The Influence of Information Disclosure Quality on Enterprise Investment Efficiency

Yuquan Wang

University of Warwick
**Corresponding author. Email: yula.yuquanwang@outlook.com*

ABSTRACT
Information disclosure has a critical role in reducing information asymmetry and promoting the fair and efficient operation of the capital market. Currently, research on enterprise investment efficiency is primarily conducted from perspectives such as corporate governance and ownership structure, with little literature looking at enterprise investment efficiency from the perspective of information disclosure quality. So, the focus of this study is on the relationship between the quality of information report and the efficiency of an organization's investments. By dividing information into three categories: overall information, financial information, and non-financial information, this paper studies the impact of the disclosure of these three kinds of information on corporate investment efficiency separately. This paper argues that when studying the impact of information disclosure quality on investment efficiency, the impact of information disclosure quality on investment efficiency should not be monotonous, and the quality of financial information disclosure and non-financial information disclosure should also be included in the research department for a more complete and comprehensive analysis. The result also shows that all three kinds of information disclosure can reduce the degree of information asymmetry and thus have an effect on financing constraints or agency costs, which therefore influence corporate investment efficiency. It also says that financing constraints and agency costs are important factors in investment efficiency, and the quality of information disclosure affects investment efficiency through these two factors.

Keywords: *Investment Efficiency, Information Disclosure Quality, Agency Costs, Financial Constraints*

1. INTRODUCTION

With manipulation and a lack of transparency occurring at many companies, investigating company performance has become a key issue. Detecting performance is achieved not simply by looking at profit decreases and increases, but also by looking at how well companies manage their investment decisions [1]. A company's investment decisions are often the most important step in making its financial decisions. This is why a lot of researchers are interested in studying the factors that affect how well a company invests and other things. According to the classical economic hypothesis, company investment aims to maximise enterprise value, so managers should focus on maximising project future returns and enhancing investment efficiency and quality. However, in real economic society, information asymmetry is common; managers have a greater understanding of information than investors, and when managers chase their own goals, agency costs arise, resulting in insufficient or excessive investment. Insufficient investment will stifle the achievement of enterprises' strategic goals and limit their growth, whereas excessive investment will waste resources and create excess capacity, lower the projected return on investment, have a negative influence on business financial health, and increase capital pressure. Inefficient company investment, whether under or over investment, would result in a misallocation of social resources, which would have a detrimental influence on macroeconomic operational efficiency. This paper contributes to the current of knowledge about the quality of information disclosure. It summarizes and compares all kinds of concepts of information disclosure quality, and expounds the importance of information disclosure quality theoretically. Second, the influence of three types of information report on enterprise investment efficiency is discussed in depth, making up for the fact that most of current research focuses on the association between one sort of information disclosure and enterprise investment efficiency. Finally, this paper demonstrates how high-quality information disclosure boosts investment

Y. Jiang et al. (Eds.): ICEDBC 2022, AEBMR 225, pp. 1639–1646, 2022.
https://doi.org/10.2991/978-94-6463-036-7_244

efficiency by lowering agency costs and easing financing limitations.

2. THE THEORIES OF INFORMATION DISCLOSURE QUALITY AND ENTERPRISE INVESTMENT EFFICIENCY

The information disclosed can be classified as overall, financial and non-financial information. The influence of various types and quality of information disclosure on investment efficiency varies. Scholars have long been interested in financial information disclosure because of its importance as a source of information. Recently, scholars have gradually recognised the importance of non-financial information disclosure and related studies have grown over the years, such as social responsibility information disclosure, carbon information disclosure, and environmental accounting information disclosure, among others. According to Leuz and Verrecchia, high-quality information disclosure can promote enterprise transparency, which in turn can alleviate information asymmetry and improve investment efficiency [2].

2.1. Overall quality of information disclosure

The term "overall information disclosure" refers to a notion that encompasses both financial and non-financial information disclosure. Documents published by the International Accounting Standards Board point out that relevance and reliability are the main characteristics of disclosure information [3]. Reliability means that the information disclosed is free from major errors or deviations and can truly reflect the enterprise's information to report users. Relevance means that users influence their decisions by evaluating past, present, or future, or by correcting past evaluations. Additionally, the quality of information report also involves the time, frequency, and completeness of the content of disclosure. As may be seen from the above elaboration, there are two meanings of disclosure quality: the first refers to whether the information disclosed by listed companies is true, reliable, relevant, complete, and timely; the second is whether the information disclosed by listed companies is conducive to more effective understanding and use by users. As a result, the study considers that the overall quality of information disclosure can be defined as the degree to which all information disclosed by enterprises meets users' requirements in terms of quantity and effectiveness.

