Journal of Commerce & Accounting Research
10 (2) 2021, 53-63
http://publishingindia.com/jcar/

Submitted: 21 October, 2020
Accepted: 03 February, 2021

RELATIONSHIP BETWEEN BANK-SPECIFIC ATTRIBUTES AND WEB-BASED DISCLOSURES - THE CASE OF INDIA

Manpreet Kaur*, Mandeep Kaur**

Abstract *This paper examines the association between bank-specific attributes (such as bank size, financial performance and corporate governance) and web disclosure practices of top thirty Indian commercial banks. To meet this purpose, a disclosure index of 101 items of information was developed. To examine the hypotheses of the study, an OLS Regression model was estimated on the sample of top thirty Indian banks. OLS regression results indicate that large-sized banks are more likely to use the websites to disclose information. On the contrary, financial performance and corporate governance practices have not shown any relationship with the disclosure score of Indian banks. The study contributes to the existing literature on web-based disclosure and the findings are useful for managers and investors. The study will help the managers to meet the actual and potential informational need of the investors; for the investor, it will help to make investment decisions and assessed the firm value in a better way.*

Keywords: *Disclosure, Internet, Web, Size, Corporate Governance*

INTRODUCTION

The web has played an important role in information disclosure. It helps in the dissemination of timely, easily assessable and relevant information to the investors which are the prime requirement of financial market to be efficient. voluntary information disclosure is a recent trend in companies which helps to attract more investors. Because, the companies which disclose voluntary information are considered more reliable companies for investment purposes. There are a number of channels to disclose information but the web is more powerful and preferable source because it's readily availability in all over the world (Henchiri, 2011). Thus, web has developed a dynamic environment for the companies willing to interact with stakeholders and to attract potential ones.

Web disclosure states the utilization of World Wide Web (WWW) by companies to disseminate financial and non-financial information (Lymer et al., 1999). Moreover, the release of insider information of the organization into public domain is considered as a disclosure.

The web has provide a number of benefits to the companies in terms of widespread information distribution, ease of access and cost saving linked to the printing of annual reports (Boubaker et al., 2011). Moreover, it allows companies to reach a wider range of shareholders and ameliorate the quality of their funding patterns. As a result, market becomes less risky, efficient and more liquid. Furthermore, web disclosure is useful for investors as they can access the information from anywhere and anytime, which assists them to make investment decision. Thus, web disclosure is beneficial for both companies as well as for investors.

Nowadays, the study of communication through the web is of particular interest. However, companies are liberal to disclose information on web as per their needs due to the absence of standardized protocols on web-based reporting (Henchiri, 2011). Except the United States of America and Canada, in all other countries, web disclosure is still voluntary exercise. In the United States of America, the US Securities and Exchange Commission (SEC) has adopted the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) filing system and made it compulsory for larger organizations to provide their financial information on the web. In Canada, Ontario Securities Commission has used the System for Electronic Document Analysis and Retrieval (SEDAR) to disclose information on web.

The purpose of this paper is to examine the impact of potential factors on web-based disclosure practices of the banking sector of India. Indian banking industry has been selected for the research due to the two prime reasons. First, there a wide

* Assistant Professor, I. K. Gujral Punjab Technical University, Kapurthala, Punjab, India.
Email: manpreet8701kaur@gmail.com

** Assistant Professor, I. K. Gujral Punjab Technical University, Kapurthala, Punjab, India.
Email: mandeeparora.ptu@gmail.com

range of literature is available on the web disclosure practices of companies in developed countries but only few studies are concerned with developing countries. Second, most of the studies focused on the non-financial companies but the current study pays attention on the banking industry. To the best of our knowledge, there are only few studies, which focused on the potential drivers of web-based disclosure on Indian banking industry. The study contributes the limited literature on disclosure. The study is important because it informs the regulators about the company characteristics, which are or are not fulfilling the informational demands of potential and existing shareholders.

