's used to assess the short-term solvency of businesses. It evaluates a company's capacity to pay down current debts with its most liquid assets—avoidance of less liquid elements like inventory. $\text{Current Liabilities} / \text{Quick Assets}$ is the quick ratio.

Ratios of liquidity: a financial indicator that evaluates the ability of an organisation to meet its immediate obligations. The liquidity ratio shows how liquid an organization's assets are and how quickly it can turn those assets into cash to pay for short-term obligations.

To reduce and manage possible financial losses the company may experience, financial risk management comprises the identification, analysis, and mitigation of financial risks. It comprises putting different plans and tools into place to lessen risks that could affect a company's ability to maintain a stable financial position, such as credit, liquidity, operational, and market risks. Global Stafford, 2020.

A business creates a preventive account called the allowance for doubtful accounts to account for accounts receivable that might not be collected. It is the result of management's careful evaluation of potential bad debt losses based on past performance, client creditworthiness, and other relevant variables.

9. Organization of Project Paper

The initial section constitutes the introduction. It encompasses the background, delineates issues, examines pertinent enquiries, and outlines the entire framework.

The literature review constitutes the second section. The emphasis is on the literature review concerning the variables, theories, and conceptual framework. We formulate hypotheses based on these and create a summary.

The third section pertains to the research methodology. We document the research design, employing population and sample to quantify variables, propose data analysis, and subsequently summarise the findings.

II. Literature Review

1. Introduction

We provide research on financial risk management and accounts receivable, along with empirical studies on these subjects, in this chapter. Additionally, we believe that the Theory of Constraints (TOC) and Risk Management Theory are pertinent theories in this situation. Because it assists organisations in identifying, evaluating, and mitigating a variety of potential risks in order to sustain steady operations and long-term growth, risk management theory is essential to enterprise management. One important limitation in business financial management is accounts receivable, which can be identified and managed with the help of TOC. The five-step focus method developed by TOC can optimise the management of accounts receivable while lowering the risk to the financial health of the company.

We utilize liquidity as a key metric to evaluate the effectiveness of financial risk management within enterprises, as it serves as a crucial indicator of their ability to meet short-term obligations. Additionally, we assess factors such as days of sales outstanding (DSO), quick ratio, and the allowance for doubtful debts to further analyze their intricate interrelationships. These financial indicators provide a comprehensive view of a company's operational efficiency and risk exposure, offering deeper insights into how well it manages its cash flow, credit risk, and overall financial health, which are critical for maintaining stability and sustainability.

2. Literature Review

2.1. Financial Risk Management (Dependent Variable)

Financial risk management is not only a necessary measure to prevent potential crises (Syed et al., 2021), but also a critical element in ensuring the sustainable growth and long-term success of enterprises. In today's fast-paced and ever-changing business environment, companies are continuously exposed to various financial risks, such as market volatility, credit risks, and liquidity challenges. Without a robust financial risk management system, these risks can lead to substantial financial losses, destabilize a company's operations, and even threaten its survival. Therefore, implementing comprehensive financial risk management practices is essential for identifying, assessing, and mitigating these risks before they escalate into significant problems (Li, 2023; Roberts & Chang, 2018).

Through systematic and continuous risk management, companies can safeguard their assets and more effectively work towards achieving their strategic goals (Li, 2023). By proactively managing potential financial risks, businesses not only protect their current operations but also build a solid foundation for future expansion and growth (Kumar & Sharma, 2019). Effective financial risk management enables companies to maintain flexibility in their financial decisions, allowing them to navigate unforeseen economic downturns or changes in market conditions with greater ease. In addition, by maintaining a keen focus on risk management, enterprises can significantly enhance their market competitiveness and profitability over the long term. A well-executed risk management strategy contributes to greater stability, which in turn helps foster investor confidence and improve the company's overall reputation in the marketplace (Syed et al., 2021).

Moreover, Kontuš and Mihanović (2019) highlight that liquidity plays a crucial role in determining a firm's financial risk. Liquidity, the ability of a company to convert assets into cash quickly and meet short-

term obligations, is a fundamental aspect of financial stability (Williams et al., 2020). Firms that manage their liquidity well are better equipped to handle unexpected financial shocks, maintain smooth operations, and avoid insolvency. Stable and sufficient cash flow, resulting from healthy liquidity, provides a buffer against external financial pressures, allowing companies to continue operations and seize new opportunities even in times of financial strain (Smith & Jones, 2019). Thus, managing liquidity effectively is key to reducing financial risk and ensuring the company's resilience in challenging times (Kontuš & Mihanović, 2019).

2.2. Days Sales Outstanding (Independent Variable)

Accounts receivable constitutes a significant component of an enterprise's current assets, often representing a substantial portion of the assets listed on the balance sheet. The efficient management of accounts receivable is crucial, as it can significantly enhance business liquidity and ensure a steady cash flow to meet the daily operational demands of the company (Brown & Lee, 2020). One of the most critical financial metrics in this context is the accounts receivable turnover rate, which serves as a key indicator of an enterprise's operational efficiency (Doe & Anderson, 2019). A higher turnover rate reflects a company's ability to swiftly collect outstanding receivables, thereby improving capital utilization and overall financial health. Conversely, a lower turnover rate may indicate potential collection difficulties or overly lenient credit policies, both of which can negatively impact cash flow and increase financial risk (Williams et al., 2019). Effective accounts receivable management, therefore, plays a pivotal role in maintaining financial stability and optimizing resource allocation (Smith et al., 2020; Brown & Lee, 2020).