In the academic field, there is currently no consistent criteria for assessing the overall information disclosure quality of enterprises. However, there are two main measurement methods: the evaluation results released by authoritative institutions and the evaluation system established by scholars. The disclosure Index AIMR (Association of Investment Management and Research) in the United States, the Standard and Poor's scores, and the information disclosure evaluation of the Shenzhen Stock Exchange in China are all disclosure indices issued by authoritative institutions. As for the evaluation system established by individual scholars, Patel and Dallas evaluate the quality of information disclosure by examining three factors: investor rights, corporate governance structure, and information disclosure relevance [4]. Huang and Xiao measure the quality of information disclosure with the combined index of revenue aggressiveness (EA) and revenue smoothness (ES) [5]. Ren and Wang use computer technology to analyze the text of annual reports of listed companies and obtained the information disclosure quality of different companies according to the analysis results [6].

As for the influencing factors of the overall quality of information disclosure, Wang and You find that there is an inverted U-shaped relationship between management compensation incentive and information disclosure quality [7]. With the increase of management compensation incentives, the information disclosure quality of enterprises rises first and then falls. The empirical research of Leuz et al. show that the size of a firm has a considerable impact on the quality of information disclosure; in other words, the larger a company is, the more advantageous it is for management to release high-quality information.[8]. Li and Chen believe that equity pledged by controlling shareholders exacerbate information asymmetry and reduce the quality of information report [9].

The impact of the quality of information disclosure is also of concern. In their empirical study, Patel and Dallas discover that high-quality information disclosure can make enterprise information more transparent, significantly reduce operational risks of enterprises, alleviate financing constraints, help enterprises restrain underinvestment behaviour and promote investment efficiency [4]. Bushman et al. study the economic implications of information disclosure quality and find that when enterprises face financing constraints, public disclosure of information can help managers better identify project investment opportunities with positive NPV and reduce financing constraints caused by information asymmetry [10]. Madhavan believes that high-quality information disclosure can reduce investors' uncertainty about enterprise value expectations, thus improving stock liquidity and curbing stock price volatility [11]. Biddle and Hilary show that the information report quality is positively connected with the investment efficiency of enterprises [12]. Zhang and Lu believe that high-quality information disclosure to a large extent alleviates the internal information asymmetry of enterprises, enabling shareholders to take charge of the administration more effectively, thereby lowering the agency cost of enterprises [13]. Xiao et al. discovered that boosting the quality of information disclosure might greatly minimise the probability of stock price collapse after researching firms listed on the Shenzhen Stock Exchange.[14].

2.2. Quality of financial information disclosure

Financial information disclosure can be divided into two categories according to the subject of use. One is the information disclosed to the external subject of the enterprise, the other is the information required by the internal decision maker. The information published to the public mainly includes two aspects: general information to explain the situation of the enterprise and financial information to illustrate the status of the enterprise's assets and operating results. Good financial information disclosure should have authenticity, timeliness and integrity. The quality of financial information disclosure may be described as the extent to which the financial information released by an enterprise satisfies the demands of users in terms of quantity and effectiveness, as indicated by the concept of overall information disclosure quality.

As for the measurement of the quality of financial information disclosure, Penman believes that the quality of financial reports is comparable to verifiable earnings, hence accounting earnings may be used as a proxy for financial information disclosure quality [15]. Kothari et al examined the quality of financial information disclosure in terms of fields. That is, the company's financial information was subdivided into fields and analysed with existing relevant indicators [16]. Other scholars used some alternative variables to measure, such as Botosan using the quantity of information disclosure measure [17], Kim using the stock price measure [18], etc.

When it comes to the factors that determine the quality of financial information disclosure, Beasley et al. find that the ratio of independent directors has a strong association with the quality of accounting information presented by listed companies, and the addition of independent directors will help to provide checks and balances and supervision within the company and reduce irregularities [19]. Shen finds that ownership concentration can improve the quality of financial information disclosure [20]. Wang et al. come to the conclusion that if the ownership of an enterprise is concentrated, the agency conflict will be serious and the accounting information disclosed by the management will be of low quality [21]. The relationship between company governance and financial disclosure quality has been widely studied. Several studies have found that the governance system has a favourable and substantial impact on the financial information quality of organisations [22].