REVIEW OF LITERATURE AND HYPOTHESES DEVELOPMENT

Disclosure has enormous benefits for the public, shareholders, employees and government. It assists the stakeholders to assess the performance of the organization and, based upon that, take further decisions. There are number of studies on mandatory disclosure practices. But nowadays, researchers also tried to explore the area of voluntary disclosure practices, which is totally a discretion matter of the companies and voluntary information disclosures enhance the good will of the organization. This section tries to review the previous studies available on voluntary as well as mandatory disclosures. The focus of this section is to evaluate the web-based disclosure practices.

Agency theory propounds that managers do not always work in the interest of shareholders. As a result, the conflicts can be aroused between them due to asymmetrical information and proper information disclosure can bring the interest of entrepreneur in line with stakeholders' interest (Jensen & Meckling, 1976; Urquiza et al., 2010; Shehata, 2014).

Signaling theory was developed to reduce the information asymmetry in the labor market (Spence, 1973). The theory asserts that providing more information to a stakeholder generates a good signal in the market about the image of the company, which ultimately ameliorate the growth of the organization (Urquiza et al., 2010; Siala et al., 2014).

Most of the previous disclosure studies probing a connection between the level of disclosure practices and distinct company characteristics were applied in the developed countries - the UK, (Craven & Marston, 1999; Elzahar & Hussainey, 2012; Ponte et al., 2006); Spain (Alvarez et al., 2008; Cinca et al., 2007); France (Boubaker et al., 2011); Japan (Marston, 2003); China (Liu & Eddie, 2007); the US (Kaya, 2014).

The other group of studies has examined the disclosure practices of developing countries such as Ghana (Tsamenyi et al., 2007; Mensah, 2011; Bokpin, 2013); Indonesia (Almilia & Budissusetyo, 2008; Pertiwi, 2013); India (Hossain, 2008; Verma, 2010; Kaur & Kaur, 2015; Samanta & Dugal, 2016; Kaur & Kaur, 2014; Bhatia & Tuli, 2017; Kaur & Kaur, 2017); Jorden (Roberts et al., 2012; Haddad et al., 2017); Malaysia (Ho & Taylor, 2013; Haat et al., 2008; Arussi et al., 2009; Akhtaruddin & Haron, 2010; Sharma, 2013); Bangladesh (Nahar et al., 2016; Khan, 2010; Ahmed & Khan, 2016); Turkey (Kilic, 2016). Some studies worked upon a comparative approach to assess the disclosure practices of different countries such as (Chatterjee & Hawkes, 2008; Bonson & Escobar, 2008; Henchiri, 2011; Savvides & Savvidou, 2012; Siala et al., 2014). There are a number of studies in Arab countries such as Qatar (Hossain & Hammami, 2009); Oman (Mohamed et al., 2009); the UAE (Aljifri & Hussainey, 2007; Alsaeed, 2006; Hassan, 2009; Momany & Pillai, 2013).

Our paper develops the hypotheses concerning the association between the web-based disclosure of banks and different characteristics of banks such as firm size, financial performance and corporate governance. These variables have been discussed in the following sections.

COMPANY SIZE

Prior studies have presented great evidences about the existence of positive relationship between the company size and the level of disclosure. There exists a number of reasons for greater disclosure of large companies:

- Larger firms have dispersed shareholding patterns and asymmetrical information which increase the cost of capital. As a result, larger companies have to disclose more information to mitigate the effect (Tsamenyi et al., 2007).
- Availability of adequate resources in larger companies enables them to collect, analyze and present information at a large scale at the minimum cost (Alsaeed, 2006).
- Larger companies are more exposed to public; thus, they disclose more amount of information.
- Agency cost is higher in large companies due to widespread of shareholders. Hence, disclosure of more information reduces the potential agency cost.

Larger firm are more concerned about the public obligations and regulations. This could be a giant cause to disclose additional information. There are large numbers of empirical studies which proved that larger firms disclose more information (Marston, 2003; Henchiri, 2011; Bokpin, 2013; Kaya, 2014; Samanta & Dugal, 2016). Based upon the above discussion, the following hypothesis is formulated:

H1: Larger banks are more likely to disclose more voluntary information than smaller banks.

