



RESEARCH PAPER

A Review on the Determinants of Financial Distress

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ABSTRACT

The aim of this review is to explore the key internal and external determinants of financial distress in corporate finance, providing a comprehensive understanding of the factors that influence financial stability and distress in businesses. Financial distress is a significant concern for businesses, investors, and policymakers, affecting the overall health and sustainability of firms. Internal factors such as liquidity management, profitability, capital structure, management quality, asset structure, and growth potential are critical in shaping a company's financial decisions. External factors, including market conditions, macroeconomic variables, industry-specific pressures, legal frameworks, and international exposure, further impact the financial health of firms. The review synthesizes empirical evidence from case studies and scholarly articles to analyze the interplay between internal and external determinants of financial distress. It examines various theoretical frameworks and models used to assess financial instability in different industries and market conditions. The findings highlight the critical role of governance and liquidity management in preventing financial distress. Companies with strong governance practices and efficient liquidity management are better equipped to withstand financial challenges. The analysis also underscores the influence of external factors, such as market conditions and regulatory changes, on a firm's financial position. Future research should focus on developing dynamic, real-time models that incorporate both financial and non-financial indicators of financial distress. Additionally, cross-industry comparisons and long-term perspectives should be considered to better understand emerging risks such as technological disruption and climate change, which pose significant challenges to business sustainability.

KEYWORDS Financial Distress, Governance, Liquidity, Profitability, Solvency

Introduction

Financial distress occurs when a company struggles to meet its financial obligations, often due to insufficient revenues to cover operational costs. It can lead to bankruptcy, insolvency, or liquidation. This condition contrasts with financial health, where a company maintains profitability and liquidity. Financial distress impacts a company's operations, damages investor confidence, increases borrowing costs, and erodes long-term growth potential. It also affects employees, suppliers, and the broader economy, leading to workforce reductions and defaults. Understanding the determinants of financial distress—such as liquidity problems, poor management, and unfavorable market conditions—is essential for risk management and corporate sustainability. Additionally, financial distress highlights the role of external factors, like market cycles and legal frameworks, in corporate stability (Ohlson, 1980). Research in this field helps identify early warning signs, enabling businesses to adopt strategies to prevent or mitigate distress, thus fostering more resilient financial systems and corporate practices (Altman, 1968).

Understanding the determinants of financial distress is crucial for businesses, stakeholders, and policymakers, as it provides key insights into a firm's financial health and its ability to handle internal and external shocks. For businesses, recognizing signs of distress, such as declining profitability or high leverage, allows for proactive measures like debt restructuring and cost reduction, enhancing resilience (Shleifer & Vishny, 1997). Stakeholders, including investors, creditors, employees, and suppliers, rely on these indicators to assess risk and make informed decisions. Investors may divest, creditors may tighten terms, and employees and suppliers may adjust their expectations based on the firm's financial health (Berger & Udell, 2002). Policymakers use these insights to design regulatory frameworks, such as bankruptcy laws and corporate governance regulations, that help mitigate distress risks and stabilize the broader economy, especially during economic downturns (Levine, 2005). In conclusion, understanding financial distress enables businesses to protect their stability, stakeholders to make better decisions, and policymakers to ensure economic resilience.

This literature review examines both internal and external factors contributing to financial distress. Internal factors include liquidity management, profitability, capital structure, corporate governance, asset composition, and growth potential. Poor liquidity, declining profitability, and excessive leverage increase vulnerability to distress (Chava & Jarrow, 2004; Altman, 1968; Ohlson, 1980). Ineffective management and weak governance can exacerbate the issue (Fama & Jensen, 1983), while illiquid assets and rapid, mismanaged growth can strain resources (Hirshleifer & Thakor, 1992; Jensen & Meckling, 1976).

External factors include macroeconomic conditions like interest rates, inflation, and GDP growth, as well as industry-specific pressures such as competition, technological disruptions, and regulatory changes (Merton, 1974; Tirole, 2006). The legal and regulatory environment, including bankruptcy laws and creditor protections, also impacts firms' ability to manage distress (La Porta et al., 1998). Global risks, such as currency fluctuations and geopolitical instability, further complicate financial stability (Bekaert & Harvey, 2000). External shocks, such as natural disasters or pandemics, can accelerate distress (Baker et al., 2020).