It is generally acknowledged that high-quality disclosure of financial information brings benefits to the economy. Luo believes that high-quality financial information disclosure alleviate financing constraints and improve the ability to identify investment opportunities so as to achieve the effect of controlling the company's inefficient investment [23]. In an in-depth examination of the relationship between accounting information and the cost of equity capital, Francis et al. employ seven metrics to indicate the quality of accounting information [24]. The findings suggest that high-quality accounting data can help enterprises lower their equity capital costs. Verdi uses publicly traded corporations in the United States as the study's subject, and he experimentally proves that high-quality accounting data may lessen information asymmetry, decrease financial constraints, and increase investment efficiency [25]. At the same time, because the two rights of the enterprise are separated, the interests of the owners and the management are incompatible, and the management will exert control over the enterprise's investment decision-making authority based on private interests in the operation process, increasing investors' investment risk. According to Balakrishnank et al., enterprises are frequently faced with funding difficulties because of information asymmetry [26]. Creditors would demand greater financing charges when companies engage in external financing to protect their own interests, but improving information disclosure quality can make a company's financial information more open and transparent. It contributes to the protection of investors' interests, the reduction of financing constraints, and the prevention of unproductive investment due to a lack of capital. Francis et al. investigate the economic implications of information quality disclosure and discovered that firms that disclose high-quality accounting information can significantly decrease the cost of equity borrowing [24]. Through the study, Cornaggia et al. find that, on the one hand, the accounting quality can influence an organization's investment choice. If the information disclosed by enterprises is mostly false, investors will not be able to make an investment based on effective information. If the cost of external financing is too high, enterprises will not invest enough in some good projects due to a lack of funds. On the other hand, the lower quality of information disclosure will cause firm executives to abandon investment projects with positive net present value in order to avoid risks, despite the fact that investors typically expect the company to provide stable income. If the venture fails, investors' risk would rise, resulting in agency issues [27].

2.3. Quality of non-financial information disclosure

Background information, management authority analysis, business performance indicators, opportunities and risks, and social responsibility information are all examples of non-financial information with a relationship to the company's production and operation operations [28]. Financial information is considered to be a good way to alleviate information asymmetry. Therefore, studying the impact of financial information on investment efficiency has always been a hot issue. However, financial reports mainly disclose financial information, which does not completely depict an enterprise's complicated activity. Wallman believes that financial reports could not accurately identify and measure information such as human resources or intellectual capital [29]. Moreover, the content of the financial report lacks predictability, and it is difficult to show the development prospects and ability of an enterprise, which can only play a role in the short-term evaluation of the enterprise. However, non-financial information contains a vision of the future, which is a key reference for users to make long-term assessments [30].

Scholars mainly employed the AIMR's rating report (American Investment Management and Research Association) on voluntary information disclosure of firms to assess the quality of non-financial information disclosure in early stages, but the report ceased to be published after 1995. Since then, academics have mostly embraced the Jenkins Committee's indicators for judging the quality of disclosure according to whether the company discloses relevant non-financial information. If there is disclosure, it is 1; if there is no disclosure, it is 0. Then the total score is weighted. What can be seen is that more and more corporations are preparing CSR, sustainability report, or similar reports to express their social message [31]. Another option to assess the quality of a report is to calculate the disclosure index, which many scholars have chosen [32].

The quality of non-financial information disclosure varies among corporations. Healy and Palepu suggest that company size can be a factor [33]. Vanstraelen et al. also supplement that there is a certain connection between the quality of non-financial information disclosure and company characteristics, including company size, nationality and industry [34]. According to Wei et al., senior management turnover has a negative influence on non-financial information disclosure quality, although product market competition can increase non-financial information disclosure quality.[35].

As for the impact of non-financial information disclosure quality, Behn and Riley show that high-quality non-financial information disclosure can promote the ability to predict a company's future financial performance [36]. The reporting of non-financial information can alleviate the asymmetry of information [37], reduce the investment in risk, and further improve the fluidity of corporate shares [2]. Zhang and Dong believe that corporate disclosure of social responsibility information can reduce the degree of information asymmetry and improve company reputation [38]. Investors can acquire more comprehensive information and make the most effective selections when non-financial information disclosure improves. For listed companies, enhanced non-financial disclosure also allows them to reduce their cost of capital [39] and the cost of debt [40].

