

Financial Distress In Diverse Industry Contexts: A Comprehensive Systematic Literature Review

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Abstract

Financial distress is a critical state affecting businesses across various industry contexts, characterized by significant challenges in meeting financial obligations and maintaining economic stability. This comprehensive systematic literature review (SLR) aims to provide a holistic understanding of financial distress in diverse industry settings, drawing insights from 25 articles published in Scopus-indexed journals between 2018 and 2023. The review identifies key factors contributing to financial distress, explores its impact on business performance and continuity, and discusses the development of predictive models. The findings highlight the importance of financial ratios, regulatory frameworks, risk management practices, and consumer behavior in understanding financial distress. Additionally, this review addresses crucial research questions related to publication trends, significant articles and journals, key contributors, and future research directions. The study emphasizes the need for advanced predictive models and comprehensive regulatory policies to mitigate financial distress and enhance economic resilience.

Keywords: Financial distress, systematic literature review, financial ratios, regulatory frameworks, risk management, consumer behavior, predictive models, economic resilience.



INTRODUCTION

The issue of financial distress has long been a significant concern for businesses and researchers across various industry contexts. ((Kumendong & Hutabarat, 2019)) Understanding the factors that contribute to financial distress and the strategies firms can employ to mitigate its impact is crucial for ensuring business continuity and enhancing overall economic stability. ((Kumendong & Hutabarat, 2019)) ((Farooq et al., 2023)) ((Habib et al., 2020)) ((Mallinguh & Zéman, 2020)) This comprehensive systematic literature review aims to provide a holistic understanding of financial distress in diverse industry settings, offering practical insights for the prevention and management of financial crises.

Financial distress can have far-reaching consequences, including reduced profitability, diminished firm value, and jeopardized business continuity. ((Farooq et al., 2023)) ((Kumendong & Hutabarat, 2019)) ((Mallinguh & Zéman, 2020)) ((Habib et al., 2020)) et al., 2018). The situation is often exacerbated in developing countries, where firms face additional challenges in managing financial distress. The need to understand the determinants of financial distress and the associated costs has become increasingly pressing, as financial distress can have significant implications for various stakeholders, including managers, employees, investors, and creditors. (Kumendong & Hutabarat, 2019). To address this critical issue, researchers have undertaken extensive studies to identify the key factors that contribute to financial distress. These factors can be categorized into firm-level fundamental determinants, macroeconomic determinants, and firm-level corporate governance determinants. (Habib et al., 2020) Understanding the complex interplay between these factors is crucial for developing more comprehensive models of predicting and managing financial distress.

The extant literature highlights the widespread prevalence of financial distress, particularly in developing countries, where it can have severe consequences for business profitability, firm value, and business continuity ((Farooq et al., 2023)). Researchers have categorized the determinants of financial distress into firm-level fundamental factors, macroeconomic factors, and corporate governance factors, emphasizing the need for more comprehensive models to predict and manage this phenomenon. Furthermore, the literature has explored the consequences of financial distress, ranging from financial reporting and auditing implications to operational and capital market consequences.

This review paper sets out to address several critical research questions: ((Mallinguh & Zéman, 2020)) ((Habib et al., 2020))

RQ1: What are the trends in publication and citation of research on financial distress in various industrial sectors over the last 10 years?

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- RQ2: Which articles and outlets (journals) are the most significant regarding financial distress in various industrial sectors?
- RQ3: Which authors, institutions, and countries have made the greatest contribution to financial distress research in various industrial sectors?
- RQ4: What descriptive trends (via multiple metrics such as authors, words, etc.) exist in the academic field of financial distress across various industry sectors?
- RQ5: What are the most important themes (intellectual structure) regarding financial distress in various industrial sectors?
- RQ6: What are the future avenues for financial distress research in various industry sectors?

Definition and Concept of Financial Difficulty

Financial difficulty, often used interchangeably with terms like financial distress, financial vulnerability, or financial instability, refers to a state where an individual or entity faces significant challenges in meeting financial obligations and maintaining desired economic stability.(Brüggen et al., 2017). This goes beyond mere short-term cash flow issues and indicates a deeper inability to manage resources effectively, potentially jeopardizing long-term financial health.(Farooq et al., 2023). While financial distress often manifests as difficulty paying debts or covering expenses, it can also encompass broader struggles in achieving financial goals, managing risk, and building long-term financial security.(Sabri et al., 2022)

Numerous factors contribute to financial difficulty, ranging from individual circumstances to broader economic conditions. On a micro-level, factors like low income, unemployment, unexpected medical expenses, excessive debt accumulation, and inadequate financial literacy can significantly increase the risk of experiencing financial distress. (Sabri et al., 2022)Furthermore, external factors such as economic recessions, industry downturns, and unexpected global events (like the COVID-19 pandemic) can exacerbate financial vulnerabilities across various sectors and demographics. (Gamage et al., 2020) Understanding the interplay of these individual and systemic factors is crucial for developing targeted interventions and mitigating the negative consequences of financial distress.