Return on Asset: Return on asset is the ratio of net income of a company and average total assets. When the return on asset is high, the firm may deliver more information to the investors to present a good image of the company and to highlight its ability to maximize the shareholders' value. On the contrary, when the return on asset is low, the management tries to cover up its losses and low profitability by providing less information (Singhvi & Desai, 1971). Mixed results have been found on the relationship of disclosure and financial performance. Some studies proved a positive relationship between two (Mensah, 2012; Momany & Pillai, 2013). In contrast, others found no relationship between two (Ahmed et al., 2017). Surprisingly, a significant negative association has also been reported between the extent of disclosure and financial performance (Bhatia & Tuli, 2017). Based upon the above discussion, the following hypothesis has been purported:

H2: Higher profitable banks are more likely to disclose more web-based information than those banks with low return on asset.

Corporate Governance: The current study has utilized two variables of corporate governance such as ratio of non-executive in the board and separation of CEO and chairman position to check the impact of corporate governance on web disclosure. In prior studies, mixed results have been found on the variables. There are few evidences on the positive relationship between the level of disclosure and the ratio of non-executive directors in the board (Hossain, 2008; Khan, 2010). While, insignificant relation has also been reported (Ahmed & Khan, 2016), Alfraih and Almutawa (2017) found a negative association between role duality and level of disclosure. On the contrary, Sanchez et al. (2011) claimed that role duality has a positive impact on strategic information disclosure. Based upon the above discussion, the following hypotheses have been framed.

H3: Ratio of non-executive directors has a positive impact on web disclosure.

H4: Separation of CEO and chairman position has a positive influence on web disclosure.

RESEARCH METHODOLOGY

Data Collection

To carry out the study analysis, thirty Indian public and private sector banks have been chosen. Banks were selected on the basis of their asset size in balance sheet and visited from May to September 2018. Websites of the banking companies are the prime source of information, which has been used to collect the data for the analysis. Variant type of information has been collected under different heads to carry out the study results.

Construction of Disclosure Index

A disclosure index was formed as a benchmark to measure the extent of web-based disclosure activities of banking companies. It is a matter of discretion for the companies that which kind of information they want to disclose on their websites; therefore, it is a matter of subjective judgement to select the items of web-based information. Such kind of selection totally depends upon the context and nature of the industry, which is going to be studied and the country's context (whether the companies are of developing and developed countries).

There is a substantial amount of literature available, which focused on the disclosure practices of banking companies. These research studies have been considered to decide on the items of information. After the investigation of all available sources, 101 items of information were identified as relevant for disclosure index. These 101 items were then grouped to formulate different categories. There are various approaches to assign the score to the items of information of disclosure index. More popular techniques are known as weighted and unweighted disclosure index approaches. Hossain (2009) adopted an unweighted method in which the disclosed item assigned one otherwise zero. The other approach is the application of weights to the item of information which is disclosed, more than zero and less than one and if the item of information is not disclosed, then it scores zero.

The current study employs the unweighted disclosure index technique due to the fact that the method considers all the items of information equally important. In this approach, if the bank discloses the item of information then one is assigned and vice-versa.

Model Development

Ordinary Least square (OLS) regression has been used in the study to assess the hypotheses. The regression model is given by:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y= Disclosure index score

Structure related variable

- X1= Log of asset size

Performance related variable

- X2= Return on asset

Corporate governance related variables

- X3= Ratio of non-executive directors
- X4= Separation of CEO and chairman position (Dummy Variable)
- β_0=constant, β=slope of independent variables
- ε=error term

RESULTS

This section discusses the empirical methods utilized to check the hypotheses of the study and reports the results. In the first part, the descriptive statistics of the dependent and independent has been described. Second, the validity of the model was assessed. Lastly, the OLS regression model results have been discussed.

DESCRIPTIVE STATISTICS

Descriptive statistics of the independent and dependent variable can be seen in the Table 1. The descriptive statistics reveal that the mean value of the level of web-based disclosure is quite good (71%) with the standard deviation of 4 and range from 62 to 79. It implies that none of the selected Indian commercial banks discloses all items of disclosure index. The Table also indicates that banks' attributes i.e. size of bank (LAS), return on asset (ROA) and ratio of non-executive director (RONEDIB) have varied ranges.