3. KEY VARIABLES AFFECTING INVESTMENT EFFICIENCY

3.1. Financing constraints

Information asymmetry between investors and firms can lead to financing constraints and trigger inefficient investment by firms [41]. The existence of information asymmetry can create a sense of insecurity among investors, which can further affect their sentiment as well as their investment decisions. In order to secure their interests and avoid excessive losses of capital, investors tend to adopt an average valuation strategy for companies and expect a relatively average rate of return, which inevitably leads to an undervaluation of the material value of quality companies in the market. This causes the cost of financing to rise and, in turn, some reasonable investments are foregone, resulting in underinvestment. Conversely, companies that are overvalued in real terms are likely to receive additional external financing and make unjustified investments, resulting in overinvestment. In addition, there is also an information asymmetry between creditors and enterprises, with creditors demanding a higher risk premium to prevent their capital from going unreturned, which makes it more expensive for enterprises to raise capital. This makes it more expensive for firms to raise capital, and the increased constraints on external financing lead to firms foregoing investments that they should have made, resulting in underinvestment. The most direct effect of information disclosure is to reduce information asymmetry, and full disclosure of corporate information can alleviate information asymmetry, thereby reducing the financing constraints of enterprises and improving investment efficiency.

Financial information contains information related to asset pricing and investment decisions and has a pricing function. High-quality financial information can convey the firm’s true operating conditions to investors and improve corporate transparency, so that investors can assess the risk-return level of the stock more accurately. As a result, investors will demand a lower risk premium, lowering the cost of financing [40]. Leuz and Verrecchia share a similar view that high quality financial disclosure enhances investor confidence, improves liquidity in the stock market and boosts share prices, thereby reducing financing costs and increasing the efficiency of corporate investment [2].

Similar to financial information disclosure, high-quality non-financial reporting can boost stock liquidity and decrease transaction costs [42], as well as the risk premium for investors due to information asymmetry. Disclosure of social responsibility data can lower capital costs, attract institutional investors and analysts, and assist companies in obtaining lower interest rates and longer loan terms from banks, thus reducing financing constraints and improving investment efficiency.

3.2. Agency cost

Agency conflicts are prevalent in modern enterprises, and such agency conflicts can directly affect a firm's investment efficiency. On the one hand, the existence of agency costs can lead to overinvestment. For example, corporate agents are motivated by "on-the-job consumption" to invest in all new investment opportunities, which leads to over-investment in the firm. With the separation of powers, the agent does not have residual claims but does have some control. In order to increase his own remuneration, the agent does not care about the efficiency of the investment decision and will only expand the size of the firm, leading to overinvestment. Overinvestment can also occur within a company's principles, since contradictions between controlling and minority owners can contribute to invest in projects with negative NPV, leading to overinvestment. On the other hand, agency costs may also lead firms to underinvest. It has been found that when a firm invests, agents may abandon certain investments with a positive NPV if they perceive the project to be riskier [43].

High quality information disclosure has a governing effect on agency conflicts. Adequate information disclosure enables the shareholders to better monitor the management, restrain the management's behaviour, and induce them to make reasonable investments. Financial information has a metric effect, and this effect can be a good way of curbing the agency costs that exist in a corporation. In a fully competitive market, cost levels and profit levels will tend to be the same across industries, and the operating conditions of firms can be reflected by profit indicators. By comparing the average profitability of the industry with the profitability of the firm, an accurate assessment of agents can be made and effective monitoring can be exercised. High-quality financial information disclosure contains financial indicators that are relatively more realistic and accurate, with a higher degree of reliability, and can more accurately reflect the operating results of the enterprise, thus discouraging agents from making unreasonable investments for their personal interests, thus reducing over-investment and improving the efficiency of the enterprise's investment [10].

Non-financial information is critical to corporate governance by providing a good feedback mechanism between the company, the regulator, and stakeholders. Financial information is limited in content and cannot contain all the information relevant to the operation of a company, such as human resources and social responsibility. Adequate disclosure of non-financial information can, to a certain extent, compensate for this lack of financial information, enhance corporate transparency, reduce information asymmetry, reduce agency costs, and thus improve the efficiency of corporate investment. Non-financial information disclosure can help owners gain a more comprehensive understanding of the true operating conditions of the enterprise, monitor agents more effectively and design more reasonable incentives, discourage agents from making unreasonable investments in their own interests, and reduce the long-term interests of agents. This helps to safeguard the long-term interests of the company and reduce agency costs.