The impact of financial difficulties extends far beyond the economic realm, often cascading into various aspects of an individual's or entity's well-being. Prolonged financial distress can negatively impact mental health, leading to increased stress, anxiety, and

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even depression.(Brüggen et al., 2017) Furthermore, it can strain relationships, limit access to healthcare, hinder educational attainment, and contribute to social inequalities. (Sabri et al., 2022) For businesses, financial difficulty can result in reduced profitability, diminished firm value, strained relationships with creditors, and in severe cases, even bankruptcy.(Kumendong & Hutabarat, 2019) Recognizing the multifaceted nature of financial difficulty, its causes, and consequences is crucial for developing effective interventions and promoting financial well-being across diverse industry contexts.

Factors Contributing to Financial Distress

Financial distress arises from a complex interplay of factors, ranging from internal organizational weaknesses to broader economic downturns and governance failures. Understanding these contributing factors is crucial for developing effective risk management strategies and promoting financial resilience across diverse industry contexts. This review will delve into three primary categories of factors: fundamental, macroeconomic, and corporate governance.

Fundamental factors, often stemming from within an organization, encompass a range of managerial and operational shortcomings. Poor financial management practices, such as inadequate cash flow management, over-reliance on short-term debt, and uncontrolled expenses, can quickly erode financial stability. (Yazdanfar & Öhman, 2020) instance, a company with poor inventory management might experience stockouts, leading to lost sales and reduced revenue, ultimately contributing to financial distress.(Altman et al., 2017) Furthermore, excessive reliance on debt financing, while potentially beneficial in the short term, can quickly become unsustainable if profits decline or interest rates rise, increasing the risk of default and financial distress. (Shevlin et al., 2022) Additionally, weak internal controls, inadequate risk management practices, and failure to adapt to changing market conditions can further exacerbate financial vulnerabilities. (Kumendong & Hutabarat, 2019)

Macroeconomic factors, on the other hand, are external forces that influence the broader economic environment and impact businesses across industries. Economic recessions, characterized by declining economic activity, reduced consumer spending, and increased unemployment, can significantly increase the risk of financial distress across various sectors. (Gamage et al., 2020) For example, during the COVID-19 pandemic, many businesses, particularly in the tourism and hospitality sectors, faced severe financial distress due to lockdowns, travel restrictions, and reduced consumer demand. (Eikhof, 2020) Moreover, fluctuations in interest rates, inflation, and currency



exchange rates can adversely affect borrowing costs, input prices, and profitability, ultimately influencing the likelihood of financial difficulties (Bhattacharjee et al., 2016) Additionally, government policies, such as changes in taxation or regulations, can significantly impact business operations and contribute to financial distress, particularly for industries heavily reliant on government support or operating within tightly regulated environments (Charalambakis & Garrett, 2019)

Corporate governance factors play a crucial role in shaping a company's resilience to financial distress. Weak corporate governance structures, characterized by a lack of transparency, accountability, and independent oversight, can increase the risk of mismanagement, unethical behavior, and ultimately, financial distress. For instance, a lack of board independence and diversity can hinder effective decision-making and increase the likelihood of risky investments or financial misconduct, ultimately jeopardizing the company's financial health (Ramadhan & Marindah, 2021) Furthermore, ineffective risk management practices, inadequate internal controls, and a lack of transparency in financial reporting can create an environment conducive to financial distress. **(Scott, 1972)** Therefore, establishing strong corporate governance mechanisms, including a competent and independent board of directors, robust risk management systems, and a culture of transparency and accountability, is essential for mitigating financial distress and fostering long-term sustainability.

Impact of Financial Distress

Financial distress casts a long shadow, impacting individuals, businesses, and the broader economy. For individuals and families, financial distress often translates to diminished financial well-being, characterized by difficulty meeting essential needs, accumulating debt, and experiencing heightened stress and anxiety. (Brüggen et al., 2017) This can lead to reduced consumption, housing instability, and adverse health outcomes, ultimately hindering overall well-being and social mobility. (Günay et al., 2019) Furthermore, financial distress can strain family relationships, increase the risk of mental health issues, and limit access to education and opportunities for future generations (French & Vigne, 2019)

Businesses facing financial distress experience a myriad of negative consequences, impacting their operational efficiency, profitability, and long-term sustainability. As financial difficulties mount, businesses may struggle to obtain necessary credit, forcing them to delay investments, reduce research and development activities, and even downsize operations. (Farooq et al., 2023) This can lead to a decline in product

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quality, reduced innovation, and a diminished ability to compete effectively in the marketplace (Taufiq et al., 2023). Furthermore, financial distress can damage a company's reputation, erode investor confidence, and ultimately lead to bankruptcy or acquisition, resulting in job losses and economic disruption (Jaipanya et al., 2023).

The impact of financial distress extends beyond individual entities, affecting the stability and growth of the broader economy. Widespread financial distress, particularly within specific industries or sectors, can trigger a domino effect, leading to reduced investment, job losses, and a decline in economic activity. (Tong & Serrasqueiro, 2021). This can create a vicious cycle, where economic downturns exacerbate financial vulnerabilities, further contributing to financial distress and hindering economic recovery. (Mallinuh & Zéman, 2020). Therefore, addressing financial distress requires a multi-faceted approach, encompassing individual financial literacy and resilience-building measures, sound business practices and risk management strategies, and supportive macroeconomic policies that promote financial stability and sustainable economic growth.

