Print ISSN: 2288-4637 / Online ISSN 2288-4645
doi:10.13106/jafeb.2023.vol10.no2.0153

Impacts of Transparency and Disclosures on Firm Valuation of the Healthcare Sector in India

Saumya SINGH[1], Pracheta TEJASMAYEE[2], Venkata Mrudula BHIMAVARAPU[3], Arpita SHARMA[4], Rameesha KALRA[5], Sanjeev KADAM[6], Poornima TAPAS[7], Shailesh RASTOGI[8]

Received: November 10, 2022 Revised: February 21, 2023 Accepted: March 01, 2023

Abstract

This study's principal goal is to find the interrelation between transparency & disclosure (TD) and the healthcare sector's firm valuation (FV). The paper uses the market-to-book (MTB) ratio and market capitalization as proxies, where sales measure act as a control variable. Dynamic panel data regression (PD) is the method applied for analyzing data. Data pertains to 10 healthcare companies gathered over five years (2016-2020). Results imply that TD has a negative and significant influence on the FV, where market capitalization acts as a proxy for valuation. This association indicates that a greater degree of TD diminishes FV. TD is also reported to have a negative and insignificant association with MTB. Therefore, TD does not influence FV. The findings of this paper have significant practical implications. Results can help policymakers determine mandatory disclosure levels that are not detrimental to the healthcare sector. Managers and analysts must also analyze the dimensions of disclosure that can negatively impact the firm's valuation and make decisions regarding TD accordingly. This is the first study to assess the influence of TD on the FV of the Indian healthcare sector, which makes it unique. This study is limited to the healthcare sector, which is its shortcoming.

Keywords: Pharmaceuticals, Hospitals, Health Care, Valuation, Transparency, Disclosures

JEL Classification Code: G3, G4, O1, O4

1. Introduction

Transparency, as defined by the Basle Committee on Banking Supervision (1998), is the disclosure of timely and accurate information. While considering transparency, the concept of disclosures comes into the picture. TDs are the major interrelated elements of corporate governance (CG) (Srivastava & Rastogi, 2010; Pinto et al., 2019). The disclosure depicts the correct picture of the banks' financial standing, risk dispersal, risk management, and operating activities. TD is the widely acknowledged term that aids in disseminating financial and nonfinancial information about a company via any medium (Bushman et al., 2004). Post the financial crisis of 1997, TD gained momentum among investors (Morris et al., 2011). Before making any investment

[1]First Author and Corresponding Author. Ph.D. Scholar, Symbiosis Institute of Business Management, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0003-1597-2980. [Postal Address: Lavale, Mulshi, Pune, Maharashtra 412115, India] Email: sumosinghvns@gmail.com
[2]Ph.D. Scholar, Symbiosis Institute of Business Management, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0002-2765-9716. Email: prachetatejasmayee1998@gmail.com
[3]Assistant Professor, Symbiosis School of Banking and Finance, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0002-9757-1904. Email: mrudulabhimavarapu@gmail.com
[4]Assistant Professor, Symbiosis Institute of Business Management, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0001-7712-9206. Email: arpita.sharma85@gmail.com
[5]Assistant Professor, Christ University (Deemed University), Bangalore, India. ORCID ID: 0000-0001-6274-6324. Email: rameesha.kalra@gmail.com
[6]Assistant Professor, Symbiosis Institute of Business Management, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0003-2754-625X. Email: sk.ymtcom@gmail.com
[7]Professor, Symbiosis Institute of Business Management, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0002-2614-6337. Email: poornimatapas@sibmpune.edu.in
[8]Professor, Symbiosis Institute of Business Management, Symbiosis International (Deemed) University, Pune, India. ORCID ID: 0000-0001-6766-8708. Email: krishnasgdas@gmail.com

decision, the investors and stakeholders thoroughly scrutinize the complete set of records for which they rely on the company's annual, sustainability, and financial reports (Rastogi, 2013; Athaley et al., 2020; Rastogi, 2015, 2014). Reducing the asymmetry in information between the enterprises and stakeholders through these statements and reports would aid the investors in making conscious investment strategies (Shingade & Rastogi, 2020; Rastogi et al., 2020; Singh et al., 2022).

Following the 2008 financial crisis, governments worldwide have undertaken a wide range of regulatory steps to promote TD. Consequently, governance reform proposals worldwide started surfacing to prevent a repeat of the disaster (Bruner, 2011). TD presently is closely related to governance mechanisms of the financial institutions as it checks the personal managerial interests, which can potentially subordinate the interest of stakeholders (Cheung et al., 2010). Thus TD occupies a centralized position in resolving various agency problems, including the information asymmetry problem (Chi, 2009). TD also impacts valuation in several ways. In general terms, valuation is defined as the firm's economic value (Chua et al., 2007). TD plays a significant role, from enhancing management incentives to cutting down the cost of capital and the overall valuation of the enterprises (Leuz & Verrecchia, 2000; Diamond & Verrecchia, 1991; Bhimavarapu et al., 2022).