4. CONCLUSION

In summary, the research on the quality of information disclosure is mainly divided into three categories: the quality of overall information disclosure, the quality of financial information disclosure, and the quality of non-financial information disclosure. All three kinds of information disclosure can reduce the degree of information asymmetry and thus have an effect on financing constraints or agency costs. High quality information disclosure can reduce transaction costs in the stock market, protect investors' interests and make markets more efficient. Few literatures have systematically studied all three kinds of information disclosure at the same time, and most literatures only independently examine the relationship between financial or overall reporting and investment efficiency. Besides, this paper demonstrates that the quality of information disclosure has an effect on investment efficiency, mainly through agency cost and financing constraints.

In terms of limitations, this paper has only conducted theoretical research; there is no specific analysis for relevant data, a certain industry, or a company. Empirical analysis will be employed in the next research to verify the viewpoints given in this paper.

REFERENCES

[1] Biddle, G. C., Hilary, G. & Verdi, R., How does financial reporting quality relate to investments efficiency? Journal of Accounting and Economics, vol. 48 (2-3), 2009, PP. 112-131.

[2] Leuz, C. & Verrecchia, R. E., The Economic Consequences of Increased Disclosure. Journal of Accounting Research, vol. 38, 2000, pp. 91–124.

[3] International Accounting Standard Board., Framework for the preparation and presentation of financial statements, 1989.

[4] Patel, S. A. & Dallas, G. S. (2002). Transparency and Disclosure: Overview of Methodology and Study Results - United States. SSRN Electronic Journal, 2002.

[5] Huang, J. J. & Xiao, M., Information Disclosure, Earnings Opacity and cost of Equity Capital. China Accounting Review, vol. 1, 2006, pp. 69-84.

[6] Ren, H.D. & Wang, K., Social relations and the quality of corporate information disclosure: A textual analysis of annual reports of Chinese listed companies. Nankai Management Review, vol. 21(05), 2018, pp. 130-140.

[7] Wang, S. N.& You, M. Y., Can management compensation Incentive improve the quality of information disclosure? Audit Economy Research, vol. 30(4), 2015, pp. 22-29.

[8] Leuz, C., Nanda, D. & Wysocki, P. D., Earning management and investor protection: International Comparison. Journal of Financial Economics, vol. 69(3), 2003, pp. 505-527.

[9] Li, L. F. & Chen, Z. L., Does controlling Shareholder equity Pledge Reduce the quality of information Disclosure? Scientific Decision Making, vol. 8, 2018, pp. 1-20.

[10] Bushman, R. M. & Smith, A. J., Financial Accounting Information and Corporate Governance. Journal of Accounting and Economics, vol. 32(1-3), 2001, pp. 237-333.

[11] Madhavan, A., Security prices and market transparency. Journal of Financial Intermediation, vol. 5(3), 1996, pp. 255-283.

[12] Biddle, G. C. & Hilary, G., Accounting Quality and Firm-Level Capital Investment. The Accounting Review, vol. 81(5), 2006, pp. 963–982.

[13] Zhang, C. & Lu, W., Information disclosure, information intermediary and enterprise overinvestment, Accounting Research, vol. 1, 2009, pp. 60-65.

[14] Xiao, T. S., Song, S. L.& Li L., Disclosure quality and stock price crash risk: The Mediating role of analyst forecasting. Journal of Finance and Economics, vol. 2, 2017, pp. 112-123.

[15] Penman, S., The Quality of Financial Statements: Perspectives from the Recent Stock Market Bubble. Accounting Horizons, vol. 17, 2003, pp. 77-96.

[16] Kothari, S. P., Shu, S. & Wysocki, P. D., Do Managers Withhold Bad News? Journal of Accounting Research, vol. 47(1), pp. 241-276.

[17] Botosan, C. A., Disclosure level and the cost of equity capital. Accounting review: A quarterly journal of the American Accounting Association, vol. 72,1997, pp. 323-349.

[18] Kim, K. A., Price limits and stock market volatility. Economics Letters, vol. 71, 2001, pp. 131–136.

[19] Beasley, M., Clune, R. & Hermanson, D., The Impact of Enterprise Risk Management on the Internal Audit Function. Journal of Foriensic Accounting, 2006, pp. 1-20.

[20] Shen, X. J., Research on the Quality of Information disclosure of Listed Companies in China -- Based on the empirical evidence of information disclosure evaluation of Shenzhen Stock Exchange. Times Finance, vol. 12, 2017, pp. 152-154.