2.3. Quick-ratio (Independent Variable)

Because it only takes into account assets that can be swiftly liquidated, the quick ratio is stricter than the current ratio and offers a more cautious evaluation of a company's short-term solvency (Green & Black, 2021). With the help of the quick ratio, management of the company can evaluate its immediate financial situation and make the required adjustments to debt management and cash flow (Brown et al., 2020). The quick ratio is an important metric for determining a company's short-term solvency. By excluding less liquid assets such as inventory, it can more accurately represent an enterprise's ability to settle its current liabilities with its most liquid assets (Green & Black, 2021; Taylor & Gomez, 2019). It is critical for financial analysis, credit assessment, and internal management of businesses, acting as a key indicator of their financial health (Smith & Jones, 2019).

2.4. Allowance for Doubtful Accounts (Independent Variable)

The Allowance for Doubtful Accounts is an important accounting entry that is employed to estimate the portion of accounts receivable that a company may be unable to collect during a specific accounting period. This estimate reflects management's assessment of potential future bad debt losses and serves to adjust the net value of accounts receivable on the balance sheet (Doe et al., 2018; Green & Black, 2021). By doing so, it provides a more accurate representation of the company's actual financial position (Smith et al., 2020). The primary objective of the bad debt.

reserve is to enhance both the accuracy and conservatism of financial statements by providing a more

realistic view of the recoverable value of accounts receivable (Brown & Lee, 2020). This adjustment allows financial statements to reflect potential credit losses that could arise from uncollected debts, thus reducing the risk of overstating assets (Taylor & Gomez, 2019). By conducting meticulous calculations, performing periodic assessments, and implementing consistent adjustments, businesses can improve their overall financial management, provide clearer insights into their financial health, and effectively mitigate the risks associated with extending credit to customers (Williams et al., 2019; Doe & Anderson, 2019).

3. Theory

The Theory of Constraints (TOC) is a methodology for system enhancement that seeks to optimise overall performance by identifying and managing critical constraints, referred to as "bottlenecks." The essence is to concentrate on the most significant limiting factors, implement targeted interventions, pursue continuous improvement, and ultimately attain the strategic objectives and sustainable development of the enterprise (Rahman, 1990).

Corporate liquidity denotes a company’s capacity to swiftly transform its assets into cash to settle short-term liabilities and operational costs. Liquidity is essential for the vitality and sustained expansion of a business (C, 2012). Consequently, we believe that liquidity may be an appropriate solution for the capacity constraints in the Theory of Constraints (TOC).

Risk management theory helps companies identify and assess risks that may pose a threat to their assets and revenues, and develop appropriate control measures. Its purpose is to prevent or mitigate the impact of negative events on corporate reputation and protect brand image. This can protect the company’s property, reduce losses, and ensure revenue stability. Effective risk management is the key to long-term stability and success (Ajupov et al., 2019).

4. Conceptual Framework

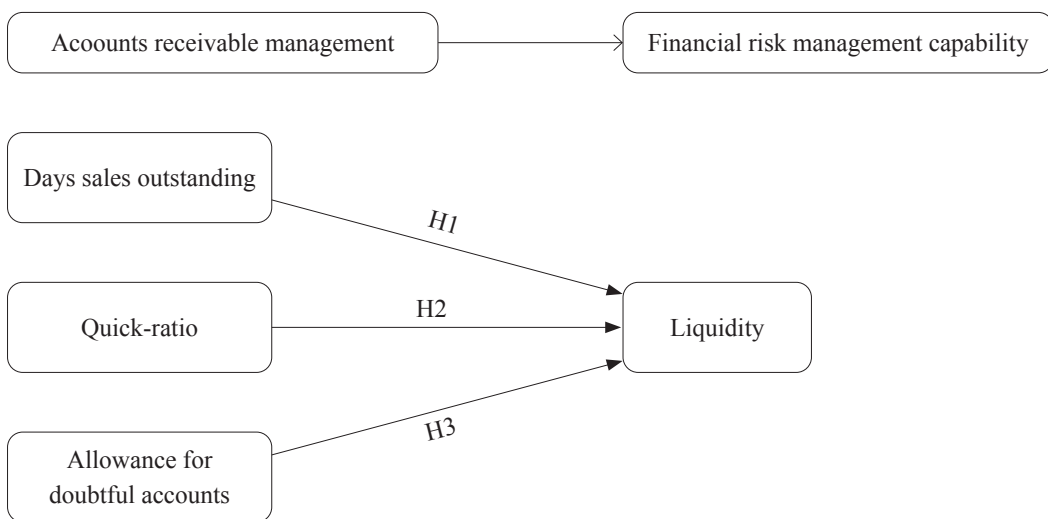


Fig.1. Model

The chart unequivocally illustrates that Accounts Receivable management is assessed through key financial indicators such as the Quick Ratio, Days Sales Outstanding (DSO), and the Allowance for Doubtful Accounts. These metrics provide a comprehensive evaluation of how efficiently a company manages its receivables. Additionally, liquidity is a vital factor in assessing financial risk management, offering insights into the company's ability to meet short-term obligations.

Furthermore, our research delves into the intricate correlations between the Allowance for Doubtful Accounts, Quick Ratio, and DSO. As a result, our findings serve as valuable tools to evaluate the broader impact of accounts receivable management on overall financial risk management, helping enterprises enhance their risk mitigation strategies.

5. Hypothesis

Hypothesis (H1): Days Sales Outstanding exhibits an inverse correlation with the liquidity ratio.

Hypothesis (H2): The quick ratio exhibits a positive correlation with the liquidity ratio.

Hypothesis (H3): The allowance for doubtful accounts negatively correlates with the liquidity ratio.

6. Summary

Our research offers a comprehensive and systematic approach to assessing accounts receivable management by employing a set of carefully selected metrics across three distinct dimensions, allowing for detailed and multifaceted analyses. This approach provides a foundation for evaluating not only the efficiency of receivables management but also its broader implications on overall business performance. In parallel, we utilize liquidity as a critical financial indicator to assess the effectiveness of financial risk management strategies, ensuring a holistic understanding of the company's financial health. By focusing on the relationship between liquidity and accounts receivable, we develop logical inferences and formulate hypotheses grounded in the intricate and dynamic interrelationships between these variables. This enables a deeper understanding of the complexities involved in financial management and provides a platform for rigorous empirical testing. Our empirical validation includes the use of advanced statistical techniques to ensure the robustness of the analytical framework and the accuracy of the conclusions derived from the study.