Understanding these determinants helps identify early warning signs and supports strategies for mitigating financial distress, ensuring better outcomes for businesses, stakeholders, and policymakers.

The primary objective of this literature review is to identify, analyze, and compare the key determinants of financial distress, based on existing academic and industry literature, and to suggest potential areas for future research. Financial distress is a multifaceted phenomenon that arises from a variety of internal and external factors, each influencing a firm's ability to remain solvent and operational. By systematically exploring these determinants, this review seeks to provide a comprehensive understanding of the forces that contribute to financial instability and to highlight the gaps in the current literature, pointing to areas where further research could enhance our understanding of corporate distress.

Literature Review

The Trade-Off Theory of capital structure, developed by Modigliani and Miller (1958), posits that firms balance the tax benefits of debt with the costs of financial distress. Debt provides tax shields, but excessive debt increases the risk of bankruptcy due to rising distress costs. This creates an optimal debt level where the benefits of debt are

offset by distress costs (Modigliani & Miller, 1958; Gordon, 1964). Over-leveraged firms may struggle to meet debt obligations, making financial distress inevitable.

Agency Theory, introduced by Jensen and Meckling (1976), focuses on conflicts between managers (agents) and shareholders (principals). In financial distress, managers may act in their own interests, delaying corrective actions or taking excessive risks, worsening the firm's financial position (Jensen & Meckling, 1976). Agency costs rise, particularly when debt holders and equity holders have conflicting interests (Fama, 1980), and poor governance can lead to inefficient decisions, amplifying financial problems (Stulz, 1990).

The Pecking Order Theory, proposed by Myers and Majluf (1984), suggests firms prioritize internal financing over external financing due to information asymmetry. When internal funds are insufficient, firms prefer debt over equity to avoid negative market signals. In financial distress, firms may continue to accumulate debt rather than issue equity, worsening their situation (Myers & Majluf, 1984; Titman, 1984). This theory highlights how financial distress can be self-reinforcing, with high debt increasing bankruptcy risk (Myers, 1984).

Material and Methods

This literature review examines the determinants of financial distress by synthesizing empirical research, case studies, and theoretical frameworks. A systematic review methodology was used to ensure comprehensive, reliable, and current analysis. The focus was on identifying both internal and external factors contributing to financial distress, drawing from a wide range of academic and professional sources.

The search was conducted across databases such as JSTOR, Google Scholar, Science Direct, and Web of Science, using keywords related to financial distress and its determinants. Studies published between 2000 and 2024 were prioritized to capture recent trends.

Inclusion criteria involved studies that directly addressed financial distress and its determinants, published in peer-reviewed journals or academic books. Excluded were studies with narrow focus or poor methodological rigor.

Data extraction identified key internal factors (e.g., liquidity, profitability, capital structure) and external factors (e.g., market conditions, macroeconomic variables). A thematic synthesis approach was used to categorize findings, highlighting common trends and inconsistencies across studies.

Results and Discussion

Internal Determinants

Financial distress is often driven by internal factors that are directly within a firm's control. These determinants include liquidity management, profitability, capital structure, management quality and corporate governance, asset structure, and growth potential. Understanding these factors is critical for both practitioners and researchers seeking to prevent or mitigate financial distress.

Liquidity management plays a crucial role in determining a company's ability to meet its short-term obligations, and poor liquidity is often one of the first signs of financial distress. Working capital, the difference between current assets and current

liabilities, is a fundamental indicator of short-term solvency (Chava & Jarrow, 2004). A negative working capital position suggests that a firm may face difficulties in covering its short-term liabilities, increasing the likelihood of default or bankruptcy. Cash flow management is similarly important, as it reflects the actual inflows and outflows of cash within the firm. Insufficient cash flow, especially when a company relies heavily on external financing or has low cash reserves, can lead to an inability to meet obligations, triggering financial distress (Ravi & Gupta, 2014).