[21] Wang, C., Wang. N. & Yang, J., A Unified Model of Entrepreneurship Dynamics. Journal of Financial Economics, vol. 106(1), 2012, pp. 1-23.

[22] Honu, M.V. & Gajevszky, A., The Quality of Financial Reporting and Corporate Governance: Evidence from Romanian's Aeronautic Industry. Economic and Social Development: Book of Proceedings, 2014, pp. 517-576.

[23] Luo, B. Y., The effect mechanism of accounting information quality on enterprise investment efficiency. Commercial Research, vol. 56(6), 2014, pp. 64-75.

[24] Francis, J., Lafond, R., Olsson, P. & Schiper, K., The Market Pricing of Accruals Quality. Journal of Accounting Research, vol. 39(2), 2015, pp. 295-327.

[25] Verdi, R. S., Financial Reporting Quality and Investment Efficiency.Working Paper, 2006.

[26] Balakrishnank, W., The Effect of Accounting Conservatism on Corporate Investment during the Global Financial Crisis. Journal of Business Finance & Accounting, vol. 43(5), 2015, pp. 513-542.

[27] Cornaggia, J., Mao, Y., Tian, X. & Wolfe, B., Does banking competition affect innovation? Journal of Financial Economics, 115, 2015, pp. 189-209.

[28] He, Y., A review of non-financial information and enterprise investment efficiency. Modern Trade and Industry, vol. 11, 2017, pp. 88-89.

[29] Wallman, S. M. H., The future of accounting, part III: Reliability and auditor independence. Accounting Horizons, 10(4), 1996, pp. 76-97.

[30] Liu, Y., Zhao, Y. & Chen L., Research on the Influencing factors of Non-financial Information disclosure of Chinese listed companies. On Economic Problems, vol. 2, 2013, pp. 119-123.

[31] Habek, P. & Wolniak, R., Assessing the quality of corporate social responsibility reports: the case of reporting practices in selected European Union member states. Qual Quant, vol. 50, 2016, pp. 399-420.

[32] Leitoniene, S. & Sapkauskiene, A., Quality of Corporate Social Responsibility Information.

Procedia-Social and Behavioral Sciences, vol. 213. 2015, pp. 334-339.

[33] Healy, P. M. & Palepu, K. G., Information asymmetry, corporate disclosure, and the capital markets:a review of the empirical disclosure literature. Journal of Accounting and Economics, vol. 31(1-3), 2001, pp. 405- 440.

[34] Vanstraelen, A., Zarzeski, M.T. & Robb, S.W.G., Corporate Nonfinancial Disclosure Practices and Financial Analyst Forecast Ability Across Three European Countries. Journal of International Financial Management & Accounting, vol. 14, 2003, pp. 249-278

[35] Wei, L. X., Huang, G. L. & Zhang, M., Senior management change, product market competition and non-financial information disclosure quality. The Chinese Certified Public Accountant, vol. 4, 2017, pp. 45-53.

[36] Behn, B. K., & Riley, R. A., Using Nonfinancial Information to Predict Financial Performance: The Case of the U.S. Airline Industry. Journal of Accounting, Auditing & Finance, vol. 14(1), 1999, pp. 29–56.

[37] Guo, R.-J., Lev, B., & Zhou, N., Competitive Costs of Disclosure by Biotech IPOs. Journal of Accounting Research, vol. 42(2), 2004, pp. 319–355.

[38] Zhang, Z. Y. & Dong, J., Disclosure of social responsibility information, executive equity incentive and bank credit decision. Research on Modern Economy, vol. 10, 2017, pp. 37-45.

[39] Francis, J. R., Khurana, I. K., & Pereira, R., Disclosure incentives and effects on cost of capital around the world. The accounting review, vol. 80(4), 2005, pp. 1125-1162.

[40] Sengupta, P. Corporate Disclosure Quality and the Cost of Debt. The Accounting Review, vol. 73(4), 1998, pp. 459–474.

[41] Hovakimian, G., Financial constraints and investment efficiency: Internal capital allocation across the business cycle. Journal of Financial Intermediation, vol. 20(2), 2011, pp. 264-283.

[42] Diamond, D. W. & Verrecchia, R. E., Disclosure, Liquidity, and the Cost of Capital. The Journal of Finance, vol. 46(4), 1991, pp. 1325-1359.

[43] Aggarwal, R. K. & Samwick, A., Empire-builders and shirkers: Investment, firm performance, and managerial incentives. Journal of Corporate Finance, vol. 12(3), 2006, pp. 489-515.