

Original Article

The Dynamics of Information Asymmetry in Corporate Financial Decision-Making in the Digital Era

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Abstract:

Information asymmetry has long been recognized as a fundamental issue in corporate finance, influencing investment, financing, and dividend decisions. In the digital era, rapid technological advancement has transformed the nature of information dissemination, creating both opportunities and new challenges for transparency and market efficiency. This study aims to analyze the dynamics of information asymmetry in corporate financial decision-making within the context of digital transformation. Using a qualitative approach with a literature study design, the research synthesizes classical and contemporary theories of information asymmetry, corporate governance, and digital finance. Data were collected from peer-reviewed journals, academic books, and reports published by reputable international institutions such as the OECD, World Bank, and IMF. The analysis reveals that information asymmetry is shaped by the interaction of financial reporting quality, governance mechanisms, regulatory environments, and digital technologies. Digital governance, blockchain-based reporting, and enhanced ESG disclosure play a significant role in reducing information gaps, although they may also generate new forms of algorithmic asymmetry. Overall, the findings indicate that effective integration of digital technology and strong corporate governance can mitigate information asymmetry and improve the efficiency of corporate financial decisions in the digital era.

Keywords: Information asymmetry; Corporate finance; Digital governance.

Introduction

Information asymmetry is a central issue in modern financial theory, explaining the imbalance of access to information between corporate insiders (managers) and external parties such as investors, creditors, and regulators ([Akerlof, 1978; Jensen & Meckling, 2019](#)). This imbalance leads to conflicts of interest, market inefficiency, and suboptimal decision-making ([Myers & Majluf, 1984; Stiglitz & Weiss, 1981](#)). In the

context of corporate finance, information asymmetry affects three main financial decisions: investment, financing, and dividend policy (Ehrhardt, 2011; Ross et al., 2019). Therefore, a comprehensive understanding of the dynamics of information asymmetry is crucial to assess corporate financial behavior in the capital market.

The phenomenon of information asymmetry has become increasingly complex in the digital era due to advancements in information technology, big data, and AI-based financial systems (Barakat & Sayegh, 2021; Mandlik & Kadirov, 2018; Van Buskirk, 2012). While digitalization was expected to enhance transparency, it has instead created new forms of asymmetry such as algorithmic asymmetry and data opacity (Chan et al., 2008; Chung et al., 2017). On one hand, digital technologies improve data accessibility and reporting efficiency; on the other hand, firms may manipulate the information narrative through digital media, creating biased market perceptions (Barberis & Thaler, 2003; Shi, 2024). These structural changes demand a renewed theoretical framework to understand the relationship between information, financial decisions, and market behavior.

In practice, information asymmetry directly affects firm value and investor confidence. When disclosed information does not reflect a firm's true condition, investors perceive higher risks, leading to an increased cost of capital (Diamond & Verrecchia, 1991; Healy & Palepu, 2001). Firms with high-quality financial reporting tend to exhibit lower levels of information asymmetry and greater market stability (Khan et al., 2021). Therefore, improving the quality of disclosure and transparency is not merely a regulatory obligation but a strategic instrument to enhance market efficiency and corporate reputation (Boulton, 2024; Bushman & Landsman, 2010; Mundim, 2022).

Moreover, corporate governance structures play a vital role in mitigating the negative effects of information asymmetry. Independent boards, institutional ownership, and active audit committees can reduce opportunistic managerial behavior stemming from private information advantages (Barron & Qu, 2014; Chen et al., 2003; Fama & Jensen, 1983; Hughes et al., 2007; Setiany & Suhardjanto, 2021). In the digital era, these governance mechanisms are reinforced through digital disclosure systems and blockchain-based reporting that accelerate information dissemination and improve market trust (Qu et al., 2015; Silpachai et al., 2024; Wang et al., 2022; Wen, 2002). Thus, the synergy between strong governance and digital transparency serves as a key determinant of balanced information among stakeholders.

The urgency of this study lies in understanding the transformation of information asymmetry amid global financial digitalization. Whereas traditional studies focused on information gaps between managers and investors, contemporary issues have evolved into multidimensional challenges involving technology, behavioral bias, and information ethics (Hirshleifer, 2015). A deeper investigation is necessary to determine whether digitalization truly mitigates information gaps or introduces new forms of data inequality in financial markets.