Furthermore, by integrating these methodologies, our research contributes to advancing the field of financial management. We offer practical insights and recommendations that can improve decision-making processes for financial managers, particularly in areas such as credit control, cash flow optimization, and risk mitigation. These insights are not only valuable to scholars but also to practitioners who seek to implement more effective financial management strategies. By addressing the intricate connections between liquidity, accounts receivable management, and financial risk, we add depth to the existing body of knowledge and provide actionable frameworks for real-world application (Anderson & Smith, 2022). This study stands as a significant contribution to financial management research and offers new pathways for future investigation (Jones, 2021).

III. Research Methodology

1. Introduction

This chapter will comprehensively explore the research methodology that is fundamental to the study. It will provide a detailed explanation of the design employed in the research, the characteristics and selection criteria for the population, and the sampling techniques used. In addition, it will cover the data collection methods, including specific tools and procedures used to gather information (Creswell, 2014). The chapter will also address how the collected data is analyzed and the various statistical or qualitative techniques applied to ensure reliability and validity. Furthermore, it will clearly define the dependent and independent variables, offering an in-depth look at how these elements interact within the research framework (Yin, 2018).

In this section, we will delve into the theoretical underpinnings that guide the study. The chosen theoretical approach will be clearly outlined, alongside the conceptual framework that structures the investigation. By integrating the relevant theory with the methodologies used for data collection and analysis, this section aims to provide a more robust and holistic perspective. The combination of theoretical insights and empirical data will be carefully examined to enhance the overall argument, ensuring that the research findings are well-supported and aligned with established academic principles (Creswell, 2014). This approach will contribute to a thorough and nuanced understanding of the topic at hand, strengthening the validity of the conclusions drawn (Yin, 2018).

2. Research design

Our research design adopts a quantitative approach, utilizing numerical data to conduct a statistical analysis. This method allows us to explore the correlation between accounts receivable management and financial risk management, offering a data-driven perspective on the relationship between these variables. To quantify accounts receivable, we will employ key metrics such as Days Sales Outstanding (DSO), the quick ratio, and the allowance for doubtful accounts, which are well-established indicators for measuring the efficiency of receivables management (Ross, Westerfield, & Jordan, 2019). These metrics help assess a company's ability to collect revenue and manage credit effectively.

Moreover, existing literature highlights a strong connection between liquidity management and financial risk. Specifically, liquidity ratios, including the quick ratio and current ratio, are frequently used to gauge a company's capacity to meet short-term obligations, thus playing a crucial role in financial risk assessment (Berk & DeMarzo, 2020). By applying these liquidity ratios, we can determine how well a company manages its cash flow in relation to mitigating financial risks.

In this study, a thorough statistical analysis will be performed on the dataset associated with each variable to investigate the interrelationships between them. This approach will enable us to assess the validity of the proposed hypotheses. By systematically analyzing the data, we aim to uncover significant patterns and correlations, ultimately providing insights into how the variables interact and supporting or refuting the hypotheses based on empirical evidence.

Multiple linear regression model:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \mu$$

Where:

Y= Current ratio (DV)

β_0 = Constant

β_1 =Days sales outstanding (IV1)

β_2 =Quick ratio (IV2)

β_3 =Allowance for doubtful debts (IV3)

μ = Error

3. Population and sample

The target population for this research consists of all companies currently listed on China's main stock exchanges. The findings from this research are anticipated to be relevant and applicable to these listed companies. As of 2022, there are 5,019 companies publicly traded in the domestic markets (Shanghai Securities News, 2022).

For the sample selection, we will focus specifically on firms operating within the food and beverage sector. This industry was chosen due to the significant role inventory control plays, given the perishable nature of the products (Niti, 2023). As a result, inventory management is likely to exhibit more pronounced effects in this sector compared to others. By concentrating on a single industry, the influence of industry-specific variables is minimized, allowing for more focused analysis. The food and beverage sector, therefore, will serve as a control variable to limit the confounding effects that could arise from cross-industry variations.

Additionally, the sample size will be determined based on the statistical techniques employed, particularly regression analysis. To ensure robustness, the study will use a sample size of at least 50 companies, which aligns with the standard requirements for ensuring reliability and validity in regression analyses. This approach is designed to maintain a large enough sample size for meaningful conclusions and credible results.

4. Types of data use

In this study, we primarily rely on quantitative data for the analysis, utilizing key financial metrics such as the quick ratio, Days Sales Outstanding (DSO), and the allowance for doubtful accounts. These quantitative indicators serve as essential tools to evaluate various aspects of accounts receivable and liquidity management. Furthermore, the liquidity ratio is employed as a significant metric to assess financial risk management, offering insights into the company's ability to meet its short-term obligations (Berk & DeMarzo, 2020; Ross, Westerfield, & Jordan, 2019).

Additionally, the data employed in this research are secondary in nature. Information is collected from publicly available sources, including the official websites of the selected enterprises, as well as other credible public domains. The financial statements, cash flow reports, and annual reports of these companies form the

core documents used for the analysis. These reports provide comprehensive insights into the financial health and operational efficiency of the companies under study (Graham, Smart, & Megginson, 2019). By using these secondary data sources, we ensure that the analysis is grounded in accurate and up-to-date information, enhancing the reliability of the study's conclusions.

5. Data collection method

The selected methodology is online research, which entails the collection and analysis of information through the use of Internet resources. We assess the credibility and accuracy of a diverse array of information sources, including academic papers, news articles, blogs, forums, and government and non-governmental organisation (NGO) websites.