METODOLOGI

The main objective of this research is to identify the causes of financial distress, explore the impact of financial distress, and develop prediction models. A systematic literature review (SLR) aims to address concerns within the current body of research by discovering, critically assessing, and combining all relevant studies conducted on a specific topic while also addressing one or more specific studies. A systematic literature review (SLR) distinguishes itself from a regular literature review by emphasizing transparency, evidence, impact, validity, and causality. This approach ensures the strength of the evidence collected (Abdelkader & Wahba, 2024; Mohamed Shaffril et al., 2021). The PRISMA statement form is used to describe the comprehensive procedure in selecting and excluding relevant papers in systematic reviews and meta-analyses. The PRISMA statement helps researchers enhance the documentation of systematic literature review publications (Mohamed Shaffril et al., 2021). This review is conducted using research publications published in the SCOPUS database from 2014 to 2023 as the basis.

RESULT

Literature Search

The search for relevant publications was conducted on May 22, 2024, using the Scopus database. The search was performed using the term "Financial Distress." This

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search yielded a total of 5274 articles from 2014 to 2023, covering 10 years. After curating papers published between 2014 and 2023 in the business and management domain, a total of 5247 articles were retained. Given our research focus on business and management, we disregarded articles published in other subject areas. There were 1147 documents remaining after selecting the "Article" document type. After selecting the publication stage and choosing articles written in the "English" language, a total of 385 articles were extracted. To enhance the reliability of the analysis while maintaining quality criteria, this study specifically chose articles with 2 or more citations. Subsequently, a total of 358 papers were selected for this study based on the citation count of 40 or more. After removing unnecessary papers, the total number of remaining papers was 25. Figure 1 provides a brief overview of the inclusion and exclusion process of certain elements.

Quality Assessment

The selected papers underwent a rigorous and thorough screening procedure to incorporate the highest quality research in this study. Only papers with a high number of citations (more than 40) were selected to maintain research quality standards and enhance the understanding of the topic. Paper duplications were strictly managed during the selection process.

Eligibility and Inclusion Criteria

This review paper draws from previously published articles. The study eliminated conference papers to maintain quality requirements. Researchers focused exclusively on financial distress in industries, excluding all other sectors from their study. The Scopus database was chosen for the article search due to its extensive collection of publications in this discipline, surpassing other databases such as Web of Science (Cordes & Marinova, 2023). Due to the dominance of the English language in financial distress literature, only articles written in English were selected. An additional reason for selecting only English-written papers is their global comprehensibility and wide acceptance. This study includes both open-access articles and papers with restricted access.

Qualitative Synthesis

For this study, a total of 25 publications published in Scopus-indexed journals between 2014 and 2023 were selected for examination. After the paper selection, the procedure proceeded with two consecutive steps. The initial stage involved exporting relevant metadata from Scopus to Microsoft Excel to facilitate a descriptive study of the

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literature. This analysis focused on the distribution of publications by year and field as well as financial distress in various industrial sectors.