The Table results elucidate that bank size has a mean value 5.4, which is measured as a log of asset size (LAS) with maximum of six and minimum of five, with standard deviation (3.7). As also shown in the Table, commercial banks' return on asset (ROA) ranges from -2.04 to 1.88, with average of 0.16, and ratio of non-executive director (RONEDIB) has mean value 0.67, with range of 0.47 to 0.91. Separation of CEO and Chairman (DS) has a mean value 0.7.

Table 1: Descriptive Statistics

Variables	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
DIS	0.71	0.71	0.79	0.62	0.04	0.00	2.39
LAS	5.40	5.36	6.43	4.79	0.37	0.50	3.24
ROA	0.16	0.19	1.88	-2.04	0.93	-0.19	2.89
RONEDIB	0.67	0.64	0.91	0.47	0.12	0.41	2.19
SCCP	0.70	1.00	1.00	0.00	0.46	-0.920	-1.242

CORRELATION ANALYSIS

Correlation analysis has been performed to check the relationship between different variables. The table results show that there is not very high correlation between the independent variables.

Table 2: Correlation Matrix

Variables	DIS	LAS	ROA	RONEDIB	SCCP
DIS	1.000				
LAS	0.478** (0.008)	1.000			
ROA	0.277 (0.138)	-0.044 (0.819)	1.000		
RONEDIB	-0.249 (0.185)	-0.524** (0.003)	0.158 (0.405)	1.000	
SCCP	0.186 (0.326)	0.164 (0.387)	0.504** (0.00)	0.00 (1.000)	1.000

ASSESSING THE MODEL VALIDITY

To check the validity of the model, the basic assumptions of OLS liner regression were tested.

First, dependent and independent variables are normally distributed as it can be observed from the descriptive statistics table that the value of kurtosis is not exceeding ±3. Jarque-Bera test results also approve the normality of residuals as the result value is more than 0.05. Second, the unit root test accepts the assumption of stationarity. Third, multicollinearity has been checked by applying variation inflation factor (VIF) test. Form the table, it can be seen that all the variables have VIF value less than 10. Therefore, multicollinearity is not an issue to interpret the results of the model.

Table 3: Variation Inflation Factor

Variables	VIF
ROA	1.29
RONEDIB	1.58
LAS	1.60
SCCP	1.27
Mean	1.44

Last, to check the homoscedasticity of residuals, White's test of homoscedasticity was used and the test results validate this assumption by accepting the null hypothesis which is that the variance of the residuals is homogenous. The p value is more than 0.05; it leads to the acceptance of null hypothesis. As a result, there is no issue of heteroscedasticity, the model results can be interpreted with more confidence.

MODEL EXPLANATION

It can be observed from the table that the model is highly significant as the p value is less than 0.05. The model has the ability to explain 25% variations in disclosure index score due to independent variables as the adjusted r square is 0.25. Regression coefficient and their p values are presented in the table from which it can be interpreted that size of a bank has positive and significant impact on web disclosure score as the p value is less than 0.05. Therefore, it can be inferred that larger banks disclose a huge amount of information on their websites. The results are consistent with previous studies (Marston, 2003; Henchiri, 2011; Bokpin, 2013; Kaya, 2014; Samanta & Dugal, 2016). These results are also in line with agency cost which asserts that due to the widespread of shareholders in larger firms have to incur more agency cost and with disclosure of more information the potential agency cost can be reduced.

Conversely, financial performance which is measured as return on asset has no influence on web disclosure score as the p value is more than 0.05. As a result, there is no association between the financial performance and web disclosure score of the bank. The result is consistent with the findings of (Ahmed et al., 2017), as they found an insignificant relationship between profitability and disclosure practices.

Corporate governance practices also have no impact on web disclosure score of banks as the table results elucidate that the ratio of non-executive directors in board (RONEDIB) has p value of 0.72, which is insignificant. Therefore, it can be inferred that increased number of non-executive director in board is not ameliorate the disclosure performance of a bank. The mixed results have found in previous literature. Alfraih and Almutawa (2017) found that voluntary disclosure practices have not been affected by the ratio of non-executive directors in the board. By contrast, Khan (2010) found that the existence of non-executive directors have an influence on the CSR reporting in Bangladesh.