The relevant research data for this study can be gathered through both direct and indirect sources, particularly from the company's official financial disclosures. These disclosures provide valuable insights into key financial metrics such as liquidity ratios, bad debt reserves, and other important financial indicators. Direct data can be accessed from publicly available reports like balance sheets, income statements, and cash flow statements, where these figures are clearly outlined. Indirect data may come from supplementary financial notes, management discussions, or external audits, which often provide additional context or explanations about the company's financial health and strategies. By utilizing both direct and indirect sources, we ensure that the data used for analysis is comprehensive and reflects the company's actual financial position, which is critical for drawing accurate and reliable conclusions.

6. Measurement of Variables

6.1. Dependent variable ---Financial risk management---Liquidity

Employing current ratio strategies can efficiently assess and oversee a company's liquidity, facilitating more informed financial decisions and investment evaluations.

Universal standards: An ideal current ratio typically ranges from 1.5 to 3. This signifies that the company possesses sufficient liquid assets to meet its short-term obligations. A current ratio under 1 suggests that a company might struggle to fulfil its short-term liabilities, indicating potential liquidity risk.

An excessively elevated current ratio (e.g., exceeding 3) may indicate that the company is not utilising its current assets efficiently, potentially resulting in resource wastage. (Jason, 2023).

Current ratio equals current assets divided by current liabilities.

6.2. Independent variable

The independent variable is the management of accounts receivable. The study selected the following ratios for measurement.

6.2.1. Days Sales Outstanding

Days Sales Outstanding (DSO) is an important financial metric used to assess how efficiently a company is

managing its receivables. It measures the average number of days it takes for a company to convert its sales, either from products or services, into cash. By analyzing DSO, businesses can gain insight into their receivables management practices and determine how quickly they are able to collect payments from customers. A lower DSO suggests that the company is swiftly converting sales into cash, reflecting efficient credit policies and cash flow management. Conversely, a higher DSO may indicate delays in payment collection, which could lead to potential

cash flow issues. Understanding DSO is crucial for companies to optimize their liquidity and working capital, ensuring smooth business operations.

$$\text{DSO} = (\text{Accounts Receivable} / \text{Revenue}) \times 365$$

6.2.2. Quick-ratio

The financial metric in question plays a vital role in evaluating a company's short-term financial health, specifically its ability to meet immediate liabilities. This measure focuses on the capacity of a business to settle its current liabilities using its most liquid assets, without relying on inventories. By excluding inventories, the metric provides a more conservative view of liquidity, as inventories may take time to convert into cash. It is especially useful in industries where inventories are not quickly or easily sold. This approach ensures that the company's ability to cover short-term obligations can be accurately gauged by focusing solely on assets that can be swiftly converted to cash. Hence, businesses with strong liquidity ratios can effectively manage their operations and withstand financial uncertainties.

$$\text{Quick-ratio} = \frac{\text{cash} + \text{receivables}(\text{net}) + \text{short-term investments}}{\text{current liabilities}}$$

6.2.3. Allowance for doubtful accounts

The Allowance for Doubtful Accounts is a critical figure in a company's financial reporting, representing the amount set aside to cover potential losses from receivables that may not be collected. This reserve acts as a safeguard, ensuring that the company is prepared for any anticipated defaults on outstanding debts. By establishing this allowance, businesses can more accurately reflect their financial position and avoid overstating their assets. The amount allocated to this account is typically estimated based on historical data, where the company reviews previous patterns of uncollectable debts and calculates the average proportion of bad debts in relation to total sales. This historical ratio provides a foundation for estimating future losses.

To compute the current allowance for doubtful accounts, the company first needs to determine its historical doubtful accounts ratio, which is the proportion of bad debts to total sales over a specific period. Once this ratio is identified, it is applied to the company's current sales figures. The result, which is the product of current sales and the historical doubtful accounts ratio, represents the present allowance for doubtful accounts. This process ensures that the business maintains an accurate and realistic view of its expected losses from receivables, enhancing its financial transparency and planning.

7. Proposed Data Analysis

We apply regression analysis to process the previous data, as it helps uncover relationships between key financial metrics. For assessing accounts receivable management, we will use indicators such as Days Sales

Outstanding (DSO), the quick ratio, and the allowance for doubtful accounts. These metrics provide insights into how efficiently the company is managing receivables and handling short-term liabilities. Additionally, financial risk management will be evaluated through liquidity, which is essential for meeting short-term financial obligations.

Through regression analysis, we aim to explore the connections among these factors, identifying how changes in one variable might impact others. This analysis will help draw conclusions about the impact of accounts receivable management on overall financial health and risk management.

8. Summary

This section highlights the importance of using quantitative methods to conduct a thorough analysis and validate the hypothesis proposed in earlier sections. Quantitative methods provide a structured approach to examining data and drawing evidence-based conclusions. In this case, we chose regression analysis as the primary method for processing the data. Regression analysis was selected because it enables us to identify relationships between variables, assess the strength of these relationships, and make predictions based on historical data. By employing this method, we can rigorously test the proposed hypothesis and ensure that the conclusions drawn are grounded in reliable and quantifiable evidence, thus strengthening the overall validity of the research.

IV. Data Analysis

1. Introduction

To understand the impact of accounts receivable management on financial risk management, it's crucial to perform a quantitative analysis of the relationships between various variables. The chapter will delve into the quantitative examination of the collected data and discuss the findings. Section 4.2 will provide a descriptive analysis of the data set, highlighting essential characteristics such as industry, audit firms, listing duration, and the exchanges where the companies are listed. In section 4.3, the focus will shift to exploring the correlations between quick-ratio, days sales outstanding, and the allowance for doubtful debts. Section 4.4 will present a regression analysis to further investigate how accounts receivable management influences financial risk management capabilities, assessing the impact strength of each independent variable on the dependent variables. Finally, section 4.5 will offer a summary of the entire data analysis.