It is apparent from the prior studies that there is existing research dealing with the FV of the corporate sector (Chua et al., 2007; Charumathi & Ramesh, 2020). However, none of these studies concentrate on the healthcare industry in India. The prior works on disclosures and corporate value are highly inconclusive. There are two categories of Literature on the relationship between TD and FV. One category claims that disclosures have a beneficial impact on a company's value. Taylor et al. (2018) and Bajic and Yurtoglu (2018) discovered that social disclosures positively correlate with increased business value. Another category demonstrates the negative impact of disclosure. As per Bhimavarapu and Rastogi (2020), while reporting the disclosures, firms are acquainted with the mindset of investors.

Nonetheless, they disguise the reality by coating the facts with various deceiving techniques. This disguise produces even more investor uncertainty. Studies on South African and Indonesian listed enterprises highlight yet another dimension of the relationship between TD and FV. This dimension uncovers empirical proof that, despite its various benefits, social disclosures do not necessarily positively influence the FV (Oktaviani et al., 2019; Sampong et al., 2018; Alencar, 2005).

Post the identification of this issue. This study empirically assesses TD's influence on the FV of India's healthcare sector. To achieve the goal of this study, the following objective is framed: Determination of the association of TD with healthcare FV.

The motivation for this research is that healthcare is a rapidly expanding sector of the Indian economy (Chandwani, 2021). Recent years have evidenced a rise in human health hazards through outbreaks of several diseases and viruses. Thus, the critical need to connect strategic thinking to health and management processes in a globalized world gets emphasized (Chandwani, 2021). This critical need motivates the study to analyze the influence of TD on the FV of the firms engaged in the healthcare sector. Transparency is an essential virtue in the healthcare industry sector and is evident from the survey conducted worldwide among twenty-seven countries. This evidence reveals that more than half of the healthcare interviewees agreed that information transparency is crucial to a sustainable health system (Kirchmer et al., 2013).

The fact that no previous literature deals with TD's impact on FV for India's healthcare sector make this study novel. Analysis of the said relationship is critical given the recent crises that India's healthcare sector faced during the deadly covid pandemic (Malik, 2022). Healthcare organizations must strive for transparency as it adds fundamental value to the firm (Kirchmer et al., 2013).

The paper's findings have significant implications for administrators in healthcare sectors. Because there are several uncertain disclosure dimensions, some disclosures can prove counter-productive. As a result, managers and analysts in the healthcare sector must assess the safe disclosure level and follow the best CG practices regarding TD.

The first section of this study deals with the introduction; the second section has in it the theoretical framework, literature review, along with hypothesis development are dealt in the third part of the paper respectively. The data used in the study is given in the fourth part, and the methodology is detailed in the fifth part. The sixth segment deals with the discussion of the research, and the study concludes in the seventh part.

2. Theoretical Framework

This study segment is developed to put forth the theoretical concept taken up for the study with the help of a theoretical conceptual model presented in the depicted figure.

Figure 1 displays the approach taken up by the research to attain the results obtained from the analysis. Figure 1 depicts that the study has taken up market-to-book value and market capitalization variables as the proxy for the FV of healthcare enterprises. Several studies on firm value can be found in the prior studies, and they are primarily empirical studies on the influence of CG on the healthcare sector. Numerous studies also deal with corporate disclosure's influence on financial and nonfinancial firms. However, none of them assess TD's

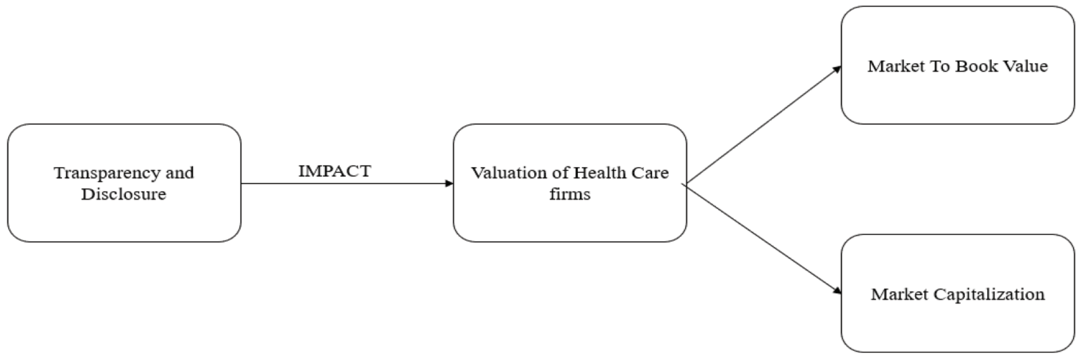

Figure 1: Conceptual Model for the Study

impact on healthcare firms' valuation. From this point of view, this study proves to be novel.