Previous research has extensively examined the relationship between information asymmetry and corporate financial policies, though most studies emphasize classical approaches such as agency theory and signaling theory (Bhattacharya, 1979; Myers & Majluf, 1984). Recent works have shifted attention toward the role of big data and ESG disclosure in mitigating information asymmetry (Lu & Li, 2023). However, a literature gap remains regarding the integration of digitalization, governance mechanisms, and

investor behavior in shaping the modern dynamics of information asymmetry in financial decision-making.

Based on the foregoing, the objective of this research is to analyze the dynamics of information asymmetry in corporate financial decision-making in the digital era. Specifically, this study aims to identify the key factors influencing information asymmetry, assess the role of digital technologies and governance in reducing it, and evaluate its implications for investment, financing, and dividend decisions. The findings are expected to contribute theoretically to the development of modern financial management and practically to the creation of transparent, equitable financial ecosystems for companies, investors, and regulators alike.

Methods

This study employs a qualitative approach with a literature study design. The qualitative method was chosen because the research aims to explore and interpret the dynamics of information asymmetry in corporate financial decision-making within the context of digital transformation, rather than to test hypotheses statistically. According to [\(Creswell & Poth, 2016\)](#), qualitative research focuses on understanding social phenomena through contextual interpretation and conceptual depth. Therefore, this study emphasizes theoretical, conceptual, and empirical synthesis from existing academic sources to develop a comprehensive understanding of how digitalization reshapes information asymmetry in financial management.

The research adopts a literature study (library research) design, which involves a systematic exploration, evaluation, and interpretation of existing scholarly works. [\(Zed, 2018\)](#) explains that literature studies are aimed at establishing a strong theoretical foundation, identifying research gaps, and constructing a conceptual framework based on previous findings. The data used in this research are derived from reputable academic publications, including textbooks, peer-reviewed journal articles, financial institution reports, and official publications by global organizations such as the OECD, World Bank, and IMF. These sources were selected due to their academic credibility and relevance to topics such as information asymmetry, digital finance, and corporate governance.

Data Sources

The research relies exclusively on secondary data, obtained from previously published academic works and credible institutional reports. Secondary data are considered appropriate for this study because they provide broad and historical insights into the development of information asymmetry theories—from classical to contemporary perspectives [\(Neuman Lawrence, 2014\)](#). The primary focus of data collection centers on literature discussing the relationship between information asymmetry and corporate financial decisions (investment, financing, and dividend policies), as well as the influence of digitalization, big data, and ESG disclosure on financial transparency and corporate behavior.

Data Collection Techniques

Data collection was conducted through a systematic process consisting of several stages:

1. identifying relevant keywords such as information asymmetry, corporate finance,

digital disclosure, agency theory, signaling theory, and governance transparency;

2. retrieving literature through credible academic databases including Scopus, ScienceDirect, SpringerLink, and Google Scholar; and
3. selecting sources based on relevance, recency (preferably within the last 10 years, except for foundational theories), and publication credibility.

According to [\(Hart, 2018\)](#), critical selection and evaluation of literature are essential to ensure the validity, reliability, and academic rigor of a literature-based study. This process ensures that all materials analyzed contribute substantively to the conceptual framework of information asymmetry in the digital age.

Data Analysis Methods

The data were analyzed using a content analysis method with a descriptive-analytical approach. Content analysis was chosen because it allows researchers to interpret patterns, meanings, and relationships between concepts derived from multiple literature sources [\(Krippendorff, 2018\)](#). The analytical process consisted of three main stages:

1. data reduction, by categorizing literature based on key themes such as information asymmetry theory, financial decision-making, and digital transformation;
2. data presentation, by synthesizing theoretical findings and highlighting their interconnections; and
3. interpretation and conclusion, through a conceptual integration of financial theories and technological developments.

Results

Key Factors Influencing Information Asymmetry

The analysis reveals that information asymmetry in corporate finance is shaped by a complex interaction of internal and external factors. Internally, the quality of financial reporting and managerial ownership structure play critical roles. Firms with high-quality reporting and independent external audits tend to exhibit lower information gaps between managers and investors [\(Healy & Palepu, 2001; Khan et al., 2021\)](#). Moreover, higher levels of managerial ownership align the interests of managers with shareholders, thereby reducing the incentive for opportunistic behavior [\(Meckling & Jensen, 1976\)](#).

Corporate governance mechanisms—such as the presence of independent directors, active audit committees, and transparent disclosure policies—further mitigate agency conflicts and information disparities. Externally, regulatory frameworks and market transparency standards enforced by authorities such as the OECD and national financial regulators significantly influence how information is disseminated and verified. Additionally, industry competition and institutional investor participation have been identified as external drivers of information efficiency, as they exert market-based pressure for greater transparency [\(Bushee & Noe, 2000; Kim et al., 2010, 2013\)](#).