Moreover, poor liquidity often results from ineffective management of accounts receivable and payable, inventory management, or an over-reliance on credit. The failure to maintain adequate liquidity can force firms to delay payments, incur higher interest rates on short-term borrowing, or even face insolvency if the cash position is not managed carefully (Jiang & Zhou, 2012). According to Altman (1968), firms experiencing liquidity problems often enter financial distress due to the difficulty of maintaining operations without sufficient cash flow.

Profitability is another key internal determinant of financial distress. A sustained decline in earnings often signals underlying financial issues, such as inefficient operations, reduced demand, or high costs. Firms experiencing poor profitability are less likely to generate sufficient cash flow to service debt or reinvest in their business, which significantly increases the risk of financial distress (Ohlson, 1980). Profitability can be assessed through key metrics such as return on assets (ROA), return on equity (ROE), and operating profit margins, with lower values indicating potential distress (Altman, 1968).

Furthermore, prolonged periods of unprofitable operations can deplete a firm's equity base, leaving it highly vulnerable to external shocks, such as economic downturns or increased competition (Chava & Jarrow, 2004). Poor profitability often correlates with an erosion of the firm's market value, affecting investor confidence and access to financing. In extreme cases, negative profits can lead to bankruptcy filings, particularly if the firm fails to adjust its business model or operational efficiency (Li & Wang, 2018).

The capital structure, specifically the debt-equity ratio, is one of the most widely recognized predictors of financial distress. Leverage, or the proportion of debt in a company's capital structure, amplifies both the potential for return and the risk of bankruptcy (Ohlson, 1980). High leverage increases the firm's fixed financial obligations and interest payments, which can become unsustainable during periods of declining revenue or economic uncertainty (Merton, 1974).

A high debt-equity ratio signals that a firm is more reliant on debt financing, which can exacerbate financial distress in the event of a downturn, as firms with high debt levels are less flexible in managing cash flow problems. According to the Modigliani-Miller theorem (1958), while capital structure does not impact firm value under perfect market conditions, in reality, excessive debt increases bankruptcy risk due to the costs of financial distress. Numerous studies have found a strong relationship between high leverage and increased probability of default, particularly for firms with volatile earnings or in highly cyclical industries (Altman, 1968; Chava & Jarrow, 2004).

The quality of management and corporate governance is pivotal in determining a firm's ability to avoid or mitigate financial distress. Inefficient decision-making, poor strategic planning, and inadequate risk management can all lead to financial difficulties. Firms with ineffective management teams are less likely to respond effectively to operational inefficiencies or external shocks (Shleifer & Vishny, 1997). Studies suggest

that weak governance structures often result in poor oversight, which may exacerbate financial distress (Adams et al., 2005).

The composition of the board of directors is another critical factor. A well-structured board with diverse expertise and independent directors can provide more effective oversight and strategic direction, helping firms avoid or recover from financial distress (Raheja, 2005). On the other hand, firms with concentrated ownership or family-controlled boards may suffer from conflicts of interest, leading to suboptimal decision-making (Morck & Yeung, 2003). Effective corporate governance can mitigate the risk of distress by fostering accountability, transparency, and prudent financial management, whereas weak governance can accelerate the downward spiral into financial instability.

The asset structure of a firm—whether it holds more fixed assets or current assets—also plays a significant role in determining the likelihood of financial distress. Firms with a higher proportion of fixed assets, such as property, plant, and equipment, may be more vulnerable during financial distress, as these assets are less liquid and harder to monetize in times of crisis (Tirole, 2006). Conversely, firms with a higher proportion of current assets (such as receivables or inventory) are generally more flexible and better able to adjust to short-term financial needs.

Studies show that companies with a disproportionate amount of long-term assets may face difficulties during economic downturns, as the liquidation of these assets is typically slower and more costly (Ohlson, 1980). Furthermore, asset impairment can occur if the company cannot generate sufficient cash flow to maintain or replace these assets, leading to a vicious cycle of declining value and increasing distress (Merton, 1974). The structure of a firm's assets can thus serve as a buffer or a risk factor in its financial stability, with less liquid, long-term assets increasing the likelihood of distress in case of financial strain.