3. Literature Review

Different studies deal with different facets of voluntary disclosures. Voluntary disclosure elements dealt with in these studies range from 20 to 128 (Naser & Nuseibeh, 2003). Most of the Literature pertaining to the healthcare sector focuses on understanding CG and its implementation in healthcare sector firms (Kwedza et al., 2017; Jamali et al., 2010; Brown, 2019). Some studies exclusively deal with the challenges faced in the execution of CG in the healthcare industry (Perkins et al., 2000; Delaney, 2015). However, none of the studies deal with the valuation or the determinants of valuation of the firms involved in the healthcare sector.

Further, Literature on TD considering the healthcare sector is also non-existent. However, TD has the potential to significantly improve the overall financial standing of firms involved in the healthcare sector (Lazarus, 2011). Considering this, the Literature of this study broadly deals with two contradictory findings. One body of Literature deals with the bright side of TD's impact on valuation, while the other talks about the negative impact of TD on the FV.

3.1. The Positive Impact of TD on FV

Most businesses in any sector operate in an unpredictable, obscure, and ever-changing external environment, and transparency allows for improved decision-making (Lazarus, 2011). Big companies play strategically to enhance their corporate image in the long run by improving their TD (Janney et al., 2009; Chang et al., 2007). Disclosure is required to create public value, and highly transparent organizations achieve higher scores of public value. The benefits are reported to multiply when disclosures about the dynamics and design of the firm's environment are made (Douglas & Meijer, 2016). Charumathi and Ramesh (2020) deployed a voluntary disclosure index tailored for Indian-listed enterprises when discussing corporate disclosures. They discovered a positive and noticeable relationship between VD and FV.

Temiz (2021) highlighted that firm performance and FV can be enhanced by minimizing information asymmetries and providing timely and accurate information. Findings also reflect the significance of disclosures in boosting the public image. Healy and Palepu (2001) further stated the significance of a superior disclosure in reducing opacity and improving information symmetry. Greater TD can help to boost information symmetry and do away with agency snags (Bijalwan & Madan, 2013; Cheung et al., 2010). Bhimavarapu et al. (2022) suggested elevated levels of accountability on the part of promoters for increment in TD.

Charumathi and Ramesh (2020) reported the benefits of going beyond mandatory disclosures in the findings of a study. These findings reveal that companies opting for voluntary disclosure of optional information on ESG attract higher market valuation. The market valuation is also gets influenced by the client's trust. When implementing transformation, sustainability in disclosures is a significant and critical criterion to attain the client's trust (Ehms, 2016). ESG disclosures, particularly by companies with lesser insider holdings, better research, and more financial stability, positively impact the valuation of firms (Yu et al., 2018). The significance of sustainability is substantial (Singh et al., 2022). CSR plays a substantial role in substantially increasing the FV (Jihadi et al., 2021). Not just the firm's sustainability but also its valuation gets significantly impacted by the implementation of CSR (Machmuddah et al., 2020).

Madhani (2020) stated that corporate governance (CG) has grown and evolved tremendously over the previous decade. This growth has led many countries to develop CG codes, and the recommendations in a good CG code consider TD a key element in achieving excellent governance. TD is useful for improving corporate governance (CG) and leveling operational efficiency (Lai et al., 2014). Firms can increase their investor trust, reduce capital raising costs, diversify hazards, and increase company valuation by striving for improved governance (Madhani, 2020). FV also gets favorably impacted by high profitability (Sudiyatno et al., 2020).

3.2. The Negative Influence of TD on FV

Contrary to the theories stating a decline in the cost of capital resultant of the disclosures, Brazilian firms witness no such impact of CG in general and disclosures in particular on the cost of capital (Alencar, 2005). Sampong et al. (2018) further deny the overestimated benefits of CSR disclosures on the FV. Transparency in disclosure is to have economic repercussions for businesses, particularly when valuing them (Damodaran, 2007). Rastogi and Kanoujiya (2022) denied any association of disclosure with the financial performance of banking institutions. TD is a waste of scarce resources and has no association with efficiency (Sharma & Rastogi, 2008).

Hassan et al. (2009) find a weak association between VD and FV, though the same is not reported for mandatory disclosures. Further, Gill et al. (2013) mentioned that, for selfish motives concealed in disclosures, penalty management pays through lowered market price of shares and profits. It is evident from the prior studies that studies have considered heterogeneous sectors or unique sectors like; manufacturing or information technology. None of these studies have focused on the healthcare industry—considering the gap, the following hypothesis is framed.