Overall, these findings underscore that information asymmetry is not solely the result of data imbalance but rather a systemic issue influenced by managerial behavior, disclosure practices, governance structures, and institutional environments.

The Role of Digital Technologies and Governance in Reducing Information

Asymmetry

In the digital era, advanced technologies such as digital governance, blockchain systems, and AI-enabled analytics have become critical mechanisms for mitigating information asymmetry in corporate financial environments. Information asymmetry arises when insiders (e.g., managers) hold more or better information than outsiders (e.g., investors), leading to adverse selection, moral hazard, and market inefficiencies. Digital technologies address this by enhancing the transparency, accuracy, and timeliness of corporate disclosures. Specifically, digital governance—defined as the application of digital tools and architectures to govern enterprise information flows—has been empirically shown to improve the quality of information disclosure among listed firms, which consequently reduces information gaps between corporate insiders and external stakeholders ([Hu & Yang, 2024](#)).

Digital governance enhances information transparency in several ways. First, digital tools such as cloud computing, big data analytics, and automated disclosure platforms allow firms to prepare and publish financial information more rapidly and accurately than traditional manual processes. This improves investors' ability to assess firm performance promptly, reducing reliance on outdated or incomplete data that often exacerbate information asymmetry. Second, digital governance can mediate managerial transaction costs and human capital inefficiencies by automating routine reporting tasks and minimizing human error, which further supports consistent and reliable disclosure quality. Firms that adopt robust digital governance frameworks therefore tend to present financial and non-financial information that is both more reliable and more comprehensive.



Figure 1. Digital Governance and Technology in Reducing Information Asymmetry

A concrete real-world example is the increasing adoption of blockchain-based reporting systems by Chinese firms to enhance invoice processing and financial statement preparation. Empirical evidence from China shows that blockchain adoption is associated with higher financial reporting quality, fewer accounting errors, improved earnings informativeness, and increased stock liquidity, indicating clearer and more transparent financial information for investors (Liao et al., 2025). Such blockchain systems store financial transactions in a decentralized, immutable ledger that all relevant parties can inspect, thereby reducing opportunities for manipulation and information distortion—common sources of asymmetry.

Despite the benefits, digital technologies also introduce new challenges and asymmetries. For instance, algorithmic analytics and AI systems may favor stakeholders with more sophisticated analytical capabilities, creating a digital divide where some investors can interpret and act on information faster and more effectively than others. This can lead to forms of algorithmic information asymmetry if not paired with equitable disclosure practices and governance oversight. Therefore, digitalization alone does not fully eradicate information asymmetry; it must be supported by strong governance policies, ethical standards, and regulatory frameworks that ensure equitable access and interpretation of digital disclosures.

The role of corporate governance is to anchor these digital tools in accountable and transparent practices. Good governance structures—such as independent audit committees, board oversight of disclosure policies, and integration of digital reporting standards—amplify the effectiveness of digital technologies in reducing information asymmetry by ensuring that automated disclosures are reliable, verified, and aligned with stakeholder interests. Studies indicate that firms with stronger digital governance experience better disclosure quality and more accurate investor pricing, as governance mechanisms reduce managerial opportunism and provide checks against misrepresentation.

Moreover, ESG (Environmental, Social, and Governance) disclosure has emerged as a key domain where digital technologies and governance intersect to mitigate information asymmetry. Enhanced ESG disclosure—often enabled by digital reporting platforms and analytics—provides broader insights into firm sustainability practices, reducing uncertainty about non-financial performance and reputational risk. Research shows that higher quality ESG disclosures are associated with reduced stock price crash risk, indicating that transparent non-financial information helps balance informational power between insiders and outsiders while strengthening market confidence (Xu et al., 2022).

Overall, the integration of technological transparency and governance accountability constitutes a synergistic mechanism: digital technologies provide the tools for fast, accurate, and detailed data generation; governance structures ensure that this data is disseminated fairly, ethically, and in ways that genuinely reduce the informational advantage of insiders. When applied effectively, such integration can transform information asymmetry from a structural risk into a manageable and transparent dimension of corporate finance.

Implications for Investment, Financing, and Dividend Decisions

Information asymmetry exerts a profound influence on the three core areas of

corporate financial decision-making—investment, financing, and dividend policy.