The second variable of corporate governance, the separation of CEO and chairman position (SCCP) also has no influence on disclosure. Thus, the finding indicates that there is no variation in disclosure practices of banks due to the separation of positions.

Table 4: OLS Regression Analysis

Variables	Coefficient	Std. Error	t-Statistic	Probability
C	36.74	15.07	2.44	0.02
LAS	6.25	2.26	2.77	0.01*
ROA	1.07	0.82	1.31	0.2
RONEDIB	0.02	0.07	0.36	0.72
SCCP	-0.62	1.62	-0.38	0.7

R-squared = 0.35
Adjusted R-squared = 0.25
F-statistic = 3.4
Durbin-Watson stat = 2
Probability (F-statistic) = 0.02

SUMMARY AND LIMITATIONS

Web-based disclosure has played an imperative role in the growth of the banking sector. There are number of factors which affect the level of web disclosure practices which is the discretion matter of the companies. There are no regulations, established for web disclosure. The current study analyzes the impact of various explaining variables influence on web-based disclosure practices of thirty Indian commercial banks. A disclosure index of 101 elements has been constructed. Unweighted disclosure index approach was used to calculate the disclosure score of the index in which one is assigned to the item which is disclosed, otherwise zero. Bank size, return on asset, ratio of non-executive directors in the board and separation of CEO and chairman position are the variables, which have been considered in the study. Bank size has a positive significant impact on web discourse while other attributes have insignificant impact.

The present study has some limitation. The following limitations are most pertinent. First, the elements composing the index are subjective and based upon the previous studies. Alteration of these items can modify the results. Second, the study has been done only for thirty Indian banks. The sample size can be increased and segregation of public and private banks can also alter the results. Third, despite the unweighted disclosure index, the weighed disclosure index method can be used which has been utilized in a number of previous studies. Lastly, only four company specific attributes have been employed, the number increased can modify the findings.

Further research could address the following issues:

- Addition of more items of information will help to reflect the proper picture of disclosure performance.
- The current study conducted only on banking industry. Further studies can considered the other non-financial industries.
- More company-specific variables can be employed in future research of web disclosure.
- Current study is based upon voluntary disclosure practices. Mandatory disclosure can also be added along with voluntary disclosure.
- Longitudinal research will be initiated in future as the present study only focused on one time based research.

REFERENCES

Allam, A., & Lymer, A. (2003). Developments in internet financial reporting: Review and analysis across five developed countries. *The International Journal of Digital Accounting Research, 3*(6), 165-199.

Agyei-Mensah, B. K. (2011). Association Between firm specific charateristics and levels of diclosure of financial information of rural banks in the ashanti region of Ghana. *Journal of Applied Finance & Banking, 2*(1), 69-92.

Ahmed, A. H., Burton, B., & Dunne, T. (2017). The determinants of corporate internet reporting in Egypt: An exploratory analysis. *Journal of Accounting in Emerging Economies, 7*(1), 35-60. Retrieved from https://doi.org/10.1108/JAEE-04-2015-0024

Alarussi, A. S., Selamat, M. H., & Hanefah, M. M. (2009). (2009). Determinants of financial and environmental disclosures through the internet by Malaysian companies. *Asian Review of Accounting, 17*(1), 59-76. doi:https://doi.org/10.1108/13217340910956513

Almilia, L. S. (2008). *Corporate internet reporting of banking industry and lq45 firms: An Indonesia example.* Parahyangan International Accounting and Business Conference, Bandung.

Alsaeed, K. (2006). The association between firm-specific characteristics and disclosure: The case of Saudi Arabia. *Managerial Auditing Journal, 21*(5), 476-496. doi:10.1108/02686900610667256

Allam, A., & Lymer, A. (2003). Developments in internet financial reporting: Review and analysis across five developed countries. *The International Journal of Digital Accounting Research, 3*(6), 165-199.