***H1:** Transparency and disclosures positively influence firms' valuation in the healthcare sector.*

4. Data and Method

4.1. Data and Variables

The current paper considers the panel data with the cross-section of healthcare firms listed in India from 2016-2020. The chosen sample and timeframe are essential for Indian firms due to recent regulatory changes in the healthcare industry and the implementation of the Insolvency and Bankruptcy Code (IBC)-2016. The retrieval of data is done from the CMIE Prowess database. The variables are explained in Table 1.

4.2. Methodology

According to Hsiao (2005) and Wooldridge (2010), the panel data analysis is beneficial for providing more information because it exhibits the features of cross-section and time series. Hence, it is capable of giving strong evidence. Moreover, the dynamic model looks for short- and long-run impacts (Wooldridge, 2010). For the analysis assumed hypothesis, the following model is developed:

$$\mathrm{FV}_{it} = \beta_1 \mathrm{FV}_{it(-1)} + \beta_2 \mathrm{TD}_{it} + \beta_3 \mathrm{l\_sales}_{it} + \beta_{it} \quad (1)$$

$$u_{it} = \mu_{it} + v_{it}$$

Where β_j are coefficients, FV is the dependent variable showing the firm's value. FV has two variants, i.e., l_mcap and MTB. TD is transparent, and disclosure and is taken as an explanatory variable. l_sales is kept controlled for the fitness of the model. β_{it} is the error term adding μ_{it} (individual-effect) and μ_{it} (regular error-term). 'it' is for firm' *i*' at year *t*. (–1) is used for lagged value (please refer to Table 1 for variable description).

Table 1: Variables

S. No.	Variables	Type	Code	Explanation	Citations
1	Market-to-book ratio (Firm's value)	DV	MTB	It is one of the popular indicators of a firm's value. Higher MTB shows a higher value of the firm.	Sáenz (2005)
2	Market Capitalization (Firm's value)	DV	l_mcap	It is taken as the proxy of the firm's value. mcap = (total number of a bank's equities)*(current market price of an equity). The natural log value is taken.	Dias (2013), Jayadev (2013)
3	Transparency and Disclosure (T&D)	EV	TD	It represents the level of T&D of information by a firm. The T&D index is generated to measure it.	Aksu and Kosedag (2006), Arsov and Bucevska (2017)
5	Sales	CV	l_sales	It also indicates the firm's value—the amount of sales taken in INR. The natural log of sales is taken.	Jayadev (2013) Dias (2013)

The response variable, explanatory variable, and control variables are shown as DV, EV, and CV, respectively.

Table 2: Measures of Dispersion and Correlation Matrix

Correlation Matrix						
	l_mcap	**MTB**	**TD**	**l_sales**	**Mean**	**SD**
l_mcap	1				10.45	0.65
MTB	0.518*	1			4.17	1.80
TD	0.156	–0. 059	1		0.64	0.04
l_sales	0.475*	0.150	0.008	1	8.70	0.79

*Indicates significance at 0.05.

4.3. Transparency and Disclosure index

In line with Aksu and Kosedag (2006) and Arsov and Bucevska (2017), this study has developed a T&D index for the T&D assessment. A customized T&D index is prepared considering the S&P study. This study uses 102 T&D traits observed in many countries. For an effective T&D index model, the study adds a fresh set of traits (Strategic, Technology, and Basel Disclosures) as per the requirement of the current corporate environment.

The following categories of information are incorporated:

1. Financial Transparency and Information Disclosure (30 traits),
2. Board & Management Structures & Processes (29 traits),
3. Ownership Structure & Investor Relations (10 traits) and
4. Strategic, Technology, and Basel Disclosures (33 traits).

We have used an unweighted approach for disclosure assessment as described in Arsov and Bucevska (2017). For this, ‘1’ is kept for the existence of information and ‘0’ for the non-existence of information.

5. Results

5.1. Measures of Dispersion and Multicollinearity

Table 2 shows the outcomes of measures of dispersion. The MTB has a mean value of 0.518, showing a lower market value of healthcare firms than their book value. l_mcap and l_sales exhibit average values of 10.45 and 8.70, indicating that the healthcare firms in India have a fair value on average. TD has a mean value of 0.64, showing a moderate level of disclosure in healthcare firms.

The correlation matrix in Table 2 shows that the correlation of l_mcap to l_sales and MTB is significant. Both l_sales and MTB correlate positively to l_mcap (with coefficients 0.518 and 0.475, respectively. No other correlation is found significant, as the significant correlations have a value less than 0.80. Therefore, there is no multicollinearity problem (Baltagi, 2008).