1. Investment Decisions

Information asymmetry can lead to underinvestment or overinvestment, depending on market perceptions of firm value. Managers with superior internal information may reject profitable projects to avoid negative market signaling when external financing is needed. Conversely, firms with transparent digital reporting and efficient governance are more likely to secure capital for productive investments, as investors can better assess project quality. Hence, digital disclosure reduces uncertainty, aligning investment strategies with long-term value creation.

2. Financing Decisions

According to Pecking Order Theory, firms prefer internal financing over external funding due to asymmetric information costs. This study confirms that firms with greater transparency—particularly through automated reporting and blockchain auditing—face lower information-related financing costs. Moreover, financial institutions increasingly rely on digital data analytics for credit assessments, thereby narrowing the information gap between lenders and borrowers. Consequently, the adoption of digital governance reduces reliance on debt and improves capital structure efficiency.

3. Dividend Decisions

Dividend policy continues to serve as a signaling mechanism in the digital age. However, the nature of the signal has evolved. Beyond traditional profit distribution, dividends now function as an indicator of transparency and financial stability. Firms that combine consistent dividend announcements with accessible ESG and financial disclosures tend to attract long-term investors and experience lower price volatility. This confirms that in the digital era, the informational value of dividends is strengthened by credible data dissemination and governance integrity.

The Integrated Dynamic of Information Asymmetry in the Digital Era

The evolution of information asymmetry from a purely economic concept to a multidimensional digital phenomenon represents one of the most profound shifts in corporate finance. Traditionally, information asymmetry referred to the imbalance of information between managers and investors, often leading to adverse selection and moral hazard. In the digital era, this asymmetry has transformed—no longer revolving solely around information access, but increasingly around information quality, interpretability, and data ethics ([Möslein, 2023](#)). The interplay between digital technologies, corporate governance, and market behavior now defines how effectively firms can manage transparency and trust within financial systems.

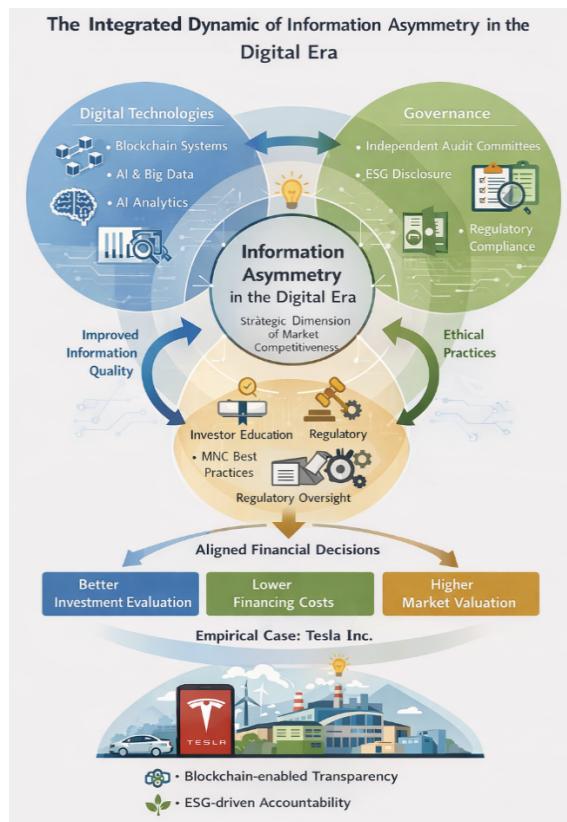


Figure 2. Integrated Dynamics of Information Asymmetry in the Digital Era

A central dimension of this new asymmetry lies in the ethical and behavioral use of digital information. Technologies such as artificial intelligence (AI) and big data analytics allow firms to collect and process vast amounts of market and consumer data, enhancing internal decision-making. However, they can also reinforce disparities in information interpretation if algorithmic outputs are opaque or biased ([Brynjolfsson & McElheran, 2016](#)). Thus, information asymmetry has evolved from unequal access to unequal understanding, where firms with superior analytical capabilities hold strategic advantages over competitors and investors with limited technological resources.

In addition, the integration of corporate governance has become indispensable in ensuring that digital transparency mechanisms operate effectively. Studies indicate that firms combining strong governance with digital disclosure tools experience significantly lower levels of information asymmetry and higher firm valuation ([Hu & Yang, 2024](#); [Kim et al., 2013](#)). Governance structures—particularly those involving independent audit committees and ESG oversight—help ensure that digital data are disclosed ethically and comprehensibly, reducing the risk of manipulation or misrepresentation. Governance, therefore, serves as a regulatory anchor that aligns technological potential with stakeholder accountability.