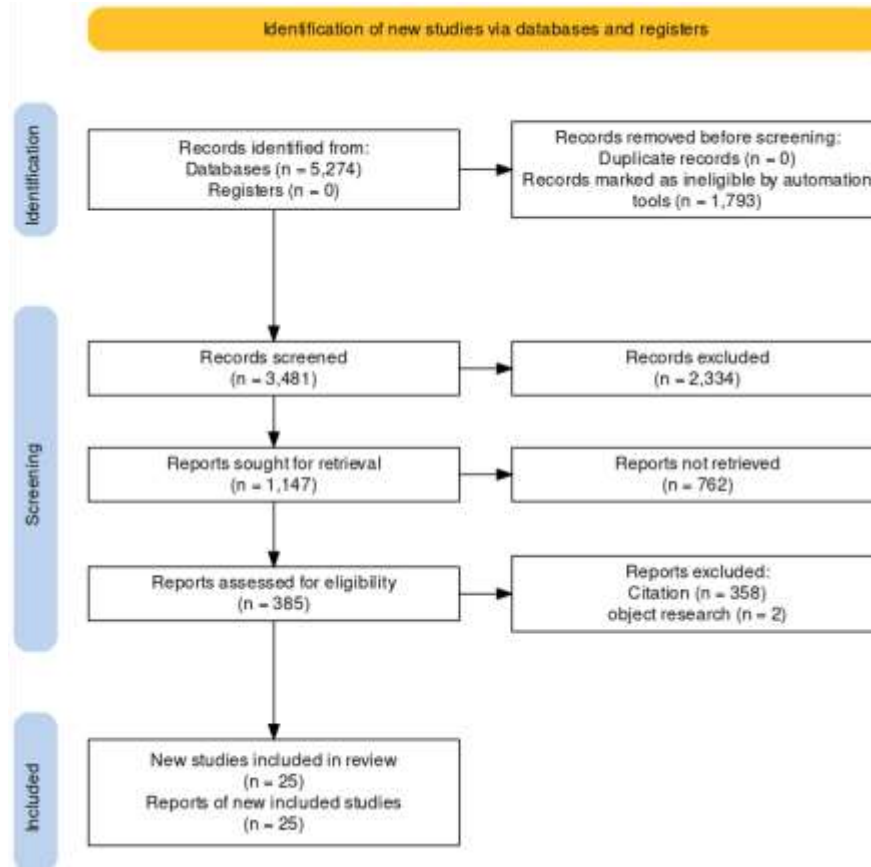


Fig. 1 Flowchart of PRISMA methodology. Source: PRISMA Statement 2020

Teoritical framework

At the firm level, we consider theories explaining financial decision-making, capital structure, and risk management. The Trade-Off Theory (Locorotondo et al., 2014) suggests that firms strive for an optimal capital structure by balancing the tax advantages of debt financing against the costs of financial distress. Conversely, the Pecking Order Theory (Locorotondo et al., 2014) posits that firms prioritize internal financing, followed by debt, and lastly equity, due to information asymmetry and signaling effects. Agency Theory (Favara et al., 2017) highlights the potential conflicts of interest between managers and shareholders, which can lead to excessive risk-taking and ultimately contribute to financial distress. Furthermore, the Debt Overhang Theory (Favara et al., 2017) explains

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how high levels of existing debt can discourage further investment and hinder a firm's ability to recover from financial distress.

Recognizing the importance of external factors, we incorporate theories addressing macroeconomic influences, market dynamics, and regulatory frameworks. The Risk-Taking Channel of Monetary Policy (Dell'Ariccia et al., 2013) elucidates how low interest rates, while stimulating economic activity, can also incentivize excessive risk-taking by firms, potentially leading to increased financial fragility. Market Discipline Theory (Hilscher & Raviv, 2014) emphasizes the role of informed investors and creditors in monitoring firms and influencing their financial decisions, thereby mitigating risk and promoting financial stability. Furthermore, Law and Finance Theory (Rodano et al., 2016) underscores the importance of strong legal institutions and investor protection mechanisms in fostering financial development and reducing the incidence of financial distress.

This review also acknowledges the human element in financial decision-making and its impact on firm performance. Theory of Planned Behavior (Fenton-O'Creevy et al., 2018) provides insights into how individual attitudes, subjective norms, and perceived behavioral control influence financial decisions, including those related to risk-taking and debt management. Self-Efficacy Theory (Kuhnen & Melzer, 2018) highlights the importance of individuals' beliefs in their ability to manage their finances effectively, influencing their financial behaviors and ultimately their vulnerability to financial distress. Furthermore, Social Network Theory (Georgarakos et al., 2014) recognizes the influence of social connections and information diffusion on financial decisions, potentially impacting firms' access to capital and their ability to navigate financial challenges.

This study also incorporates theories addressing specific financial instruments and risk management practices. Contingent Convertible Bonds Theory (Hilscher & Raviv, 2014) analyzes the role of these hybrid securities in enhancing banks' capital buffers and mitigating financial distress during times of stress. Hedging Theory of Financial Management (Gilje & Taillard, 2017) examines how firms utilize derivative instruments to manage various financial risks, including interest rate, currency, and commodity price fluctuations, thereby reducing their vulnerability to financial distress. Credit Risk Transfer Theory (Subrahmanyam et al., 2014) explores the mechanisms through which financial institutions transfer credit risk to other parties, such as through securitization, potentially impacting the stability of the financial system and influencing the incidence of financial distress.



Finally, this review recognizes the dynamic nature of financial distress and incorporates theories addressing firm life cycles, innovation, and resilience. Life-Cycle Theory (Koh et al., 2014) posits that firms face different financial challenges and vulnerabilities at different stages of their development, influencing their susceptibility to financial distress. Schumpeterian Cleansing Effect (Dörr et al., 2022) suggests that economic downturns, while painful, can also lead to the exit of inefficient firms, ultimately strengthening the economy's long-term growth potential. Furthermore, Resource-Based View (Crespí-Cladera et al., 2021) emphasizes the importance of developing unique and valuable resources and capabilities to enhance firm competitiveness and resilience, enabling them to better withstand financial shocks and avoid distress. By integrating these diverse theoretical perspectives, this systematic literature review provides a comprehensive framework for understanding the multifaceted nature of financial distress across various industry contexts. Shown in table 1 Theories being used.