2. Demographic Data

2.1.1. Industry

Accounts receivable practices can differ significantly across various industries due to the unique operational and financial characteristics of each sector. To ensure a more accurate and meaningful comparison, we have taken deliberate steps to control for these variables. For this study, we specifically focused on companies within the food and beverage industry, where similar business models and market conditions allow for a more

consistent analysis. By narrowing our scope to this single industry, we eliminate potential discrepancies that could arise from comparing across industries with different financial dynamics. A total of 51 companies were carefully selected for inclusion in this research, providing a robust dataset that offers valuable insights into the accounts receivable patterns within the food and beverage sector. This controlled approach ensures that the findings are relevant, reliable, and applicable to industry-specific financial management practices, ultimately facilitating a more accurate evaluation of performance across the selected companies.

Table 4.1. The industry profile of the samples

Industry	N	%
Food and beverage	51	100.0%

2.1.2. Stock Exchange

These selected companies are all based in China, and they are publicly listed on major stock exchanges, specifically the Shenzhen Stock Exchange, the Hong Kong Stock Exchange, and the Shanghai Stock Exchange. By focusing on companies traded on these prominent exchanges, we ensure that the data represents a cross-section of leading enterprises in China's food and beverage industry. This provides a solid foundation for analyzing

financial trends and practices within the sector. The table below illustrates the distribution of these 51 companies across the different exchanges, reflecting the geographic and market diversity within the Chinese stock market. This careful selection ensures a representative sample, allowing for a comprehensive analysis of how these companies manage their accounts receivable while operating in both domestic and international markets. Such a breakdown is critical for understanding the financial structures that support the growth and sustainability of companies within the highly competitive food and beverage industry.

Table 4.2. The stock exchange profile of the samples

Stock exchange	N	%
Hongkong	13	25.5%
Shanghai	20	39.2%
Shenzhen	18	35.3%

2.1.3. Listing time

Among these samples, the earliest record dates back to 1991, while the latest was listed in 2023. This wide range spans from the early 1990s to the 2020s. According to statistics, the average time interval among all samples is 14.41 years, indicating relatively long gaps between samples and showing that data collection has a long history with continuity over time. This time range not only highlights differences across various decades

but also provides an opportunity to analyze and compare changes across different periods.

Table 4.3. Descriptive Analysis

	N	Minimum	Maximum	Average	Standard Deviation
Listed time	51	0	32	14.41	10.004
Number of valid cases	51				

The year of launch			Listed time		
	N	%		N	%
1991	1	2.0%	0	1	2.0%
1993	1	2.0%	1	2	3.9%
1994	2	3.9%	2	2	3.9%
1995	2	3.9%	3	4	7.8%
1996	3	5.9%	4	1	2.0%
1997	2	3.9%	5	2	3.9%
1998	3	5.9%	6	4	7.8%
2000	2	3.9%	7	2	3.9%
2001	2	3.9%	8	2	3.9%
2002	1	2.0%	9	2	3.9%
2004	1	2.0%	11	1	2.0%
2008	2	3.9%	12	3	5.9%
2009	1	2.0%	13	2	3.9%
2010	2	3.9%	14	1	2.0%
2011	3	5.9%	15	2	3.9%
2012	1	2.0%	19	1	2.0%
2014	2	3.9%	21	1	2.0%
2015	2	3.9%	22	2	3.9%
2016	2	3.9%	23	2	3.9%
2017	4	7.8%	25	3	5.9%
2018	2	3.9%	26	2	3.9%
2019	1	2.0%	27	3	5.9%
2020	4	7.8%	28	2	3.9%
2021	2	3.9%	29	2	3.9%
2022	2	3.9%	30	1	2.0%
2023	1	2.0%	32	1	2.0%

2.1.4. Role of Audit Firms

Audit firms are pivotal in ensuring the integrity and accuracy of financial reporting, meticulously handling both the preparation and review of financial documents to meet stringent regulatory standards.

In this study's sample, the Big Four firms—KPMG, PwC, Deloitte, and Ernst & Young—continue to hold a substantial market share, yet prominent local firms are also securing significant audit assignments. A key player among these local firms is BDO China Shu Lun Pan CPA, which has made notable strides in capturing a share of the market. Within the sample, BDO China Shu Lun Pan CPA and PricewaterhouseCoopers (PwC) stand out for managing the highest number of client audits, each overseeing work for 10 companies. This pattern underscores not only the established reach of international firms but also the increasing influence of capable domestic firms in China. The rising demand for top-tier audit services is fueling expansion among Chinese firms, prompting them to strengthen their expertise and expand their client bases, gradually positioning themselves as competitive alternatives alongside global leaders.

Table 4.4. Audit firm

	N	%
RSM Hong Kong	1	2.0%
BDO China Shu Lun Pan CPA	10	19.6%
Beijing Xinghua CPA	1	2.0%
Da Hua CPA	5	9.8%
Deloitte	4	7.8%
Ernst & Young (EY)	2	3.9%
Gongzheng Tianye CPA	1	2.0%
Huapu Tianjian CPA	1	2.0%
Huatai United CPA	1	2.0%
Klynveld Peat Marwick Goerdeler (KPMG)	3	5.9%
Mazars CPA	1	2.0%
Pricewaterhouse Coopers (PWC)	10	19.6%
Rongcheng CPA	2	3.9%
SW Accountants & Advisors. Tianjian CPA	1	2.0%
Tianzhi International CPA		
Zhongshen Huahui Certified Public Accountants	1	2.0%
Zhongshen Zhonghuan CPA Tianheng CPA		

2.2. Independent Variables

For the independent variables, we have calculated several key statistical metrics, including the maximum, minimum, and average values for specific financial indicators such as Days Sales Outstanding (DSO), the quick ratio, and the allowance for doubtful debts. By determining the maximum and minimum values, we can identify the range of these variables, revealing potential extremes in the data. The average value provides insight into the central tendency of these indicators, offering a clearer picture of typical values within the dataset. These calculations are crucial in understanding the behavior and variability of these financial ratios, helping us assess liquidity, efficiency in collections, and the adequacy of reserves for potential bad debts.