A real-world example illustrating this integration is Tesla Inc., which employs digital transparency through blockchain-enabled supply chain monitoring and ESG reporting. Tesla's open data on environmental impact and sustainability performance has strengthened investor confidence and reduced speculative risk in its stock. Another case is Alibaba Group, which applies AI and big data in its financial arm, Ant Group, to improve credit risk assessment. By providing near-real-time disclosure of financial metrics and leveraging data-driven governance systems, Alibaba has reduced credit

information asymmetry between lenders and small enterprises ([Chen & Qian, 2022](#)). These examples show that the intersection of technology and governance creates a virtuous cycle—digitalization enhances transparency, governance ensures accountability, and together they reinforce investor trust.

Nevertheless, the digital transformation has also created new layers of asymmetry, particularly through algorithmic decision-making and data privacy concerns. Investors may still face difficulty verifying algorithmically generated reports, while firms may selectively disclose favorable information using advanced narrative framing tools ([Reischauer & Ringel, 2023](#)). This phenomenon underscores that technological innovation must be complemented by digital literacy among investors and stronger regulatory oversight to prevent new forms of opacity.

In sum, the integrated dynamics of information asymmetry in the digital era reflect a shift from static inefficiency to strategic manageability. Information asymmetry is no longer viewed solely as a market failure but as a strategic dimension of competitive advantage—one that firms can mitigate or even exploit through responsible digital governance, ethical disclosure, and stakeholder education ([Xu et al., 2022](#)). Firms that actively adopt these principles demonstrate improved capital efficiency, higher market valuations, and stronger long-term investor relationships.

Conclusion

This study contributes to the corporate finance literature by conceptualizing information asymmetry as a multidimensional phenomenon shaped by digital transformation and governance structures. Unlike traditional perspectives that focus solely on information access, this research highlights the importance of information quality, interpretability, and ethical disclosure in the digital era. The findings demonstrate that digital technologies, when supported by strong governance mechanisms, can effectively reduce information asymmetry and enhance investment, financing, and dividend decision-making. This integrative perspective offers a more comprehensive framework for understanding modern financial behavior.

Practical Advice

Practically, firms are encouraged to strengthen digital governance frameworks, adopt transparent digital disclosure systems, and integrate ESG reporting into financial communication strategies. Regulators and policymakers should also develop adaptive regulations to ensure equitable access to digital information and prevent new forms of algorithmic information asymmetry.

Suggestions for Further Research

Future research may employ empirical methods to examine the quantitative impact of digital governance and technology adoption on information asymmetry across different industries and emerging markets. Comparative cross-country studies would also provide deeper insights into the role of institutional environments in shaping digital financial transparency.

References

Akerlof, G. A. (1978). The market for "lemons": Quality uncertainty and the market mechanism. In *Uncertainty in economics* (pp. 235–251). Elsevier.

Barakat, K. A., & Sayegh, M. (2021). Information Asymmetry in the Age of Big Data Analytics. *Cognitive Analytics Management Conference, Beirut, February 2021*.

Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053–1128.

Barron, O. E., & Qu, H. (2014). Information asymmetry and the ex ante impact of public disclosure quality on price efficiency and the cost of capital: Evidence from a laboratory market. *The Accounting Review*, 89(4), 1269–1297.

Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *The Bell Journal of Economics*, 259–270.

Boulton, T. J. (2024). Mandatory ESG disclosure, information asymmetry, and litigation risk: Evidence from initial public offerings. *European Financial Management*, 30(5), 2790–2839.

Brynjolfsson, E., & McElheran, K. (2016). The rapid adoption of data-driven decision-making. *American Economic Review*, 106(5), 133–139.

Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research*, 171–202.

Bushman, R., & Landsman, W. R. (2010). The pros and cons of regulating corporate reporting: A critical review of the arguments. *Accounting and Business Research*, 40(3), 259–273.

Chan, K., Menkveld, A. J., & Yang, Z. (2008). Information asymmetry and asset prices: Evidence from the China foreign share discount. *The Journal of Finance*, 63(1), 159–196.

Chen, K. C. W., Wei, K. C., & Chen, Z. (2003). Disclosure, corporate governance, and the cost of equity capital: evidence from Asia's emerging markets. *Corporate Governance, and the Cost of Equity Capital: Evidence from Asia's Emerging Markets (June 2003)*.

