
Voluntary Human Capital Disclosure and Firm Value Relationship in the Listed Companies of Bangladesh: A Conceptual Overview

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Abstract - The aim of this paper is to incorporate relevant empirical researches and literature for extending the potentials of voluntary human capital disclosure to increase the value of the listed firms in Bangladesh. Voluntary human capital disclosure reduces information asymmetry and increases the financial lucidity of the business, and hence, could minimize agency conflicts, and satisfy employees' and other stakeholders' of the business. However, subsequent to a 13.8 percent drop in 2018, the broad index of the Dhaka Stock Exchange Limited lost 17.3 percent in 2019. It is among the first paper focusing on the consequence of voluntary human capital disclosures on firm value from a combination of agency theory, signaling theory, and stakeholder theory perspective. Moreover, extant literature endow with inconsistent and less evidence concerning the relationship of voluntary human capital disclosure with firm value. The present paper proposes and illustrates potential proposition for future empirical investigation in the context of an emerging economy like Bangladesh. It is also expected that the present paper would endow with further knowledge to investors, managers, and other stakeholders to upgrade firm value by means of voluntary human capital disclosure in their corporate reporting practices.

Keywords - *Agency Theory, Firm Value, Signaling Theory, Stakeholder Theory, Voluntary Human Capital Disclosure*

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I. Introduction

Voluntary disclosure is characterized as any information which is added to mandatory disclosure (Bhuyan, 2018). Human capital (HC) is a constituent of intellectual capital (IC) (Osman & Ngah, 2016) that comprises the stock of traits which employees provide, for instance skills, knowledge, experience, dedication and leadership, in return for wages and salaries (Roslender et al., 2012). HC is an imperative and indispensable property that contributes to improvement as well as expansion similar to physical capital, for example

machinery and other functioning resources (Stockley, 2003). Besides, HC is believed as a key resource used for sustainable benefits, and might give assistances like falling information inequity (Fontana & Macagnan, 2013). Moreover, investors are concerned in HC information as it is regarded as an important component within the value-making courses of action of firms (Massingham et al., 2011; Claver-Cortés et al., 2015). Hence, finding an efficient way to documentation and report HC issues assist firms to recognize value of critical resources, which in succession allow them to handle their HC effectively for gaining competitive advantage (Hatch & Dyer, 2004; Ployhart et al., 2014).

Firms which release more HC information could figure common understanding involving employees and employer as well as gather employees' devotion along with endeavors (Meyer et al., 2004) for increasing production competence or to provide improved service to clients with the intention that the business be able to attain superior operational efficacy as well as economic outcome (Lin et al., 2012). However, Bangladesh has achieved a steady economic growth above six percent after the millennium period (Zheng et al., 2017). To keep up growth, it needs stability in precedence development of human capital, infrastructure, economic, fiscal and business law areas (Hossen, 2019). Investment in HC could help to achieve greater productivity (Jalil & Kamaruddin, 2018). Besides, financial crises are often blamed to weak corporate governance, transparency along with disclosure practices (Gul & Leung, 2004; Ntim et al., 2012). Bangladesh, being a comparatively young nation and an acknowledged frontier market, has large prospects to take benefit of human capital intended for greater financial and organizational performance (Chowdhury et al., 2019). Moreover, the echelon of voluntary disclosures differs in corporate reporting as of nation to nation (Boesso & Kumar, 2007) in addition to corporation to corporation (Abeysekera, 2007). Hence, there is a large scope to broaden current literature through looking at voluntary HC disclosures as of a divergent research environment. The present paper has looked at the impact of voluntary HC disclosures on firm value in the context of an emerging economy like Bangladesh.

II. Problem Statement

In Bangladesh, stock investors have endured the worst year in 2019 subsequent to the market crash in 2010-11 (Dhaka Tribune, 2020). Market key index, DSEX, witnessed 7-year record negative index return, -17.30% or 932.70 points in the year 2019 next to negative return of -13.80% in 2018; whereas bourses in five other neighboring and emerging Asian countries achieved growth in the same period (Dhaka Tribune, 2020). The marketplace has been in the pessimism almost the whole time of the year 2019 together with investors' confidence crisis (The Financial Express, 2019). The average share values of textile sector dropped by 30.00 percent, non-bank financial institution 26.10 percent, telecommunication 21.50 percent, energy 10.00 percent and bank 8.10 percent during the year 2019 (NEW AGE, 2019).