Finally, the firm's growth potential, or lack thereof, can significantly affect its financial health. While growth is typically seen as a positive sign, excessive or poorly managed expansion can lead to financial distress. Firms that overextend themselves in terms of investments, acquisitions, or market penetration may find themselves burdened with high debt or struggling with inefficiencies (Tirole, 2006).

On the other hand, firms that fail to adapt to changing market conditions or technological innovations may face stagnation and ultimately financial distress. Research by Bekaert and Harvey (2000) suggests that firms in industries with rapid technological changes or shifting consumer preferences must continuously innovate and align their business models to sustain growth. Failure to do so may result in financial distress, especially if the firm faces increasing competition and diminishing profit margins.

The balance between growth and financial prudence is critical; firms that overemphasize growth at the expense of operational efficiency or financial stability are at higher risk of distress (Shleifer & Vishny, 1997). Conversely, a lack of growth can result in declining market value and reduced profitability, pushing the company into distress.

External Determinants

External factors such as market conditions, industry-specific factors, macroeconomic variables, legal and regulatory environments, and international exposure significantly influence financial distress. Economic downturns, inflation, and sectoral crises can sharply reduce revenues and profitability, increasing bankruptcy risk

(Bernanke & Gertler, 1989; Campbell et al., 2008). Inflation erodes profits, especially for firms with exposure to commodity prices (Dew-Becker & Giglio, 2016), while sector-specific shocks (Hossen & Akter, 2019) and regulatory changes (Vassolo & Suárez, 2007) further elevate distress risk.

Macroeconomic variables, including interest rates, exchange rates, and GDP growth, also affect financial distress. Rising interest rates increase debt servicing costs, pushing leveraged firms toward distress (Fama & French, 1993). Exchange rate volatility can affect firms with international operations, increasing costs for imports or reducing export competitiveness (Bartram, 2008). Slow GDP growth limits sales and access to credit, exacerbating financial strain (Srinivasan & Shome, 1999).

The legal and regulatory environment plays a crucial role, with efficient bankruptcy laws and strong creditor rights reducing financial distress (La Porta et al., 1998; Djankov et al., 2008). Strong corporate governance promotes transparency and reduces the risk of poor decision-making leading to distress (Shleifer & Vishny, 1997).

International exposure, especially to currency fluctuations and geopolitical risks, can amplify distress, particularly for multinational firms (Bartram, 2008; Bekaert et al., 2005). These external factors interact with internal firm characteristics, creating substantial risks to financial stability.

Empirical Evidence

Internal factors such as liquidity management, profitability, and capital structure are critical in predicting financial distress. Liquidity is essential for firms to meet short-term obligations. Studies by Opler and Titman (1994) and Altman (1968) emphasize the importance of liquidity, with poor liquidity leading to insolvency risk. Firms with negative cash flow are particularly vulnerable (Ramiah & Moosa, 2010).

Profitability is another key predictor, with persistent declines indicating a higher likelihood of financial distress. Research by Beaver (1966) and Ohlson (1980) highlights the predictive power of return on assets (ROA) and return on equity (ROE). Firms with declining profitability face higher distress risk, particularly in industries sensitive to external shocks (Kumar & Rajapathiraj, 2015; Strömberg, 2000).

Capital structure, particularly high debt levels, increases financial risk. Modigliani and Miller's (1958) theory of optimal capital structure suggests balancing debt's tax benefits with distress costs. Studies by Titman and Wessels (1988) and Chen (2004) show that excessive leverage raises the risk of bankruptcy, especially in volatile industries. Mikkelsen and Partch (2003) further confirm that high leverage exacerbates financial distress during adverse conditions.

Case studies, such as Lehman Brothers and Sears, illustrate how poor liquidity, excessive leverage, and declining profitability can lead to financial collapse. These examples highlight the complex interplay of internal factors in contributing to financial distress.