Chung, C. Y., Kim, H., & Ryu, D. (2017). Foreign investor trading and information asymmetry: Evidence from a leading emerging market. *Applied Economics Letters*, 24(8), 540–544.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *The Journal of Finance*, 46(4), 1325–1359.

Ehrhardt, M. C. (2011). *Financial management: theory and practice*. USA.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.

Hart, C. (2018). *Doing a literature review: Releasing the research imagination*.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1–3), 405–440.

Hirshleifer, D. (2015). Behavioral finance. *Annual Review of Financial Economics*, 7(1), 133–159.

Hu, C., & Yang, X. (2024). A study on the impact of digital governance on disclosure quality of listed companies. *Finance Research Letters*, 69, 106062.

Hughes, J. S., Liu, J., & Liu, J. (2007). Information asymmetry, diversification, and cost of capital. *The Accounting Review*, 82(3), 705–729.

Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77–132). Gower.

Khan, N., Malik, Q. A., Ali, S., Rasheed, M. H., & Saghir, A. (2021). Impact of Corporate Social Responsibility on Firm Performance: Mediating Role of Information Asymmetry. *Indian Journal of Economics and Business*, 20(4), 693–705.

Kim, Y., Lee, J., & Yang, T. (2010). Corporate transparency and firm performance:

Evidence from Korean ventures. *ICSB World Conference Proceedings*, 1.

Kim, Y., Lee, J., & Yang, T. (2013). Corporate transparency and firm performance: Evidence from venture firms listed on the Korean stock market. *Asia-Pacific Journal of Financial Studies*, 42(4), 653–688.

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.

Liao, K., Lin, L., & Sun, Y. (2025). Blockchain adoption and corporate financial reporting quality. *Journal of Accounting and Public Policy*, 49, 107265.

Lu, Z., & Li, H. (2023). Does environmental information disclosure affect green innovation? *Economic Analysis and Policy*, 80, 47–59.

Mandlik, M. A., & Kadirov, D. (2018). Big data approaches and outcome of information asymmetry: opportunities for future research. *International Journal of Business Continuity and Risk Management*, 8(4), 303–318.

Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial Behavior, Agency Costs and Ownership Structure*.

Möslein, F. (2023). Towards corporate digital responsibility. In *Research Handbook on Corporate Liability* (pp. 409–433). Edward Elgar Publishing.

Mundim, V. A. (2022). *The impact of CSR disclosure and ESG performance on firms' information asymmetry*. Universidade de Lisboa (Portugal).

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.

Neuman Lawrence, W. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*. Pearson. England.

Qu, W., Ee, M. S., Liu, L., Wise, V., & Carey, P. (2015). Corporate governance and quality of forward-looking information: Evidence from the Chinese stock market. *Asian Review of Accounting*, 23(1), 39–67.

Reischauer, G., & Ringel, L. (2023). Unmanaged transparency in a digital society: Swiss army knife or double-edged sword? *Organization Studies*, 44(1), 77–104.

Ross, S. A., Jaffe, J., & Kakani, R. K. (2019). *Corporate Finance*, 10e. McGraw-Hill Education.

Setiany, E., & Suhardjanto, D. (2021). Disclosure, information asymmetry and the cost of equity capital: Evidence from Indonesia. *Recent Developments in Asian Economics International Symposia in Economic Theory and Econometrics*, 351–366.

Shi, A. (2024). News media coverage and market efficiency research based on Fredholm integral equation algorithm. *International Journal of Information and Communication Technology*, 25(6), 68–77.

Silpachai, K., Siengthai, S., & Levermore, R. (2024). Corporate governance, information asymmetry and firm performance: evidence from Thailand. *Cogent Economics & Finance*, 12(1), 2379583.

Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393–410.

Van Buskirk, A. (2012). Disclosure frequency and information asymmetry. *Review of Quantitative Finance and Accounting*, 38(4), 411–440.

Wang, Y., Shan, Y. G., He, Z., & Zhao, C. (2022). Other comprehensive income, corporate governance, and firm performance in China. *Managerial and Decision Economics*, 43(1), 262–271.

Wen, M. (2002). Corporate governance and firm performance. *The China Boom and Its Discontents*, 128.

Xu, N., Liu, J., & Dou, H. (2022). Environmental, social, and governance information disclosure and stock price crash risk: Evidence from Chinese listed companies. *Frontiers in Psychology*, 13, 977369.

Zed, M. (2018). *Metode penelitian kepustakaan*. Yayasan Pustaka Obor Indonesia.