Table 3: Dynamic Panel Data Model (Model 1)

DV: l_mcap (Firm Value)			
	Co-efficient	**Standard Error**	***p*-value**
l_mcap (–1)	0.611*	0.052	0.000
TD	–85905.8*	10005.5	0.000
l_sales	14009.5*	1076.04	0.000
Sargan Test	6.942 (0.225)		
Arnello-Bond AR (1)	–1.523 (0.127)		

Sargan test is the test of over-identification issues under the GMM framework. The null hypothesis of the Sargan test is that there are valid over-identification restrictions in a dynamic panel data model. Arnello-Bond test used in the analysis is for serial autocorrelation in the first differenced error terms of the order. (value) presents *p*-value * significant at a 5% level of significance. l_mcap (–1) shows a coefficient at 1 lag indicating the association of the current value with the previous value.

5.2. Dynamic Model Estimation

Table 3 shows the outcomes of the regression analysis. For model diagnosis, the Arellano-Bond test confirms no autocorrelation (as *p*-value > 0.05). The Sargan test also validates over-identification constraints (as *p*-value > 0.05). Therefore, the models are fit (Baltagi, 2008).

The coefficient of l_mcap (–1) (the previous year’s firm’s value) is positive and significant, with a value of 0.6115 and a *p*-value of 0.000. This indicates that the previous firm value positively affects the current FV. TD has a negative and significant coefficient with a value of -85905.8 and a *p*-value of 0.000. This shows that a higher degree of T&D reduces the FV. l_sales is a significant positive control variable (value 14009.5 and *p*-value 0.000).

Table 4: Dynamic Panel Data Model (Model 2)

DV: MTB (Firm Value)			
	Co-efficient	**Standard Error**	***p*-value**
MTB (–1)	0.108	0.233	0.643
TD	–4.990	7.294	0.494
l_sales	0.599*	0.265	0.024

*Significant at a 5% level of significance. MTB (–1) shows a coefficient for 1 lag value to indicate the association of the current value with the previous value.

On considering MTB as a proxy of FV (Table 4), the MTB (–1) has an insignificant coefficient having a value of 0.1083 and a *p*-value of 0.643. Previous MTB (FV) does not affect current MTB (FV). TD is insignificant for MTB as it exhibits a negative (–4.990) and insignificant (p-value > 0.05) coefficient. Hence, TD does not impact FV when it is taken as MTB. l_sales is significant and positive with a coefficient value of 0.5997 and a *p*-value of 0.023.

5.3. Robustness Test

The study exhibits different results in each case (see Tables 3 and 4). Therefore, enough evidence does not exist to ensure robust results on the connection between TD and FV. It means this relationship between TD and firm value varies with the choice of FV.

6. Discussion

6.1. Discussion Regarding Testing of Hypothesis

Contrary to the findings of several works of Literature, a negative relationship between TD and FV is identified. High TD reduces FV in the Indian healthcare sector. This finding, as reflected by model 1, implies that TD is not favorably impacting FV, as depicted by the map in the healthcare sector in India. On the other hand, model 2 shows an insignificant impact of MTB on the FV. The competition may have adversely influenced TD's impact on valuation. The result is more significant because, in the healthcare sector, the rising competition can potentially outweigh the benefits of TD to the firms.

6.2. Comparison of The Results with Existing Literature

Prior studies mostly find a positive relationship between TD and FV in the corporate sector (Charumathi & Ramesh, 2020; Douglas & Meijer, 2016; Temiz, 2021; Madhani, 2020; Tiwari & Kumar, 2015). Some studies, however, have also reported the negative influence of TD on FV (Alencar, 2005; Oktaviani et al., 2019; Sampong et al., 2018). The current study's discoveries are consistent with the Literature that finds a negative association of TD with FV. The findings are inconsistent with most of the previous studies pointing positive impact of TD on FV, probably because none of the previous findings centered around India's healthcare sector. Considering the recent covid crisis and the resource crunch faced by the healthcare sector in India, TD's costs might outweigh the benefits. Further, disclosures are often biased and used to cover up the discrepancy by the management, which proves to be detrimental (Gill et al., 2013). Hence apart from the mandatory disclosures, moderate, if not low, levels of voluntary disclosures would be a safe game to play.

6.3. Contribution and Implications

The findings of this study have important ramifications for stakeholders and policymakers in addition to the healthcare industry. Policymakers can decide the optimum levels of mandatory disclosure, keeping in mind the detrimental impact of some of these disclosures on the healthcare sector. Stakeholders can make the best use of available information to make the relevant decisions without risking probable loss due to disclosures detrimental to profits made by the firms. The healthcare sector can decide the aspects of profitable voluntary disclosures and the dimensions not to ultimately design a moderate level of TD.

7. Conclusion and Limitations

This paper concludes that in the healthcare sector, TD should be moderate. The governance may not be linked to the disclosures, and investors should be wary of this fact. TD either has a negative or insignificant impact on FV. Hence the cost of TD must be considered seriously and weighed against the benefits it can offer, especially in the high competition and expansion phase.