Table 4.5. The descriptive results on the independent variable

	Descriptive Analysis			
	N	Minimum	Maximum	Average
Quick-ratio	51	0.438	8.528	1.818
Allowance for doubtful debts	51	0.384	229.934	41.052
DSO	51	0.04	24.63	18.158
Number of valid cases	51			

2.3. Dependent Variables

Given the strong connection between liquidity and a company’s ability to manage financial risk, this study employs the current ratio as the dependent variable to gauge financial risk management capability. The current ratio, which measures a company’s ability to meet its short-term obligations using its available assets, serves as a key indicator of liquidity health. In this analysis, the current ratio observed across the sample varies significantly. The lowest recorded value is 0.698, indicating potential liquidity concerns, while the highest value reaches 9.161, demonstrating strong liquidity and a robust capacity to handle short-term liabilities. On average, the current ratio across all companies in the study stands at 2.296, suggesting that, on balance, these firms possess a solid ability to manage their short-term financial commitments. This spread of values highlights the diversity in liquidity management strategies among the selected companies, offering insights into how different entities navigate financial risks within the food and beverage industry.

The descriptive results on the dependent variable

	N	Minimum	Maximum	Average	Standard Deviation
Current ratio	51	698351582240404	9.161246612466120	2.296221533136398	1.596952998202521
Number of valid cases	51				

Descriptive Analysis

3. Correlation

In this study, the Pearson correlation coefficient is utilized to assess the strength and direction of the linear relationship between different variables. This coefficient, which ranges from -1 to 1, is a statistical measure used to indicate the extent to which two continuous variables are linearly related. A value close to 1 signifies a strong positive correlation, meaning that as one variable increases, the other tends to increase as well. Conversely, a value close to -1 denotes a strong negative correlation, indicating that as one variable rises, the other tends to decrease. A coefficient around 0 suggests little to no linear relationship between the variables. Higher absolute values of the Pearson correlation coefficient indicate stronger correlations, providing valuable insights into the degree of association (Shaun, 2022). Consequently, using the Pearson correlation is suitable and relevant for this study, allowing us to comprehensively examine the relationships between our variables. Below are the results for the analyzed variables.

Table 4.7.

	Quick-ratio	Allowance for doubtful debt	DSO	Current ratio
Quick-ratio	1.0	-0.242	-0.082	0.984
Allowance for doubtful debt	-0.242	1.0	0.038	-0.274
DSO	-0.082	0.038	1.0	-0.073
Current ratio	0.984	-0.274	-0.073	1.0

4. Regression Analysis and findings

Testing a regression model is essential for assessing its suitability for predicting data patterns or explaining relationships between variables. Through rigorous testing, we can evaluate the model's goodness of fit, which indicates how well the model captures the underlying structure and characteristics of the dataset. This process also helps in identifying the specific independent variables that significantly influence the dependent variables, highlighting which factors play a critical role in the model's outcomes. Additionally, testing allows us to detect potential issues such as multicollinearity, heteroscedasticity, or overfitting, which could undermine the model's predictive power. By examining residuals and conducting diagnostic checks, we can ensure that the assumptions of the regression analysis are met. Conducting these tests thoroughly ensures that the regression model is both reliable and valid, strengthening the scientific credibility and practical utility of the analysis results. This comprehensive testing process ultimately enhances the model's ability to provide insightful and accurate predictions or explanations for real-world data patterns, offering valuable support for decision-making and policy formulation.

	Independence Variable	a(slope)	b(intercept)	t-value	t-value
1	DSO(x)	-0.0061807	2.408305625	-0.511	0.612
2	quick-radio (x)	1.066751235	0.35680845	6.886	0.0000000095
3	Allowance for doubtful debts(x)	-0.00753921	2.605574804	-1.92	0.06

P-value ≤ 0.05 : When the p-value is less than or equal to 0.05, the result is considered statistically significant. This typically indicates that there is strong evidence against the null hypothesis, leading us to reject it in favor of the alternative hypothesis. This threshold suggests that the observed effect or relationship is unlikely to be due to random chance.

P-value > 0.05 : If the p-value is greater than 0.05, the result is not statistically significant. In this case, there is insufficient evidence to reject the null hypothesis, which implies that any observed effect or relationship may have occurred by chance, and no strong conclusion can be drawn about the existence of a true effect.

P-value ≈ 0.05 : When the p-value is approximately 0.05, the result is at a borderline level. This critical value indicates that additional data or further analysis may be necessary to draw a confident conclusion. In such cases, it is often advisable to interpret the result cautiously and consider other supporting information or statistical tests.

According to the p-values obtained in our analysis, we can conclude that the current ratio has a negative relationship with Days Sales Outstanding (DSO) and the allowance for doubtful accounts, suggesting that as the current ratio increases, these metrics tend to decrease. However, there is not enough evidence to confirm a negative relationship between the quick ratio and the current ratio, indicating that their association is not statistically significant. Additionally, our findings support Hypotheses H1 and H3, as they align with the observed relationships. However, there is a lack of sufficient evidence to validate Hypothesis H2, indicating that further investigation may be needed to draw a definitive conclusion for this hypothesis.

5. Chapter Summary

In this chapter, the paper begins by providing a comprehensive overview of the research characteristics, highlighting the study's objectives and approach. To enhance understanding, the samples are analyzed based on industry sector and listing period, offering insights from both perspectives. A preliminary descriptive analysis was conducted, where the standard deviations, maximum and minimum values, and mean values of the independent and dependent variables were examined. This analysis helps to illustrate the variability and central tendencies within the dataset, setting a foundation for further exploration. Additionally, a correlation analysis was performed on the selected samples, utilizing the Pearson correlation coefficient to measure the strength and

direction of the relationships between variables. The findings indicate a strong positive correlation between the quick ratio and current ratio, suggesting that these two variables are closely related. However, no significant correlation was found among the other variables, implying a weaker or non-linear relationship between them.