However, the market price of equity is an integral element of the value of a firm and is involved with both the performance of tangible as well as intangible resources. Besides, HC is an imperative intangible resource of a firm, and thus, human capital disclosure could contribute to firm value through enhancing human capital performance. Accordingly, HC disclosures have positive link with firm performance (Maditinos et al., 2011). However, human capital disclosures might lessen the information asymmetry among the employees, investors, management and other stakeholders. Moreover, human capital disclosure is value relevant as well (Dumay & Cai, 2014) for its signaling value to the end-users of released information. Hence, on the basis of agency, signaling, and stakeholder theory, our assumption is that more voluntary human capital disclosure could improve the value of the listed firms in Bangladesh.

III. Literature Review

Employee disclosure provides most employees good inspiration to employ all their abilities to achieve company goals, as well as employee disclosures have an influence on employee commitment with sincerity, transparency, and employee performance (Bayoud et al., 2012). Moreover, measurements as well as disclosures of HC stock, flow, along with excellence (Ployhart et al., 2011) are important for business firms to efficient managing of decisive resource in addition to better control of knowledge, skill and capabilities of members of staff for achieving competitive benefit above the contestants (Beattie & Smith, 2010). Besides, both current employees and potential employees have need of information concerning the firm's HC policy along with practice, so that they could make decisions after detailed consideration (Hansson, 2004).

Corporate performance is notably influenced by intellectual capital, especially by human capital (Mavridis & Kyrmizoglou, 2005). However, institutions would mislay their competitiveness if not concentrate on human capital during strategic decision making and place importance on this significant resource in their reporting practices (Ali et al., 2008). Moreover, HC is the foremost source of a firm's intangible resources (Kalkan et al., 2014), and assists the other intellectual capital constituents, which in sequence have a direct effect on firm

performance (Kim et al., 2012). Therefore, disclosures on human resource might accelerate the firm's sustainable performance (Dominguez, 2011).

Human capital and physical capital are the most important driving forces of value making (Young et al., 2009). Besides, companies are advantaged from general disclosure with an easier access to the capital market, an improvement in corporate stock liquidity or even a decline in the cost of capital (Botosan & Plumlee, 2002; Gietzmann & Ireland, 2005). Likewise, Basir et al. (2001) described that the assessing and reporting of HC related information in firms could be an excellent medium for making decision makers more accountable and translucent to all the stakeholders. Hence, information regarding employees' qualification and capability is positively linked to the stock price (Gamerschlag, 2013).

In the perspective of Bangladesh, Mamun (2009) found that larger firms with higher market value releases more human resource accounting (HRA) information than smaller firms, and profitability positively persuades for reporting HRA information in the annual reports. Rahman et al. (2019) found that intellectual capital disclosure has positive association with firm performance. Similarly, Alam and Deb (2010) found an upbeat connection of profitability with the echelon of human resource accounting disclosure. Besides, Dey and Faruq (2019) found that profitability has no significant impact towards intellectual capital disclosure quality. However, decision makers in Bangladeshi companies now focusing on reforming organizational control systems, placing new attention into both customer and employee contentment in the quest of competitive advantages (e.g. Basir et al., 2001; Ali et al., 2008).

IV. Research Gap

Very limited number of researches has taken a look at the relationship of voluntary human capital disclosures with firm value in the context of emerging economies. Besides, current literature has found an inconsistent relationship between voluntary HC disclosure and corporate performance (e.g. Hossain & Hammami, 2009; Lin et al., 2012; Dumay & Cai, 2014; Anifowose et al., 2017). It is also among the first paper focusing on the upshot of voluntary human capital disclosures on firm value from a combination of agency, signaling and stakeholder theory perspective in the context of an emerging economy like Bangladesh.

V. Research Question and Objective

The objective of the present study is to look at the liaison between voluntary HC disclosures and firm value. Accordingly, to attain the study objective, the research question of the present paper is 'Is there any link between voluntary HC disclosures and firm value?'

VI. Significance of the Study

The present study is an attempt to broaden current literature by looking at voluntary human capital disclosures and firm value relationship in the context of Bangladeshi listed companies. Besides, the study will endow with additional knowledge to agency theory, signaling theory, and stakeholder theory based on the association between voluntary HC disclosure and firm value in the context of an emerging economy. Moreover, it will serve as a foundation for future research on human capital disclosure practices, and its relationship with firm value in the perspective of Bangladesh. A greater understanding of this relationship could help to advance the corporate reporting practices so as to obtain maximum firm value.