External factors such as market conditions, economic cycles, and country-specific characteristics significantly influence a firm's financial stability and risk of distress. Economic downturns, inflation, and financial crises exacerbate distress, especially for firms with high leverage or poor liquidity (Kaminsky & Reinhart, 1999; Gertler & Kiyotaki, 2010). Minsky's (1977) "Financial Instability Hypothesis" explains how firms

often accumulate excessive debt during economic booms, only to face financial distress when the cycle turns.

Market liquidity also plays a crucial role during recessions, as firms with limited cash reserves face greater challenges (Shleifer & Vishny, 1992). The impact of external factors varies across industries and countries. For instance, during the 1997 Asian financial crisis, industries like construction and real estate experienced higher distress compared to less cyclical sectors like utilities (Hossain & Lee, 2011). Similarly, European firms in countries with stronger regulatory frameworks were more resilient during the 1990s recession (Pagano et al., 1998).

In emerging markets, firms are more vulnerable to external shocks like commodity price fluctuations and currency volatility, with limited access to capital markets amplifying financial distress (Laeven & Valencia, 2008). Multinational corporations also face distress risks from exchange rate volatility, particularly when foreign revenue is substantial or foreign currencies depreciate sharply (Allayannis & Ihrig, 2001).

Empirical studies highlight the importance of understanding how external factors interact with internal factors like liquidity and capital structure. Comparative studies across industries and countries suggest that tailored financial strategies are essential to managing financial distress risk.

Conclusion

The study of financial distress has evolved significantly, but key gaps remain in the literature. Emerging global challenges, such as technological disruption and climate change, have not been adequately addressed. Technological advancements like AI and automation are reshaping industries, and firms that fail to adapt may face distress (Binns, 2021). Similarly, climate change poses financial risks, especially for industries like energy and manufacturing, yet its impact on financial distress is underexplored (Vermeulen, 2022).

Traditional models, such as Altman's Z-score (1968) and Ohlson's O-score (1980), are criticized for their reliance on static data and limited consideration of non-financial factors like management quality and macroeconomic volatility (Jorion & Zhang, 2019; Liu & Thomas, 2020). There is growing interest in dynamic, data-driven models, incorporating machine learning and AI to analyze large datasets and improve predictive accuracy (Khandani et al., 2010).

Future research should focus on real-time, predictive models that integrate both financial and non-financial variables, such as sentiment analysis and macroeconomic indicators (Feng et al., 2021). Cross-industry studies are needed to identify sector-specific distress patterns (He et al., 2022), and long-term studies can uncover the gradual processes leading to financial distress, addressing gaps in understanding of strategic missteps and governance failures (Altman & Hotchkiss, 2010).

By exploring these emerging factors and advancing modeling techniques, future research will improve our understanding of financial distress and provide more effective risk management tools for businesses, investors, and policymakers.

Recommendations

This literature review examines the internal and external determinants of financial distress, emphasizing their importance for businesses, investors, and policymakers in mitigating risks and ensuring stability. Internal factors such as liquidity management, profitability, capital structure, management quality, governance, asset structure, and growth potential influence a firm's financial health. Poor liquidity, high leverage, and ineffective governance are linked to increased distress risk (Chiang et al., 2018; Ghosh & Ghosh, 2020; Opler & Titman, 1994). Conversely, external factors like macroeconomic conditions, market dynamics, industry competition, and legal frameworks, including bankruptcy laws, shape the vulnerability to financial distress (Altman, 2005; Brealey et al., 2011; Eckbo, 1986).

Empirical studies confirm the role of internal and external factors in financial distress, with poor liquidity and high leverage consistently linked to risk (Moyer, 2019). Additionally, macroeconomic fluctuations and industry-specific challenges, such as competitive pressures, increase distress likelihood (Bernanke, 2007). However, emerging risks like technological disruption and climate change are underexplored (Binns, 2021; Vermeulen, 2022). Traditional models like the Altman Z-score have limitations, suggesting a need for dynamic, real-time models that integrate both financial and non-financial indicators (Liu & Thomas, 2020).

Future research should focus on developing forward-looking models, incorporating alternative data sources, and conducting cross-industry studies to enhance predictive accuracy. The evolving global landscape necessitates updates to theoretical frameworks to account for emerging risks and sector-specific patterns of distress. Understanding these determinants is crucial for managing corporate risk and guiding policy decisions.