The findings of this study are restricted to the healthcare sector of India. Similar studies could be conducted in other developing economies for cross-sectional analysis in the future. Another scope for future studies lies in the inclusion of more proxies like ROA for the valuation of the firms. Another limitation of the current study is the small sample size, making it tough to generalize the results. Hence a larger sample could be used in future studies, which could be more safely generalized.

Another scope for future research lies in determining components of TD that are favorable and those that are not. This would help understand the exact components of voluntary and mandatory disclosures that influence the valuation of firms. In addition to the index constructed in this study, the development of other industry-specific indices by experts in the field would greatly help assess the cost-benefit of TD on FV.

References

Aksu, M., & Kosedag, A. (2006). Transparency and disclosure scores and their determinants in the Istanbul stock exchange. *Corporate Governance: An International Review*, *14*(4), 277–296. https://doi.org/10.1111/j.1467-8683.2006.00507.x

Alencar, R. (2005). Cost of equity capital and disclosure level in Brazilian companies. *Brazilian Business Review*, *2*(1), 1–12. https://doi.org/10.15728/bbr.2005.2.1.1

Arsov, S., & Bucevska, V. (2017). Determinants of transparency and disclosure–evidence from post-transition economies. *Economic Research-Ekonomska Istraživanja*, *30*(1), 745–760. https://doi.org/10.1080/1331677X.2017.1314818

Athaley, C., Rastogi, S., Goel, A., & Bhimavarapu, V. M. (2020). Factors impacting bank's performance: A literature review. *Test Engineering and Management*, *83*, 7379–7398.

Bajic, S., & Yurtoglu, B. (2018). Which aspects of CSR predict firm market value? *Journal of Capital Markets Studies*, *2*(1), 50–69. https://doi.org/10.1108/JCMS-10-2017-0002

Baltagi, B. H. (2008). Forecasting with panel data. *Journal of Forecasting*, *27*(2), 153–173. https://doi.org/10.1002/for.1047

Basle Committee on Banking Supervision. (1998). Enhancing bank transparency. https://www.bis.org/publ/bcbs41.pdf

Bhimavarapu, V. M., & Rastogi, S. (2020). Valuation of transparency – A systematic literature review paper. *Test Engineering and Management*, *83*(May–June), 9092–9102.

Bhimavarapu, V. M., Rastogi, S., & Kanoujiya, J. (2022). Ownership concentration and its influence on transparency and disclosures of banks in India. *Corporate Governance (Bingley)*. https://doi.org/10.1108/CG-05-2021-0169

Bijalwan, J. G., & Madan, P. (2013). Corporate governance practices, transparency, and performance of Indian companies. *IUP Journal of Corporate Governance*, *12*(3), 45–79.

Brown, A. (2019). Understanding corporate governance of healthcare quality: A comparative case study of eight Australian public hospitals. *BMC Health Services Research*, *19*(1), 725. https://doi.org/10.1186/s12913-019-4593-0

Bruner, C. M. (2011). Corporate governance reform in a time of crisis. *Journal of Corporation Law*, *36*(2), 309–341.

Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2004). What determines corporate transparency? *Journal of Accounting Research*, *42*(2), 207–252. https://doi.org/10.1111/j.1475-679X.2004.00136.x

Chandwani, R. (2021). Stakeholders in the Indian healthcare sector. *Vikalpa: The Journal for Decision Makers*, *46*(2), 65–70. https://doi.org/10.1177/02560909211030356.

Chang, J. H., Cho, Y. J., & Shin, H. H. (2007). The change in corporate transparency of Korean firms after the Asian financial crisis: An analysis using analysts' forecast data. *Corporate Governance An International Review*, *15*(6), 1144–1167. https://doi.org/10.1111/j.1467-8683.2007.00637.x

Charumathi, B., & Ramesh, L. (2020). Impact of voluntary disclosure on the valuation of firms: Evidence from Indian companies. *Vision*, *24*(2), 194–203. https://doi.org/10.1177/0972262920914138

Cheung, Y. L., Jiang, P., & Tan, W. (2010). A transparency disclosure index measuring disclosures: Chinese listed companies. *Journal of Accounting and Public Policy*, *29*(3), 259–280. https://doi.org/10.1016/j.jaccpubpol.2010.02.001

Chi, L. C. (2009). Do transparency and disclosure predict firm performance? Evidence from the Taiwan market. *Expert Systems with Applications*, *36*(8), 11198–11203. https://doi.org/10.1016/j.eswa.2009.02.099

Chua, C. T., Eun, C. S., & Lai, S. (2007). Corporate valuation around the world: The effects of governance, growth, and openness. *Journal of Banking and Finance*, *31*(1), 35–56. https://doi.org/10.1016/j.jbankfin.2006.02.002