Although a large number of academic studies have examined the contributing factors to firm value, there is limited number of studies, which has looked into the impact of human capital disclosure on firm value. Besides, findings of the prior studies are inconsistent. Moreover, Bangladeshi companies still have further spaces to improve their human capital reporting practices. The study would act as an inspiration for the companies' management as well as shareholders to incorporate human capital disclosure as one of their major strategies to achieve competitive benefit while satisfying the other stakeholders' wants. In addition, the empirical phase of this paper would facilitate investors in reviewing whether the listed firms in Bangladesh are conforming to the full disclosure requirement into their annual reports.

VII. Underlying Theories

From the perspective of agency theory, conflicts may come up between the principal and agent due to their intention to maximize personal benefits by any means, which is termed as agency conflicts (Jensen & Meckling, 1976). These conflicts could get worse, when managers make information asymmetry to take information advantage while communicating with shareholders, employee and other stakeholders. Furthermore, agency theory (Fama & Jensen, 1983) argues that voluntary disclosure of information might decrease the information

asymmetry between management and other contracting parties. Accordingly, voluntary disclosure increases information transparency, and hence, could reduce driving force for managerial opportunistic deeds (Li et al., 2008).

Human resources are crucial for long-term achievement of an institution, besides, stakeholders such as investors, creditors, workforce, employee envoys, regulatory bodies, along with non-governmental institutions have need of human resource related news (Yi & Davey, 2010). However, stakeholder theory gives explanations about the dealings of an organization in relation to the needs of a variety of stakeholders from a business (Yi et al., 2011). Moreover, firms form common understanding concerning the employer and employees by means of disclosing more human capital associated information to raise employees' commitment and efforts with the intention that institutions might accomplish enhanced operational effectiveness together with monetary upshot (Meyer et al., 2004).

Investors as well as other stakeholders could reassess the present status and future prospects of an organization on the basis of news communicated through signal (Whiting & Miller, 2008). However, signaling theory explains how to deal with issues about to happen as of information unevenness within societal surroundings (Yi et al., 2011). Moreover, HC disclosures might function like a signal which transfers important information towards investors and have an effect on marketplace performance; besides, HC disclosures as well convey significant information to workforce that enhance the operating as well as economic performance of a firm (Lin et al., 2012).

However, usage of a single theory may not enough for all time to completely elucidate complex issues (Chen & Roberts, 2010) along with agree to widespread research (Leventis & Weetman, 2004; An et al., 2011). Besides, a combination of theories could afford more in-depth together with complete explanation (Bhuyan, 2018). In this paper, we have utilized a combination of agency, signaling and stakeholder theory to sketch our conceptual proposition.

VIII. Proposition Development

Voluntary human capital disclosure supplies human capital associated information to stakeholders, and thus, could reduce the information asymmetry among employees, management, investors and other stakeholders. Accordingly, human capital disclosure has positive effect on organizational performance (Lin et al., 2012). Besides, human capital disclosure eases the communication with stakeholders (Abeysekera & Guthrie, 2004). Furthermore, intellectual capital disclosure of a company affects the market value (Curado et al., 2011). Information disclosure on intellectual resources, for instance human resource capital has positive association with company performance (Lev, 2001; Chen et al., 2005) as well as company stock prices (Dumay & Cai, 2014). Moreover, voluntary HC disclosure might increase the quality of disseminated information with annual reports. The quality of information is more valuable to investors than the quantity of information; hence, it has a good influence on firm performance (Zhang & Li, 2005; Beretta & Bozzolan, 2008). Therefore, human resource disclosure is positively associated with company reputation and image (Dominguez, 2011). However, human capital disclosures would be beneficial if the organization and its stakeholders are competent to make sense of the HC disclosures together with relate them into daily operational activities as well as decision making procedure (Giuliani, 2016). In summary, firm performance is immensely associated to the eagerness of disclosing more voluntary information (Hamrouni et al., 2015).