References

- Allayannis, G., & Ihrig, J. (2001). Exposure to currency risk: An empirical investigation of hedging practices in U.S. multinational firms. *The Journal of International Business Studies*, 32(4), 607-625.
- Altman, E. I. (1968). Financial ratios, discriminant analysis, and the prediction of corporate bankruptcy. *The Journal of Finance*, 23(4), 589-609.
- Altman, E. I. (2005). Predicting financial distress of companies: Revisiting the Z-score and ZETA models. *Journal of Banking & Finance*, 29(8-9), 1561-1576.
- Altman, E. I., & Hotchkiss, E. S. (2010). *Corporate financial distress and bankruptcy: Predict and avoid bankruptcy, analyze and invest in distressed debt*. John Wiley & Sons.
- Baker, S. R., Farrokhnia, R., Meyer, S., Pagel, M., & Yannelis, C. (2020). How does household spending respond to an epidemic? Consumption during the COVID-19 pandemic. *Review of Asset Pricing Studies*, 10(4), 639-670.
- Bartram, S. M. (2008). International corporate finance: The role of currency risk management. *Journal of Corporate Finance*, 14(3), 342-364.
- Beaver, W. H. (1966). Financial ratios as predictors of failure. *Journal of Accounting Research*, 4(3), 71-111.
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-sized enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931-2943.
- Bekaert, G., & Harvey, C. R. (2000). Foreign speculators and emerging equity markets. *Journal of Finance*, 55(2), 565-613.
- Beraldi, P., Dufour, S., & Pitteloud, B. (2022). Exploring the influence of macroeconomic factors on corporate financial distress. *Journal of Corporate Finance*, 72, 102088.
- Berger, A. N., & Udell, G. F. (2002). The determinants of bank development and financial structure. *Journal of Financial Economics*, 65(1), 1-38.
- Berk, J. (2019). *Corporate finance* (5th ed.). Pearson Education.
- Bernanke, B. S. (2007). The financial accelerator and the credit channel. *Brookings Papers on Economic Activity*, 2007(2), 1-47.
- Bernanke, B. S., & Gertler, M. (1989). Agency costs, net worth, and business fluctuations. *The American Economic Review*, 79(1), 14-31.
- Binns, D. (2021). The role of technological disruption in corporate financial distress. *Journal of Business Research*, 127, 315-327.
- Brealey, R. A., Myers, S. C., & Allen, F. (2011). *Principles of corporate finance* (10th ed.). McGraw-Hill.
- Campbell, J. Y., Hilscher, J., & Szilagyi, J. (2008). In search of distress risk. *The Journal of Finance*, 63(6), 2899-2939.

- Chava, S., & Jarrow, R. A. (2004). Bankruptcy prediction with industry effects. *Review of Finance*, 8(4), 537-571.
- Chen, J. (2004). Determinants of capital structure of Chinese listed companies. *Journal of Business Research*, 57(12), 1341-1351.
- Chiang, H., Lee, M., & Zhang, S. (2018). Liquidity management and corporate financial distress: Evidence from emerging markets. *The European Journal of Finance*, 24(5), 393-414.
- DeAngelo, H., & DeAngelo, L. (1990). Dividend policy and financial distress: An empirical investigation of troubled firms. *Journal of Finance*, 45(5), 1415-1431.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3-4), 573-588.
- Dew-Becker, I., & Giglio, S. (2016). Asset prices, inflation, and the low-interest rate environment. *Brookings Papers on Economic Activity*.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics*, 88(3), 430-465.
- Eckbo, B. E. (1986). Corporate takeovers: Theories and evidence. *Handbook of the Economics of Finance*, 2, 200-293.
- Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33(1), 3-56.
- Feng, X., Li, S., & Xu, S. (2021). Predicting financial distress using sentiment analysis and machine learning techniques. *Journal of Forecasting*, 40(5), 890-902.
- Gertler, M., & Kiyotaki, N. (2010). Financial crises, bank risk exposure, and government policy. *Journal of Monetary Economics*, 57(S1), S17-S34.
- Ghosh, S., & Ghosh, A. (2020). Profitability, corporate governance, and financial distress: Evidence from Indian firms. *Journal of Corporate Finance*, 65, 101712.
- He, J., Li, L., & Wang, M. (2022). The influence of industry-specific factors on financial distress: Evidence from the Chinese stock market. *Asian Economic Policy Review*, 17(1), 28-44.
- Hirshleifer, D., & Thakor, A. V. (1992). Managerial conservatism, project choice, and debt. *Review of Financial Studies*, 5(3), 453-474.
- Hossain, M., & Lee, C. (2011). Financial distress and corporate governance in Asia: The Asian financial crisis of 1997. *Asia Pacific Journal of Management*, 28(3), 559-580.
- Hossen, M. N., & Akter, S. (2019). Financial distress and bankruptcy: A study on causes, effects, and solutions. *Asian Journal of Economics and Banking*, 3(1), 36-49.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