Theory	Author
Theory of Planned Behavior (TPB)	(Fenton-O'Creevy et al., 2018)
Risk-Taking Channel of Monetary Policy	(Dell'Ariccia et al., 2013)
Market Discipline Theory	(Hilscher & Raviv, 2014)
Contingent Convertible (CoCo) Bonds Theory	(Hilscher & Raviv, 2014)
Law and Finance Theory	(Rodano et al., 2016)
Capital Buffer Theory and Liquidity Preference Theory	(Chiaramonte & Casu, 2017)
Trade-Off Theory of Capital Structure	(Locorotondo et al., 2014)
Pecking Order Theory	(Locorotondo et al., 2014)
Agency Theory	(Favara et al., 2017) (Serfling, 2016)
Debt Overhang Theory	(Favara et al., 2017)
Financial Distress Prediction Models	(Ashraf et al., 2019)



Hedging Theory of Financial Management	(Gilje & Taillard, 2017)
Credit Risk Transfer Theory	(Subrahmanyam et al., 2014)
Bargaining Power Theory	(Oliveira et al., 2017)
Stakeholder Theory	(Shahab et al., 2018)
Resource-Based View	(Crespí-Cladera et al., 2021)
Market Efficiency Theory	(Andreou et al., 2021)
Life-Cycle Theory	(S. K. Koh et al., 2015).
Risk Management Theory	(P. S. Koh et al., 2014)
Social Network Theory	(Georgarakos et al., 2014)
Investment Theory	(López-Gutiérrez et al., 2015)
Corporate Governance Theory	(Kim & Upneja, 2021)
Self-Efficacy Theory	(Kuhnen & Melzer, 2018)
Financial Ratio Analysis Theory	(Kliestik et al., 2020)
Schumpeterian Cleansing Effect	(Dörr et al., 2022)
Human Capital Theory, Necessity Perspective, Opportunity Cost Perspective	(Block et al., 2022)
Socioemotional Wealth Theory	(Chirico et al., 2020)

Descriptive analysis

This section will analyze the descriptive statistics of the papers chosen throughout the review process. It will examine factors such as the year of publication, industry focus, number of citations, journal of publication, and research methodology employed in the selected studies.

The figure 2, above shows the number of journals discussing financial distress from 2014 to 2022. 2014 and 2017 recorded the highest number of journals with 5 journals each, indicating significant interest in this topic. The number of journals decreased to 2 in 2015 and 2016, increased to 3 in 2018, and reached its lowest point with 1 journal in 2019. The number of publications increased again in 2020 with 3 journals, and remained stable in 2021 and 2022 with each -3 and 2 journals respectively. This increased likelihood is influenced by the economic impact of the COVID-19 pandemic, which has increased attention to the risk of financial distress across various industries.



The figure 3 above illustrates the number of journals discussing financial distress across various industry sectors from 2014 to 2022. The most extensively covered category is "Other," with 15 journals, indicating that financial distress is a relevant issue in diverse industry contexts. The banking sector also shows significant research interest, with 4 journals, reflecting the critical importance of financial stability in this industry. The finance sector, oil and gas, tourism, manufacturing companies, and the public sector each have fewer journals, with 2, 1, 1, 1, and 1 journals respectively. This distribution suggests that while financial distress is a pertinent topic across all these sectors, the level of research attention varies depending on the unique challenges and characteristics faced by each industry.