Moreover, on the basis of agency theory human capital disclosure could reduce the agency conflicts through dropping information asymmetry, which in turn might induce firm value. Similarly, consistent with agency theory, information asymmetry could be mollified by the excellence of corporate reporting and disclosure (Ascioglu et al., 2012; Boubaker et al., 2015). Signaling theory as well argues that human capital disclosure could provide signal to the employees regarding the benefits and managerial initiatives for the employees, which in turn, might stimulate the employee performance as well as firm performance. Furthermore, voluntary human capital disclosure could create a positive impression on stakeholders' mind as it enhances the transparency of the firm, besides; more disclosure might make an annual report more trustworthy to its stakeholders. Thus, on the basis of agency theory, signaling theory, stakeholder theory and above discussion, our proposition is that voluntary human capital disclosure has positive association with firm value.

IX. Conclusion

The salient intention of the present study is to motivate voluntary human capital disclosure practices in the listed firms of Bangladesh, as well as finding out the consequence of voluntary human capital disclosure towards firm value. Accordingly, the empirical phase of our research proposition could facilitate to generalize the upshot of HC disclosures on firm value in the context of listed companies in Bangladesh. Moreover, since the proposition of the paper corresponds to the potential association of voluntary HC disclosure with firm value

its empirical extension would make use of a correlation study. It is also hoped that the empirical phase of the present paper would make available further knowledge to investors, managers, and other stakeholders to enhance voluntary human capital disclosure in their corporate reporting practices to upgrade firm value. Hence, it is expected that the conceptual background and proposition of the paper will be extended towards an empirical phase.