Ezat, A. N., & El-Masry, A. A. (2008). The impact of corporate governance on the timeliness of corporate internet reporting by Egyptian listed companies. *Managerial Finance, 34*(12), 848-867. Retrieved from https://doi.org/10.1108/03074350810915815

Amran, A. (2012). Exploring online sustainability disclosure among Malaysian company. *Social and Behavioral Sciences, 65*, 761-767.

Bhatia, A., & Tuli, S. (2017). Corporate attributes affecting sustainability reporting: An Indian perspective. *International Journal of Law and Management, 59*(3), 322-340.

Arzova, A. E. (2011). Internet financial reporting in Turkey. *EuroMed Journal of Business, 6*(3), 313-323. doi:http://dx.doi.org/10.1108/14502191111170141

Haddad, A. E., Sbeiti, A. M., & Qasim, A. (2017). Accounting legislation, corporate governance codes and disclosure in Jordan: A review. *International Journal of Law and Management, 59*(1), 147-176. Retrieved from https://doi.org/10.1108/IJLMA-07-2016-0064 Permanent

Chatterjee, B., & Hawkes, L. (2008). Does internet reporting improve the accessibility of financial information in aglobal world? A comparative study of New Zealand and Indian companies. *Australasian Accounting Business and Finace Journal, 2*(4), 33-56.

Gutierrez-Nieto, B., Fuertes-Callén, Y., & Serrano Cinca, C. (2008). Internet reporting in microfinance institutions. *Online Information Review, 32*(3), 415-436.

Omar, B., & Simon, J. (2011). Corporate aggregate disclosure practices in Jordan. *Advances in Accounting, Incorporating Advances in International Accounting, 27*, 166-186.

Bokpin, G. A. (2013). Determinants and value relevance of corporate disclosure: Evidence from the emerging capital market of Ghana. *Journal of Applied*

Accounting Research, 14(2), 127-146. doi:https://doi.org/10.1108/09675421311291883

Serrano Cinca, C., Fuertes, Y., & Gutierrez, B. (2007). Online reporting by banks: A structural modelling approach. *Online Information Review, 31*(3), 310-332.

Chang, J. L. (2015). Financial reporting quality of target companies and acquirer returns: Evidence from Korea. *International Journal of Accounting & Information Management, 23*(1), 16-41. doi:dx.doi.org/10.1108/IJAIM-07-2014-0052

AbuGhazaleh, N. M., Qasim, A., & Roberts, C. (2012). The determinants of web-based investor relations activities by companies operating in emerging economies: The case of Jordan. *The Journal of Applied Business Research, 28*(2), 209-226.

Gujrati, D. N. (2012). *Basic econometrics* (4th ed.). Mc Graw Hill.

Darmadi, S. (2013). Corporate governance disclosure in the annual report: An exploratory study on Indonesian Islamic banks. *Humanomics, 29*(1), 4-23. doi:http://dx.doi.org/10.1108/08288661311299295

Aly, D., Simon, J., & Hussainey, K. (2010). Determinants of corporate internet reporting: Evidence from Egypt. *Managerial Auditing Journal, 25*(2), 182-202.

Mohamed, E. K. A., Oyelere, P., & Al-Busaidi, M. (2009). A survey of internet financial reporting in Oman. *International Journal of Emerging Markets, 4*(1), 56-71.

Mokhtar, E. S., & Mellett, H. (2013). Competition, corporate governance, ownership structure and risk reporting. *Managerial Auditing Journal, 28*(9), 838-865. doi:http://dx.doi.org/10.1108/MAJ-11-2012-0776

Ng, E. J., & Koh, H. C. (1994). An agency theory and probit analytic approach to corporate non-mandatory disclosure compliance. *Asia-Pacific Journal of Accounting, 1*(1), 29-44. doi:10.1080/10293574.1994.10510464

Bonson, E., & Tomas, E. (2008). A survey on voluntry disclosure on the internet: Empirical evidence from 300 European union companies. *The International Journal of Digital Accounting Research, 2*(1), 27-51.