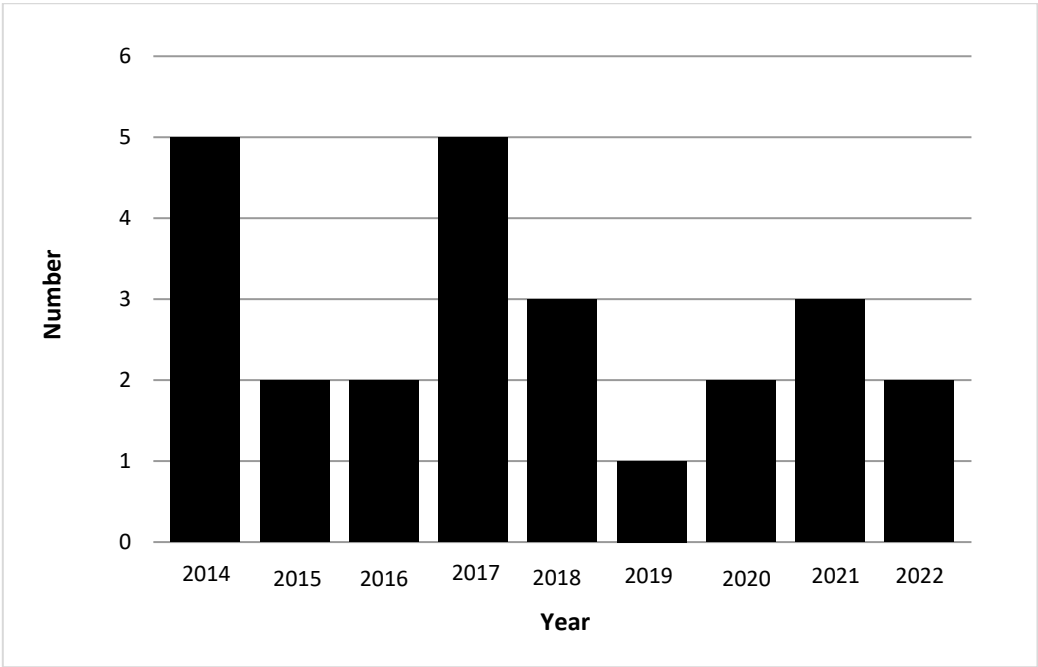


Fig. 2 Financial Distress publications in SMEs per year



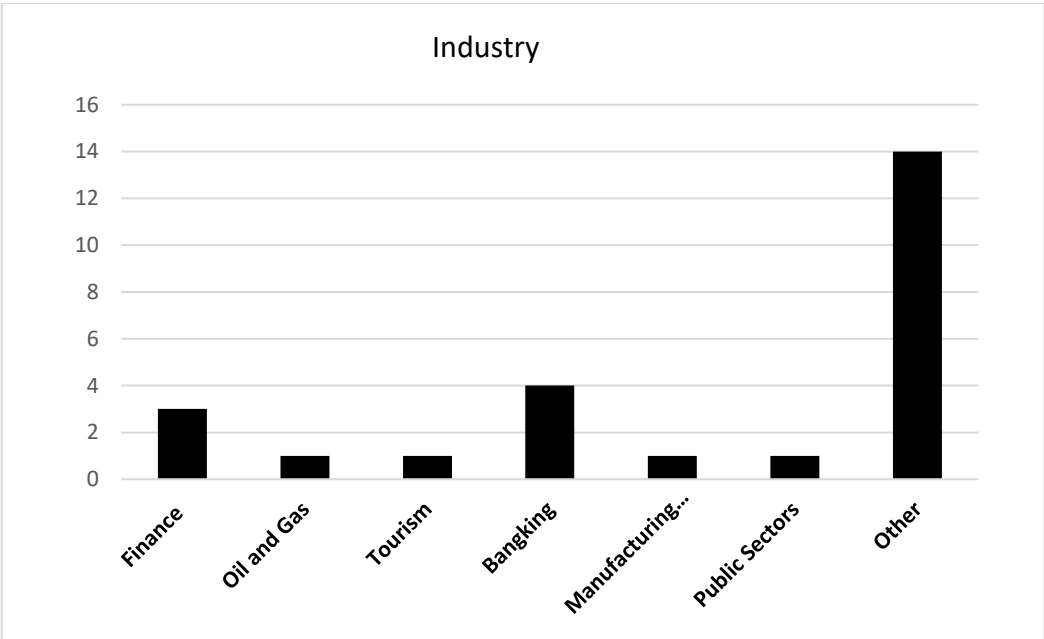


Fig. 3 Financial Distress in sector industries

Table 2 lists the top cited journals and the number of publications each has contributed to the study of financial distress across diverse industry contexts. The table highlights a diverse range of journals, indicating the interdisciplinary nature of research on financial distress. The journals include high-impact publications such as the Journal of Corporate Finance, which leads with 4 publications, followed by the Journal of Finance and the Review of Financial Studies, each contributing 3 publications. Other notable journals include the Journal of Financial Economics and Small Business Economics, each with 2 publications. This distribution underscores the relevance of financial distress research across different domains of finance, business strategy, and economics.

The inclusion of journals like the British Accounting Review, BRQ Business Research Quarterly, and Journal of Business Research with one publication each indicates that while the core of financial distress research lies within finance and economics, related fields such as accounting, business strategy, and management also contribute valuable insights. Additionally, journals such as Psychology and Marketing and Tourism Management highlight the broader impacts of financial distress, extending the discussion to psychological and industry-specific implications. This diverse representation of journals reflects the multifaceted nature of financial distress and the



importance of a comprehensive approach in understanding and addressing it across various sectors.

Table 2 Top cited journals and its publications

Journal	No. of publications
British Accounting Review	1
BRQ Business Research Quarterly	1
Business Strategy and the Environment	1
Journal of Business Research	1
Journal of Competitiveness	1
Journal of Corporate Finance	4
Journal of Finance	3
Journal of Financial Economics	2
Journal of Innovation and Knowledge	1
Journal of Management	1
Journal of Risk and Financial Management	1
Psychology and Marketing	1
Review of Financial Studies	3
Small Business Economics	2
Strategic Management Journal	1
Tourism Management	1

The image above, labeled as Table 3, shows the regional distribution of articles discussing financial distress based on the authors' countries. The United States has the highest number of publications with contributions from various authors such as Dell'Ariccia et al., Oliveira et al., Andreou et al., Serfling, and many others, indicating that this topic is extensively studied in the country. Australia also makes significant contributions with authors like S. K. Koh et al. and Chirico et al.

The European Banking Authority is noted with contributions from Hilscher & Raviv, while other European countries like the Netherlands, Belgium, and the United Kingdom also have strong representation with authors such as Georgarakos et al., Locorotondo et al., and Fenton-O'Creevy et al. Other countries like Brazil, China, Hungary, Italy, Germany, Canada, South Korea, and Mexico also contribute to the literature, showing that financial distress is a global issue relevant in various contexts and regions. For



example, research from Favara et al. in Brazil and Shahab et al. in China adds perspectives from emerging markets, while studies from Rodano et al. in Italy and Dörr et al. in Germany provide insights from European markets. This diverse contribution reflects the broad academic attention to the issue of financial distress worldwide.