References

- Abeysekera, I. (2007). Intellectual capital reporting between a developing and developed nation. *Journal of Intellectual Capital*, 8(2), 329-345.
- Abeysekera, I., & Guthrie, J. (2004). Human capital reporting in a developing nation. *The British Accounting Review*, 36(3), 251-268.
- Alam, I., & Deb, S. K. (2010). Human resource accounting disclosure (HRAD) in Bangladesh: multifactor regression analysis - a decisive tool of quality assessment. *The Cost and Management*, 38(3), 9-13.
- Ali, M. M., Khan, M. H. U. Z., & Fatima, J. K. (2008). Intellectual capital reporting practices: evidence from Bangladesh. *Dhaka University Journal of Business Studies*, 29(1), 23-45.
- An, Y., Davey, H., & Eggleton, I. R. C. (2011). Towards a comprehensive theoretical framework for voluntary IC disclosure. *Journal of Intellectual Capital*, 12(4), 571-585.
- Anifowose, M., Rashid, H. M. Ab., & Annuar, H. A. B. (2017). Determinant of human capital disclosure in the post IFRS regime: an examination of listed firms in Nigeria. *Malaysian Accounting Review (MAR)*, 16(2), 1-20.
- Ascioglu, A., Hegde, S. P., Krishnan, G. V., & McDermott, J. B. (2012). Earnings management and market liquidity. *Review of Quantitative Finance and Accounting*, 38(2), 257-274.
- Basir, M. H., Mehadi, H., & Khan, M. H. (2001). Are there any practice to account human resources investment: a study from selected Bangladeshi firms. *Journal of Business Studies*, 20(2), 123-135.
- Bayoud, N. S., Kavanagh, M., & Slaughter, G. (2012). Corporate social responsibility disclosure and employee commitment: evidence from Libya. *International Journal of Economics and Finance*, 4(5), 37-50.
- Beattie, V., & Smith, S. J. (2010). Human capital, value creation and disclosure. *Journal of Human Resource Costing & Accounting*, 14(4), 262-285.
- Beretta, S., & Bozzolan, S. (2008). Quality versus quantity: the case of forward-looking disclosure. *Journal of Accounting, Auditing & Finance*, 23(3), 333-376.
- Bhuyan, M. S. S. (2018). Determinants and Effects of Voluntary Disclosure with a focus on Corporate Governance and Firm Performance: Evidence from Bangladesh, Doctor of Philosophy Thesis, School of Accounting, Economics and Finance, University of Wollongong, available at: <https://ro.uow.edu.au/theses1/369/>
- Boesso, G., & Kumar, K. (2007). Drivers of corporate voluntary disclosure: a framework and empirical evidence from Italy and the United States. *Accounting, Auditing & Accountability Journal*, 20(2), 269-296.
- Botosan, C. A., & Plumlee, M. A. (2002). A re-examination of disclosure level and the expected cost of equity capital. *Journal of Accounting Research*, 40(1), 21-40.
- Boubaker, S., Hamrouni, A., & Liang, Q. B. (2015). Corporate governance, voluntary disclosure, and firm information environment. *Journal of Applied Business Research*, 31(1), 89-102.
- Chen, J. C., & Roberts, R. W. (2010). Toward a more coherent understanding of the organization-society relationship: a theoretical consideration for social and environmental accounting research. *Journal of Business Ethics*, 97(4), 651-665.
- Chen, M. C., Cheng, S. J., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital*, 6(2), 159-176.
- Chowdhury, L. A. M., Rana, T., & Azim, M. I. (2019). Intellectual capital efficiency and organisational performance in the context of the pharmaceutical industry in Bangladesh. *Journal of Intellectual Capital*, 20(6), 784-806.
- Claver-Cortés, E., Zaragoza-Sáez, P. C., Molina-Manchón, H., & Úbeda-García, M. (2015). Intellectual capital in family firms: human capital identification and measurement. *Journal of Intellectual Capital*, 16(1), 199-223.
- Curado, C., Henriques, L., & Bontis, N. (2011). Intellectual capital disclosure payback. *Management Decision*, 49(7), 1080-1098.
- Dey, P. K., & Faruq, M. O. (2019). Determinants of intellectual capital disclosure: an investigation on DS30 firms in Bangladesh. *Asian Journal of Accounting Perspectives*, 12(2), 27-48.
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- Dhaka Tribune (2020). As Bangladesh stock market goes down, bourses in emerging Asia go up. Retrieved May 15, 2020, from Dhaka Tribune Website: <https://www.dhakatribune.com/business/stock/2020/01/02/as-bangladesh-stock-market-goes-down-bourses-in-emerging-asia-go-up>
- Dominguez, A. A. (2011). The impact of human resource disclosure on corporate image. *Journal of Human Resource Costing & Accounting*, 15(4), 279-298.
- Dumay, J., & Cai, L. (2014). A review and critique of content analysis as a methodology for inquiring into IC disclosure. *Journal of Intellectual Capital*, 15(2), 264-290.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, 26(2), 327-349.
- Fontana, F. B., & Macagnan, C. B. (2013). Factors explaining the level of voluntary human capital disclosure in the Brazilian capital market. *Intangible Capital*, 9(1), 305-321.
- Gamerschlag, R. (2013). Value relevance of human capital information. *Journal of Intellectual Capital*, 14(2), 325-345.
- Gietzmann, M., & Ireland, J. (2005). Cost of capital, strategic disclosures and accounting choice. *Journal of Business Finance & Accounting*, 32(3/4), 599-634.
- Giuliani, M. (2016). Sensemaking, sensegiving and sensebreaking: the case of intellectual capital measurements. *Journal of Intellectual Capital*, 17(2), 218-237.
- Gul, F. A., & Leung, S. (2004). Board leadership, outside directors' expertise and voluntary corporate disclosures. *Journal of Accounting and Public Policy*, 23(5), 351-379.
- Hamrouni, A., Miloudi, A., & Benkraiem, R. (2015). Signaling firm performance through corporate voluntary disclosure. *Journal of Applied Business Research*, 31(2), 609-620.
- Hansson, B. (2004). Human capital and stock returns: is the value premium an approximation for return on human capital? *Journal of Business Finance & Accounting*, 31(3-4), 333-358.
- Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25(12), 1155-1178.
- Hossain, M., & Hammami, H. (2009). Voluntary disclosures in the annual reports of an emerging country: the case of Qatar. *Advances in Accounting*, 25(2), 255-265.
- Hossen, M. N. (2019). Challenges to banking sector of BD. Retrieved May 15, 2020, from Website: <https://www.observerbd.com/details.php?id=195260>
- Jalil, S. A., & Kamaruddin, M. N. (2018). Examining the relationship between human development index and socio-economic variables: a panel data analysis. *Journal of International Business, Economics and Entrepreneurship*, 3(2), 37-44.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Kalkan, A., Bozkurt, Ö. Ç., & Arman, M. (2014). The impacts of intellectual capital, innovation and organizational strategy on firm performance. *Procedia-Social and Behavioral Sciences*, 150, 700-707.
- Kim, T., Kim, W. G., Park, S. S., Lee, G., & Jee, B. (2012). Intellectual capital and business performance: what structural relationships do they have in upper-upscale hotels? *International Journal of Tourism Research*, 14(4), 391-408.
- Lev, B. (2001). *Intangibles: management, measurement, and reporting*. Brookings Institution Press, Washington DC, 113-122.
- Leventis, S., & Weetman, P. (2004). Voluntary disclosures in an emerging capital market: some evidence from the Athens stock exchange. *Advances in International Accounting*, 17(17), 227-250.
- Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. *Accounting and Business Research*, 38(2), 137-159.
- Lin, L. S., Huang, I. C., Du, P. L., & Lin, T. F. (2012). Human capital disclosure and organizational performance: the moderating effects of knowledge intensity and organizational size. *Management Decision*, 50(10), 1790-1799.
- Maditinos, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on companies' market value and financial performance. *Journal of Intellectual Capital*, 12(1), 132-151.
- Mamun, S. A. A. (2009). Human resource accounting (HRA) disclosure of Bangladeshi companies and its association with corporate characteristics. *BRAC University Journal*, 6(1), 35-43.
- Massingham, P. R., Nguyen, C., & Massingham, R. (2011). Using 360 degree peer review to validate self-reporting in human capital measurement. *Journal of Intellectual Capital*, 12(1), 43-74.
- Mavridis, D. G., & Kyrmizoglou, P. (2005). Intellectual capital performance drivers in the Greek banking sector. *Management Research News*, 28(5), 43-62.
- Meyer, J. P., Becker, T. E., & Vandenberghe, C. (2004). Employee commitment and motivation: a conceptual analysis and integrative model. *Journal of Applied Psychology*, 89(6), 991-1007.