Damodaran, A. (2007). Information transparency and valuation: Can you value what you cannot see? *Managerial Finance*, *33*(11), 877–892. https://doi.org/10.1108/03074350710823836

Delaney, L. (2015). The challenges of an integrated governance process in healthcare. *Clinical Governance: An International Journal*, *20*(2), 74–81. https://doi.org/10.1108/CGIJ-02-2015-0005

Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *Journal of Finance*, *46*(4), 1325–1359. https://doi.org/10.1111/j.1540-6261.1991.tb04620.x

Dias, A. (2013). Market capitalization and Value-at-risk. *Journal of Banking and Finance*, *37*(12), 5248–5260. https://doi.org/10.1016/j.jbankfin.2013.04.015

Douglas, S., & Meijer, A. (2016). Transparency and public value—Analyzing the transparency practices and value creation of public utilities. *International Journal of Public Administration*, *39*(12), 940–951. https://doi.org/10.1080/01900692.2015.1064133

Ehms, A. M. (2016). Sustainable implementation of new technologies: A valuation method for healthcare supply chains. *PM World Journal*, *5*(6), 1–11.

Gill, A., Biger, N., Mand, H. S., & Mathur, N. (2013). Earnings management, firm performance, and the value of Indian manufacturing firms. *International Research Journal of Finance and Economics*, *116*(1), 121–131.

Hassan, O. A. G., Romilly, P., Giorgioni, G., & Power, D. (2009). The value relevance of disclosure: Evidence from the emerging market of Egypt. *International Journal of Accounting*, *44*(1), 79–102. https://doi.org/10.1016/j.intacc.2008.12.005

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. https://doi.org/10.1016/S0165-4101(01)00018-0

Hsiao, C. (1985). Benefits and limitations of panel data. *Econometric Reviews*, *4*(1), 121–174. https://doi.org/10.1080/07474938508800078

Jamali, D., Hallal, M., & Abdallah, H. (2010). Corporate governance and corporate social responsibility: Evidence from the healthcare sector. *Corporate Governance*, *10*(5), 590–602. https://doi.org/10.1108/14720701011085562

Janney, J. J., Dess, G., & Forlani, V. (2009). Glass houses? Market reactions to firms joining the un global compact. *Journal of Business Ethics*, *90*(3), 407–423. https://doi.org/10.1007/s10551-009-0052-x

Jayadev, M. (2013). Basel III implementation: Issues and challenges for Indian banks. *IIMB Management Review*, *25*(2), 115–130. https://doi.org/10.1016/j.iimb.2013.03.010

Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. *Journal of Asian Finance, Economics, and Business*, *8*(3), 423–431. https://doi.org/10.13106/jafeb.2021.vol8.no3.0423

Kirchmer, M., Laengle, S., & Masias, V. (2013). Transparency-driven business process management in healthcare settings [leading edge]. *IEEE Technology and Society Magazine*, *32*(4), 14–16. https://doi.org/10.1109/MTS.2013.2286427

Kwedza, R. K., Larkins, S., Johnson, J. K., & Zwar, N. (2017). Perspectives of rural and remote primary healthcare services on the meaning and goals of clinical governance. *Australian Journal of Primary Health*, *23*(5), 451–457. https://doi.org/10.1071/PY16168

Lai, S. M., Liu, C. L., & Wang, T. (2014). Increased disclosure and investment efficiency. *Asia-Pacific Journal of Accounting and Economics*, *21*(3), 308–327. https://doi.org/10.1080/16081625.2012.741791

Lazarus, I. R. (2011). On the road to find out transparency and just culture offer a significant return on investment. *Journal of Healthcare Management, 56*(4), 223–227. https://doi.org/10.1097/00115514-201107000-00003

Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*, *38*(3), 91–124. https://doi.org/10.2307/2672910

Machmuddah, Z., Sari, D. W., & Utomo, S. D. (2020). Corporate social responsibility, profitability, and firm value: Evidence from Indonesia. *Journal of Asian Finance, Economics, and Business*, *7*(9), 631–638. https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.631

Madhani, P. M. (2020). Value addition through good governance in the corporate sector: Role of disclosure and transparency. *SSRN Electronic Journal, 15, 36-43*. https://doi.org/10.2139/ssrn.1702823

Malik, M. A. (2022). Fragility and challenges of health systems in a pandemic: Lessons from India's second wave of coronavirus disease 2019 (COVID-19). *Global Health Journal*, *6*(1), 44–49. https://doi.org/10.1016/j.glohj.2022.01.006

Morris, R. D., Pham, T., & Gray, S. J. (2011). The value relevance of transparency and corporate governance in Malaysia before and after the Asian financial crisis. *Abacus*, *47*(2), 205–233. https://doi.org/10.1111/j.1467-6281.2011.00339.x

Naser, K., & Nuseibeh, R. (2003). Quality of financial reporting: Evidence from the listed Saudi nonfinancial companies. *International Journal of Accounting*, *38*(1), 41–69. https://doi.org/10.1016/S0020-7063(03)00002-5

Oktaviani, R. M., Susanti, D. T., & Sunarto, U. (2019). The effect of profitability, tax avoidance and information transparency on firm value: An empirical study in Indonesia. *International Journal of Technology Research*, *8*(11), 3777–3780.