Furthermore, this study applied regression analysis to a total of 51 samples. The results from this analysis confirmed the validity of Hypotheses H1 and H3, supporting the theoretical expectations outlined earlier in the study. However, there was insufficient evidence to validate Hypothesis H2, indicating that further investigation may be needed to fully understand the relationships proposed in that hypothesis. This comprehensive approach, combining descriptive statistics, correlation analysis, and regression analysis, contributes to a thorough

examination of the data, strengthening the overall findings and conclusions of the study.

V. Discussion And Conclusion

1.Introduction

This part is mainly about related discussion and conclusion:

This section starts with a summary of the study, reiterating the research questions and goals to underscore the study's aims. Next, it presents the data analysis outcomes, providing interpretations and linking these results to the study's objectives, thereby highlighting its contributions. Recommendations for future research are also included, pointing out directions for further exploration. The chapter then discusses the study's limitations, acknowledging its constraints. It concludes with a review of the entire study and offers final conclusions.

2. Summary of the results

This study aims to examine the influence of accounts receivable management on financial risk management. The study successfully achieved its objective of quantifying accounts receivable and assessing financial risk management capabilities. Three variables—quick ratio, allowance for doubtful debts, and days sales outstanding—were chosen to assess accounts receivable management. According to the pertinent literature, financial risk management is associated with liquidity, and we utilise current ratios to assess this capability. Consequently, we propose three hypotheses, which are also addressed in the preceding description:

Hypothesis (H1): Days Sales Outstanding exhibits an inverse correlation with the liquidity ratio.

Hypothesis (H2): The quick ratio exhibits an inverse correlation with the liquidity ratio.

Hypothesis (H3): The allowance for doubtful accounts negatively correlates with the liquidity ratio.

This research makes use of secondary data, selecting samples from companies listed on China's leading stock exchanges. To manage variables and avoid the impact of operational differences, the samples are exclusively from the food and beverage sector. As for 51 samples we chose, there is negative correlation between DSO and AFDA to current ratio, while quick-ratio does not.

3. Discussion of Results

Our question 1 and 2 are related to find out appropriate criteria to assess account receivable and financial risk management. In the former section of our research, we find and prove that DSO, quick-ratio and allowance for doubtful accounts are of appropriation to measure accounts receivable according to some literature related. The higher the values of DSO and allowance for doubtful accounts, and the smaller values of quick-ratio so that there will be a worse result of performance of accounts receivable management. And also at the same time, we also find that liquidity is closely related to the financial risk management of an enterprise and during our research, we choose current ratio to delegate liquidity as for to assess the financial risk management. There is negative relationship between the liquidity and financial risk of a company.

Furthermore, a critical inquiry pertains to the impact of accounts receivable on financial risk management. We propose H1, H2, and H3 to investigate the effects of DSO, quick ratio, and allowance for doubtful accounts

on the current ratio through data analysis. Our analysis indicates that we cannot refute H1 and H3. The two independent variables exhibit no significant variance in the dependent variable. This validates our hypothesis; in other words, our hypothesis is correct in H1 and H3: DSO and allowance for doubtful debts exhibit a negative relationship with the current ratio. The quick ratio exhibits a positive correlation with the current ratio.

A P-value below 0.05 denotes statistical significance, suggesting a substantial linear relationship between the independent and dependent variables. If the P-value exceeds 0.05, it is deemed statistically insignificant, signifying the absence of a meaningful linear relationship between the independent and dependent variables.

The correlation analysis indicates that the P-values for two independent variables concerning the dependent variable exceed 0.05. This indicates the absence of a significant linear relationship between the independent variables (DSO, allowance for doubtful debts) and the dependent variable.

A potential explanation for the divergence in our research is that, although the sample companies are part of the same food and beverage sector, their business operations and accounts receivable management may differ significantly due to the considerable variations among distinct food and beverage products.

4. Implications and Contribution of the Study

4.1. Body of the knowledge

The study contributes significantly to the existing body of knowledge by exploring the relationship between independent and dependent variables. By selecting a sample of around 50 companies from the food and beverage sector, the research examines these variables, thereby providing additional empirical evidence on the relationship between accounts receivable and financial risk management. Although the findings haven't indicated a significant relationship, they offer crucial insights into the non-existence or weak nature of the relationship between the two variables. This may make contributions to comprehend related understandings and also accumulate evidence in this research direction.

4.2. Risk Management Theory

Our research can offer a lot of information related to management in risks of a company and also the relationships among DSO, quick-ratio, allowance for doubtful debts and as well as current ratio. Therefore, our research can add evidence to the existing risk management theory, especially a supplement to the special industry of food and beverages.

4.3. Practical contributions

Under a practical lens, this thesis presents crucial insights for professionals in the field. The research demonstrates that the relationship between accounts receivable and financial risk management is not significant on one indicator (quick-ratio), indicating that other factors may have a more substantial impact on the dependent variable. For companies, particularly those in the food and beverage sector, it suggests that expectations of

account receivable's positive effect on reducing financial risk should be tempered with caution. Overall, the findings of this research underscore the importance of investigating other avenues or variables that might have a more significant practical impact.

This study highlights the critical yet nuanced relationship between accounts receivable management and financial risk management, providing actionable insights for academia and industry practitioners. The findings suggest that while certain metrics like Days Sales Outstanding (DSO) and allowance for doubtful accounts negatively impact liquidity, the quick ratio's correlation to financial risk requires further investigation. These results underscore the complexity of financial dynamics, especially within the food and beverage industry, and emphasize the necessity for tailored risk management strategies. For businesses, this research advocates a balanced approach to accounts receivable practices that not only ensures operational liquidity but also minimizes financial vulnerability.