Bonson, E., Escobar-Rodríguez, T., & Muñoz, F. F. (2006). Online transparency of the banking sector. *Online Information Review, 30*(6), 714-730. Retrieved from https:// doi.org/10.1108/14684520610716180

Sobhani, F. A., Amran A., & Zainuddin, Y. (2012). Sustainability disclosure in annual reports and websites: A study of the banking industry in Bangladesh. *Journal of Cleaner Production Journal, 23*(1), 75-85. doi:http://dx.doi.org/10.1016/j.jclepro.2011.09.023

Bravo, F., Abad, C., & Trombetta, M. (2010). Disclosure theories and disclosure measures. *Spanish Journal of Finance and Accounting, 39*(147), 393-420.

KPMG. (2017). Guide to annual financial statements. Retrieved from https://home.kpmg/xx/en/home/services/audit/international-financial-reporting-standards/ifrs-illustrative-financial-statements.html

Gujarati, D. (2015). *Econometrics by example.* Palgrave.

Siala, H. G., Sellami, Y. M., & Fendri, H. B. (2014). Determinants of voluntary web-based disclosure: A comparison of the United Kingdom and its former colony, New Zealand. *International Journal of Accounting and Economics Studies, 2*(2), 100-110. doi:10.14419/ijaes.v2i2.3668

Elzahar, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim reports. *The Journal of Risk Finance, 13*(2), 33-147. doi:https://doi.org/10.1108/15265941211203189 Permanent

Hasan, S. Q. (2014). Financial disclosure and performance of microfinance institutions. *Journal of Accounting & Organizational Change, 10*(3), 314-337.

Hassan, M. K. (2009, March). UAE corporation-specific characterstics and level of risk disclosure. *Managerial Auditing Journal, 24*(7), 668-687.

Henchiri, J. E. (2011). Voluntary web-based disclosures by Moroccan and Tunisian companies. *EuroMed Journal of Business, 6*(2), 155-173. doi:http://dx.doi.org/10.1108/14502191111151241

Hossain, M. (2008). The extent of disclosure in annual reports of banking companies: The case of India. *European Journal of Scientific Research, 23*(4), 659-680.

Álvarez, G., Sanchez, I. M. G., & Dominguez, L. R. (2008). Voluntray and compulsory information disclosed online. *Online Information Review, 32*(5), 596-622.

Liu, J., & Eddie, I. A. (2007). Determinants of disclosures of A-, B- and H-share companies. *Asian Review of Accounting, 15*(1), 72-92. doi:https://doi.org/10.1108/13217340710763762

Blasco, J. S. (2017). *The KPMG survey of corporate.* KPMG.

Ahmed, K., & Khan, R. (2016). Disclosure practices and governance quality: Evidence from micro finance institutions. *Journal of Accounting & Organizational Change, 12*(3), 325-350. Retrieved from http://dx.doi.org/10.1108/JAOC-02-2015-0014

Kaur, H. (2012, February). A comparative study of corporate governance disclosure by private and public sector banks In India. *International Journal of Multidisciplinary Research, 2*(2), 320-341.

Kaur, J. (2011). Corporate governance in India: Issues for consideration. *Indian Journal of Commerce & Management Studies, 2*(2), 239-245.

Kaur, M., & Kaur, M. (2014). Web-based disclosure practices: A review. *IIM Journal IQRA International Management Journal, 3*(1), 138-147.

Kaur, M., & Kaur, M. (2015). An analysis of web home page disclosure practices of top public and private Indian banks. *International Journal of Banking, Risk and Insurance, 3*(2), 31-42.

Kaur, M., & Kaur, M. (2017). Web-based financial disclosure practices of top Indian banks. *Asian Journal of Reserach in Banking and Finance, 7*(12), 58-66.

Kaur, M., & Kaur, M. (2017). Web disclossure practices of Indian public sector banks. *Asian Journal of Research in Banking and Finance, 7*(9), 150-162.

Kaur, M. K. (2014). Web-based disclosure practices: A review. *IIM Journal, 3*(1).