Table 3. Regional distribution of articles

Negara	Authors
Amerika Serikat	Dell'Araccia et al., 2013, Oliveira et al., 2017, Andreou et al., 2021, Serfling, 2016, P. S. Koh et al., 2014, Kuhnen & Melzer, 2018, López-Gutiérrez et al., 2015, Kim & Upneja, 2021, Gilje & Taillard, 2017, S. K. Koh et al., 2015, Chirico et al., 2020
Australia	S. K. Koh et al., 2015
Bank Di Wilayah Eropa	Hilscher & Raviv, 2014
Belanda	Georgarakos et al., 2014
Belgia	Locorotondo et al., 2014
Brasil	Favara et al., 2017
Cina	Shahab et al., 2018
Hungaria	Kliestik et al., 2020
Inggris Raya	Fenton-O'Creevy et al., 2018), (López-Gutiérrez et al., 2015
Italia	Rodano et al., 2016, Favara et al., 2017, López-Gutiérrez et al., 2015
Jerman	Dörr et al., 2022, Block et al., 2022, López-Gutiérrez et al., 2015
Kanada	Gilje & Taillard, 2017, López-Gutiérrez et al., 2015
Korea Selatan	Kim & Upneja, 2021
Lainnya	Subrahmanyam et al., 2014
Meksiko.	Chirico et al., 2020
Negara-negara anggota Uni Eropa (EU-28).	Chiaramonte & Casu, 2017
Pakistan.	Ashraf et al., 2019
Polandia	Kliestik et al., 2020
Perancis	Favara et al., 2017, López-Gutiérrez et al., 2015



Republik Ceko	Kliestik et al., 2020
Singapura	S. K. Koh et al., 2015
Slovakia	Kliestik et al., 2020
Spanyol	Crespí-Cladera et al., 2021, López-Gutiérrez et al., 2015
Swedia	Chirico et al., 2020

The image above, labeled as Table 3, presents the most frequently referenced publications in the field of financial distress, sourced from Scopus. It lists ten key articles along with their authors, source titles, and the number of citations they have received. The most cited publication is by P. S. Koh et al. (2014) in the Strategic Management Journal with 258 citations, followed closely by Serfling (2016) in the Journal of Finance with 247 citations. Other notable publications include Dell'Araccia et al. (2013) also in the Journal of Finance with 200 citations, Shahab et al. (2018) in Business Strategy and the Environment with 143 citations, and Kliestik et al. (2020) in the Journal of Competitiveness with 143 citations. The table highlights the significant impact these studies have had on the academic discourse surrounding financial distress, with each contributing valuable insights into various aspects of the field, such as strategic management, financial stability, competitiveness, and environmental considerations. This frequent citation underscores the importance and influence of these works in shaping current and future research directions in financial distress.

Table 4 Most often referenced publications

No.	Authors	Source title	Cited by
1	P. S. Koh et al. (2014)	Strategic Management Journal	258
2	Serfling, (2016)	Journal of Finance	247
3	Dell'Araccia et al. (2013)	Journal of Finance	200
4	Shahab et al. (2018)	Business Strategy and the Environment	143
5	Kliestik et al. (2020)	Journal of Competitiveness	143
6	Subrahmanyam et al. (2014)	Review of Financial Studies	128
7	Chirico et al. (2020)	Journal of Management	108
8	Georgarakos et al. (2014)	Review of Financial Studies	88
9	Chiaramonte & Casu (2017)	British Accounting Review	87



10	S. K. Koh et al. (2015)	Journal of Corporate Finance	81

Classification

1. Tools and Techniques

In the examination of financial distress across various industry contexts, a diverse array of methodologies and analytical tools has been employed. The selected studies predominantly utilize quantitative approaches, reflecting the necessity for robust statistical analysis in understanding financial patterns and predicting distress. Standard tools and techniques include econometric models, regression analysis, Structural Equation Modeling (SEM), and survey methodologies. For instance, (Altunbas & Marques-ibanez, n.d.) utilized econometric models to study the relationship between bank leverage and monetary policy's risk-taking channel, while (Bouwman, 2013) employed financial ratio analysis and statistical models to investigate the role of capital and liquidity ratios in the European banking sector. Additionally, (De Almeida et al., 2019) used regression analysis to explore the relationship between cash holdings and business group membership, highlighting the significance of quantitative techniques in analyzing financial data. The widespread use of these tools underscores the critical need for precise and reliable methods to identify patterns, test hypotheses, and draw meaningful conclusions in financial distress research.