Moreover, the study offers a foundation for policymakers and financial analysts to develop industry-specific guidelines and interventions that enhance receivable practices without overburdening liquidity. By incorporating longitudinal analyses and cross-industry comparisons in future studies, researchers can further unravel the intricate dependencies between receivables and financial stability, providing a more comprehensive framework for corporate risk mitigation. As global markets grow increasingly volatile, such targeted strategies will become indispensable for businesses seeking to navigate financial uncertainties while fostering sustainable growth.

5. Recommendation for Future Research

5.1. Incorporate longitudinal designs

Future research should utilise longitudinal study designs to investigate the evolution of accounts receivable practices and financial risk management. Examining these factors longitudinally will enable researchers to discern the dynamic interaction between accounts receivable and financial risk management, especially within the food and beverage sector or other industries. Longitudinal studies are instrumental in revealing causal relationships and potential delayed effects between these two variables, offering profound insights into their mutual influence.

5.2. Conduct comparative studies across industries

This study focused on the food and beverage sector; however, extending the research to incorporate comparative analyses across different industries could provide a more thorough understanding of the impact of accounts receivable on financial risk management. By analyzing various sectors, including manufacturing, healthcare, and technology, researchers can acquire insights into the overall relevance and distinct characteristics of these relationships within specific industries. Given your interest in applying advanced methodologies, such as those used in AI and autonomous driving, extending this kind of cross-industry research could offer valuable lessons on how data-driven insights into financial management can be applied more broadly. For example, the unique financial structures of the healthcare or technology sectors could provide contrasts in how receivable management interacts with financial risk. This would allow for a more comprehensive understanding of the nuances in managing accounts receivable across diverse business environments, enriching the overall discussion of financial stability.

5.3. Investigate the role of specific product characteristics

The significant disparities between products in the food and beverage industry may jeopardize the accuracy of the empirical findings. As a result, future research should look into how specific product categories or types affect the relationship between accounts receivable management and financial risk management. Researchers can gain insights into how factors such as perishability, packaging requirements, and storage conditions of various products interact with accounts receivable management practices and affect the current ratio, which is used as an indicator of financial risk management proficiency. For instance, perishable goods may require quicker turnover and more stringent receivable management to maintain liquidity, while non-perishable items might allow for more flexible payment terms. Investigating these product-specific dynamics could offer valuable guidance for crafting more targeted financial strategies. This would further enhance the understanding of how different product characteristics impact financial risk and help businesses within the food and beverage sector optimize their receivable management practices.

6. Limitation

6.1. Sample size and representativeness

The research analyzed a modest sample size of 51 observations from the food and beverage sector. Notwithstanding attempts to guarantee that the sample accurately reflected the sector, the results may not be applicable to other industries. The distinctive traits and dynamics of the food and beverage industry, such as consumer demand patterns, supply chain complexities, and regulatory factors, may affect the correlations between the current ratio, DSO, allowance for doubtful debts, and quick ratio. These industry-specific characteristics complicate the generalization of these findings to other sectors. For example, the impact of accounts receivable management in capital-intensive industries like manufacturing or high-growth sectors such as technology may differ significantly. Therefore, caution should be exercised when applying these results to sectors with different financial and operational frameworks. Future studies could consider incorporating a broader and more diverse sample to enhance the robustness and applicability of the findings across various industries.

6.2. Variability in product characteristics

The food and beverage sector encompasses a diverse array of products, each with unique characteristics that can introduce additional variables affecting financial metrics. These factors, not accounted for in our research, may diminish the influence of independent variables on dependent variables. For example, perishable items like fresh produce and dairy necessitate more focus and protection due to their shorter shelf lives, contrasting with non-perishable goods that may allow for more flexible management practices. Seasonal variations, packaging demands, and storage conditions also differ across product types, directly impacting metrics like Days Sales Outstanding (DSO). The absence of these related potential characteristics in our study limits the scope of our findings, as these factors could significantly influence accounts receivable management and its effect on financial risk. Incorporating these elements in future research could provide a more nuanced understanding of how product-specific characteristics shape the relationship between receivables and financial

stability, offering more targeted insights for businesses in the food and beverage industry.

7. Conclusion

This research aims to explore how accounts receivable affects the ability to manage financial risks, focusing on the food and beverage industry. The primary goal of this empirical study is to analyze the connections between DSO, quick-ratio ,allowance for doubtful debts and the current ratio as an indicator of financial risk management. The empirical analysis reveals several important findings, considering various limitations. The investigation scrutinizes how these accounts receivable metrics correlate with financial stability and risk mitigation capabilities, offering insights specific to the food and beverage sector.

The study reveals that, in the food and beverage industry, there is no significant linear relationship between the independent variables(DSO, allowance for doubtful debts) and the dependent variable. Although no strong correlations or relationships were identified, this research offers valuable insights into the weak or nonexistent nature of these connections within the examined context. It underscores the importance of considering the unique attributes of the food and beverage sector, such as product variability and industry-specific factors, when assessing the influence of accounts receivable on the capability to manage financial risk.

Future investigations should delve into how characteristics like perishability and seasonality affect the relationship between accounts receivable and financial risk management. Employing longitudinal studies can provide insights into how these relationships evolve over time. By integrating more variables and control factors, researchers can gain a deeper understanding of the factors that influence financial risk management. Additionally, conducting cross-industry comparative studies can offer a broader perspective and help generalize the findings.

Incorporating these recommendations, future research can deepen our understanding of the complex links between accounts receivable and financial risk management capabilities. This will aid in creating effective strategies to optimize accounts receivable practices and reduce financial risks, not only in the food and beverage industry but also in other sectors.

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