Perkins, R., Barnett, P., & Powell, M. (2000). Corporate governance of public health services: Lessons from New Zealand for the state sector. *Australian Health Review*, *23*(1), 9–21. https://doi.org/10.1071/ah000009

Pinto, G., Rastogi, S., Kadam, S., & Sharma, A. (2019). Bibliometric study on dividend policy. *Qualitative Research in Financial Markets*, *12*(1), 72–95. https://doi.org/10.1108/QRFM-11-2018-0118

Rastogi, S. (2013). Long-term association of stock markets of different nations: An empirical study. *Vision: The Journal of Business Perspective*, *17*(4), 303–313. https://doi.org/10.1177/0972262913505372

Rastogi, S. (2014). The financial crisis of 2008 and stock market volatility – Analysis and impact on emerging economies pre and post crisis. *Afro-Asian J. of Finance and Accounting*, *4*(4), 443–459. https://doi.org/10.1504/AAJFA.2014.067017

Rastogi, S. (2015). Identification of factors for investments in mutual funds through banks. *Asia-Pacific Journal of Management Research and Innovation*, *11*(2), 128–133. https://doi.org/10.1177/2319510X15576189

Rastogi, S., & Kanoujiya, J. (2022). Does transparency and disclosure (T&D) improve the performance of banks in India? *International Journal of Productivity and Performance Management, 51,* 611. https://doi.org/10.1108/IJPPM-10-2021-0613

Rastogi, S., Lele, A., R., & Saraswathy, V. M. (2020). Unravelling facets of employer branding leading to talent retention: A study of Indian KPO industry. *Test Engineering and Management*, *83*, 9103–9119.

Sáenz, J. (2005). Human capital indicators, business performance and market-to-book ratio. *Journal of Intellectual Capital*, *6*(3), 374–384. https://doi.org/10.1108/14691930510611111

Sampong, F., Song, N., Boahene, K. O., & Wadie, K. A. (2018). Disclosure of CSR performance and firm value: New evidence from South Africa on the basis of the GRI guidelines for sustainability disclosure. *Sustainability*, *10*(12), 1–28. https://doi.org/10.3390/su10124518

Sharma, A., & Rastogi, S. (2008). Voluntary disclosures of Indian microfinance institutions. *Australasian Business, Accounting and Finance Journal*, *16*(3), 108–130. https://doi.org/10.14453/aabfj.v16i3.08

Shingade, S. S., & Rastogi, S. (2020). Issues raised by activist shareholders: A review of Literature. *Test Engineering and Management*, *83,* 9891–9897.

Singh, S., Rastogi, S., & Bhimavarapu, V. M. (2022). Do informed investors prefer futures? *International Journal of Modern Agriculture*, *9*(3), 257–262.

Srivastava, & Rastogi. (2010). Corporate governance: An empirical study of Indian companies. *Gurukul Business Review*, *6*, 63–68.

Sudiyatno, B., Puspitasari, E., Suwarti, T., & Asyif, M. M. (2020). Determinants of firm value and profitability: Evidence from Indonesia. *Journal of Asian Finance, Economics and Business*, *7*(11), 769–778. https://doi.org/10.13106/jafeb.2020.vol7.no11.769

Taylor, J., Vithayathil, J., & Yim, D. (2018). Are corporate social responsibility (CSR) initiatives such as sustainable development and environmental policies value-enhancing or window dressing? *Corporate Social Responsibility and Environmental Management*, *25*(5), 971–980. https://doi.org/10.1002/csr.1513

Temiz, H. (2021). The effects of corporate disclosure on firm value and firm performance: Evidence from Turkey. *International Journal of Islamic and Middle Eastern Finance and Management*, *14*(5), 1061–1080. https://doi.org/10.1108/IMEFM-06-2020-0269

Tiwari, R., & Kumar, B. (2015). Drivers of firm's value: Panel data evidence from Indian manufacturing industry. *Asian Journal of Finance and Accounting*, *7*(2), 1–22. https://doi.org/10.5296/ajfa.v7i2.7243

Wooldridge, J. M. (2010). *Econometric analysis of cross-section and panel data*. Cambridge, MA: MIT Press.

Yu, E. P., Guo, C. Q., & Luu, B. V. (2018) Environmental, social and governance transparency and firm value. *Business Strategy and the Environment*, *27*(7), 987–1004. https://doi.org/10.1002/bse.2047