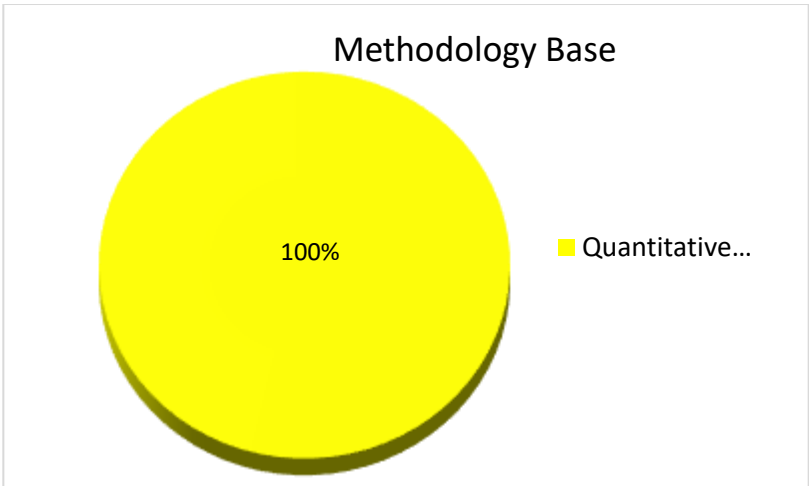


Fig. 4. Articles categorized by research methodology distribution



2. Intellectual Structure of Financial Distress Research

The literature on financial distress has unveiled several pivotal themes central to understanding its dynamics across different sectors. One prominent theme is the impact of financial ratios and predictive models on financial distress. Studies such as those by (Altman et al., 2017) and (Bouwman, 2013) emphasize the predictive power of financial ratios, including capital and liquidity ratios, in forecasting distress. These studies demonstrate that specific financial indicators are critical in identifying early warning signs of financial trouble, allowing firms and regulators to take preemptive actions. The use of advanced statistical models and financial ratio analysis underscores the quantitative nature of this research stream, highlighting the importance of robust data analytics in financial distress prediction.

Another significant theme is the influence of regulatory and policy frameworks on financial stability. Research by (Araujo et al., 2012) and (Altunbas & Marques-ibanez, n.d.) highlights how bankruptcy laws and monetary policies shape financial outcomes and stability. These studies illustrate that regulatory environments are crucial in exacerbating or mitigating financial distress. For instance, stringent bankruptcy laws may discourage risky behavior and enhance financial stability, while accommodative monetary policies might encourage excessive risk-taking by financial institutions. The interaction between regulatory frameworks and financial distress emphasizes the need for balanced and effective policy measures to maintain financial stability across various sectors.

3. Future Research Directions

The evolving landscape of financial distress research presents numerous opportunities for future exploration. One promising avenue is conducting longitudinal studies on consumer behavior to understand how changes over time impact financial stability. Studies like (Fenton-O'Creevy et al., 2018) suggest that a deeper examination of consumer behavior trends can provide valuable insights into long-term economic health. Longitudinal research could uncover patterns and shifts in consumer spending and saving behaviors, helping to identify potential risks and inform strategies for financial resilience. Such studies would be precious in understanding how economic shocks and changes in the market environment influence consumer financial behavior.

Another critical area for future research is comparative policy analysis, which can evaluate the effectiveness of different monetary policies and regulatory frameworks in preventing financial distress, as (Altunbas & Marques-ibanez, n.d.) highlighted.

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Researchers can identify best practices and policy gaps by comparing the outcomes of various regulatory approaches across different jurisdictions. This comparative analysis could lead to more practical regulatory frameworks that balance financial stability with economic growth. Additionally, developing advanced predictive models that incorporate both financial ratios and market-based variables is essential, as (Altman et al., 2017) indicated. These models could improve the accuracy of financial distress predictions and help firms and regulators anticipate better and mitigate potential financial crises. Lastly, investigating the impact of evolving legal frameworks on bank financing and overall financial stability, as explored by Araujo et al. (2020), can offer insights into the effectiveness of legal reforms. Understanding the implications of legal changes is crucial for designing regulatory policies that support financial stability and economic development.

CONCLUSION

In conclusion, a systematic literature review on financial distress in different industries highlights the diversity of financial distress and its significant impact on business performance and financial stability. The review identifies key issues such as the predictive power of indicators, the impact of regulatory frameworks and the critical role of risk management practices. For example, (Bouwman, 2013) emphasize that capital and liquidity ratios are key indicators for predicting financial distress, enabling companies and regulators to take proactive measures. In addition, (Altunbas & Marques-ibanez, n.d.) emphasize how monetary policy and regulatory frameworks can exacerbate or mitigate financial distress, emphasizing the importance of effective policy interventions.

Future research should focus on developing improved forecasting models that include both financial indicators and market variables to improve the accuracy of financial distress forecasts. (Altman et al., 2017) suggest that integrating these variables can improve the robustness of forecasting models and provide a more comprehensive view of the dynamics of financial distress. In addition, longitudinal studies of consumer behavior are needed to understand how changes over time affect financial stability. (Fenton-O'Creevy et al., 2018) emphasize that studying trends in consumer behavior can provide valuable insights into long-term financial well-being and sustainability, especially in the face of economic shocks and market fluctuations.

Comparative political analysis is another promising avenue for future research. By evaluating the effectiveness of different monetary policies and regulatory frameworks in preventing financial distress in different jurisdictions, researchers can identify best

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practices and policy gaps. As (Altunbas & Marques-ibanez, n.d.) such comparative analyzes can help develop more effective regulatory frameworks that balance financial stability and economic growth. In addition, the impact of evolving legal frameworks on bank financing and overall financial stability is examined, as (Araujo et al., 2012), can provide critical insight into the effectiveness of legal reforms. Understanding these effects is important in designing regulatory policies that support financial stability and promote sustainable economic development.

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