- NEW AGE (2019). 2019 worst year for stocks after '10 crash. Retrieved May 15, 2020, from NEW AGE Business Website: <https://www.newagebd.net/article/95096/2019-worst-year-for-stocks-after-10-crash>
- Ntim, C. G., Opong, K. K., Danbolt, J., & Thomas, D. A. (2012). Voluntary corporate governance disclosures by post-apartheid South African corporations. *Journal of Applied Accounting Research*, 13(2), 122-144.
- Osman, C. A., & Ngah, R. (2016). Assessing sustainable competitive advantage in relation with intellectual capital, knowledge management and innovativeness in women-owned SMEs in Malaysia. *Journal of International Business, Economics and Entrepreneurship*, 1(1), 46-51.
- Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead: long live human capital resources! *Journal of Management*, 40(2), 371-398.
- Ployhart, R. E., Van Iddekinge, C. H., & Mackenzie, W. I. (2011). Acquiring and developing human capital in service contexts: the interconnectedness of human capital resources. *Academy of Management Journal*, 54(2), 353-368.
- Rahman, M. M., Sobhan, R., & Islam, M. S. (2019). Intellectual capital disclosure and its determinants: empirical evidence from listed pharmaceutical and chemical industry of Bangladesh. *The Journal of Business Economics and Environmental Studies*, 9(2), 35-46.
- Roslender, R., Stevenson, J. E., & Kahn, H. (2012). Towards recognising workforce health as a constituent of intellectual capital: insights from a survey of UK accounting and finance directors. *Accounting Forum*, 36(4), 266-278.
- Stockley, D. (2003). E-learning definition and explanation, available at: <http://derekstockley.com.au/elearning-definition.html>
- The Financial Express (2019). A gloomy year for stock investors. Retrieved May 15, 2020, from The Financial Express Website: <https://thefinancialexpress.com.bd/stock/a-gloomy-year-for-stock-investors-1577765965>
- Whiting, R. H., & Miller, J. C. (2008). Voluntary disclosure of intellectual capital in New Zealand annual reports and the 'hidden value'. *Journal of Human Resource Costing & Accounting*, 12(1), 26-50.
- Yi, A., & Davey, H. (2010). Intellectual capital disclosure in Chinese (mainland) companies. *Journal of Intellectual Capital*, 11(3), 326-347.
- Yi, A., Davey, H., & Eggleton, I. R. C. (2011). Towards a comprehensive framework for voluntary IC disclosure. *Journal of Intellectual Capital*, 12(4), 571-585.
- Young, C. S., Su, H. Y., Fang, S. C., & Fang, S. R. (2009). Cross-country comparison of intellectual capital performance of commercial banks in Asian economies. *The Service Industries Journal*, 29(11), 1565-1579.
- Zhang, P., & Li, N. (2005). The importance of affective quality. *Communications of the ACM*, 48(9), 105-108.
- Zheng, C., Rahman, M. M., Begum, M., & Ashraf, B. N. (2017). Capital regulation, the cost of financial intermediation and bank profitability: evidence from Bangladesh. *Journal of Risk and Financial Management*, 10(2), 1-24.
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