- Jiang, W., & Zhou, D. (2012). Corporate liquidity and financial distress: The role of management. *Journal of Corporate Finance*, 18(1), 51-68.
- Jorion, P., & Zhang, G. (2019). Predicting corporate financial distress: A comprehensive analysis of traditional and alternative models. *Journal of Financial Economics*, 132(3), 604-626.
- Kaminsky, G. L., & Reinhart, C. M. (1999). The twin crises: The causes of banking and balance-of-payments problems. *American Economic Review*, 89(3), 473-500.
- Khandani, A. E., Lo, A. W., & Merton, R. C. (2010). Systemic risk and the refinancing of financial institutions. *The Journal of Financial Economics*, 99(3), 552-571.
- Kroszner, R. S., & Strahan, P. E. (1999). What drives deregulation? Economics and politics of the relaxation of bank branching restrictions. *Quarterly Journal of Economics*, 114(4), 1437-1467.
- Kumar, S., & Rajapathiraj, R. (2015). Profitability and financial distress: Evidence from Indian firms. *Indian Journal of Economics and Business*, 14(2), 33-46.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155.
- Laeven, L., & Valencia, F. (2008). Systemic banking crises: A new database. *International Monetary Fund Working Paper WP/08/224*.
- Levine, R. (2005). Finance and growth: Theory and evidence. *Handbook of Economic Growth*, 1, 865-934.
- Liu, J., & Thomas, W. B. (2020). Analyzing the limitations of traditional bankruptcy prediction models: A comprehensive review. *Journal of Banking & Finance*, 113, 105-120.
- Merton, R. C. (1974). On the pricing of corporate debt: The risk structure of interest rates. *Journal of Finance*, 29(2), 449-470.
- Mody, A., & Taylor, M. P. (2004). Financial market and economic crises in emerging economies: Some lessons. *The World Economy*, 27(5), 767-786.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Nissim, D. (2009). Financial distress, bankruptcy, and corporate governance. *Journal of Financial Economics*, 93(2), 227-248.
- Ohlson, J. A. (1980). Financial ratios and the probabilistic prediction of bankruptcy. *Journal of Accounting Research*, 18(1), 109-131.
- Pettit, R. R., & Singer, R. E. (1985). Small business finance: A research agenda. *Journal of Business Venturing*, 1(3), 247-273.
- Ross, S. A. (1977). The determination of financial structure: The incentive-signaling approach. *The Bell Journal of Economics*, 8(1), 23-40.

- Shin, H. S., & Stulz, R. M. (2000). Firms as financial intermediaries: The role of financial hedging in corporate governance. *Journal of Financial Economics*, 55(3), 197-228.
- Snyder, D. (2012). Bankruptcy prediction models: A systematic review. *Journal of Banking & Finance*, 36(4), 934-949.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393-410.
- Teece, D. J. (2007). Business models and dynamic capabilities. *Long Range Planning*, 43(2-3), 172-194.
- Wang, Y., & Hu, J. (2020). The impact of financial distress on corporate governance in China: Evidence from the 2015 stock market crash. *China Economic Review*, 62, 101232.