Kaya, D. (2014). The influence of firm specific characteristics on the extent of voluntry disclosure in XBRL empirical of SEC filings. *International Journal of Accounting and Information Management, 22*(1), 2-17.

Aljifri, K. (2007). The determinants of forward-looking information in annual reports of UAE companies. *Managerial Auditing Journal, 22*(9), 881-894. doi:doi.org/10.1108/02686900710829390

Khan, M. H.-U.-Z. (2010). The effect of corporate governance elements on corporate social responsibility (CSR) reporting: Empirical evidence from private commercial banks of Bangladesh. *International Journal of Law and Management, 52*(2), 82-109. doi:https:// doi.org/10.1108/17542431011029406

Kilic, M. (2016). Online corporate social responsibility (CSR) disclosure in the banking industry: Evidence from Turkey. *International Journal of Bank Marketing, 34*(4), pp. 550-569. Retrieved from https:// doi.org/10.1108/IJBM-04-2015-0060

Lipunga, A. M. (2014, September). Corporate governance practices in commercial banking sector of Malawi: Evidence from annual reports. *Journal of Applied Finance & Banking, 4*(5), 155-133.

Lymer, A. (1999). Internet and the future of reporting in Europe. *European Accounting Review, 8*(2), 289-301. doi:10.1080/096381899336041

Akhtaruddin, M., & Haron, H. (2010). Board ownership, audit committees' effectiveness, and corporate voluntary disclosures. *Asian Review of Accounting, 18*(3), 245-259. doi:https:// doi.org/10.1108/13217341011089649

Craven, B. M., & Marston, C. L. (1999). Financial reporting on the internet by leading UK companies. *The European Accounting Review, 8*(2), 321-333.

Marston, C. (2003). Financial reporting on the Internet by leading Japanese companies. *Corporate Communications: An International Journal, 8*(1), 23-34.

Tsamenyi, M., Enninful-Adu, E., & Onumah, J. (2007). Disclosure and corporate governance in developing countries: Evidence from Ghana. *Managerial Auditing Journal, 22*(3), 319-334.

Bamber, M., & Mcmeeking, K. P. (2010). An examination of voluntary financial instruments disclosures in excess of mandatory requirements by UK FTSE 100 non-financial firms. *Journal of Applied Accounting Research, 11*(2), 133-153. doi:https://doi.org/10.1108/09675421011069504 Permanent

Menassa, E. (2010). Corporate social responsibility: An exploratory study of the quality and extent of social disclosures by Lebanese commercial banks. *Journal of Applied Accounting Research, 11*(1), 4-23. doi:https://doi.org/10.1108/09675421011050009

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. doi:https://doi.org/10.1016/0304-405X(76)90026-X

Alfraih, M. M., & Almutawa, A. M. (2017). Voluntary disclosure and corporate governance: Empirical evidence from Kuwait. *International Journal of Law and Management, 59*(2), 217-236. Retrieved from http://dx.doi.org/10.1108/IJLMA-10-2015-0052

Hossain, M., & Hammami, H. (2009). Voluntry disclosure in the annual reports of an emerging country: The case of Qatar. *Advances in Accounting, incorporating Advances in International Accounting, 25*(2), 255-265. doi:10.1016/j.adiac.2009.08.002.Source:OAI

Haat, M. H. C., Rahman, R. A., & Mahenthiran, S. (2008). Corporate governance, transparency and performance of Malaysian companies. *Managerial Auditing Journal, 23*(8), 744-778.

Khan, M. N. A. A., & Ismail, N. A. (2011). The level of internet financial reporting of Malaysian companies. *Asian Journal of Accounting and Governance, 2*, 27-39.

Momany, M. T., & Pillai, R. (2013). Internet financial reporting in UAE - Analysis and implications. *Global Review of Accounting and Finance, 4*(2), 142-160.

Momany, M. T., & Al-Shorman, S. A. (2006, October). Web-based voluntary financial reporting of Jordanian companies. *International Review of Business research Papers, 2*(2), 127-139.

Kuruppu, N., Oyelere, P., & Jabri, H. A. (2015). Internet financial reporting and disclosure practices of publicly traded corporations: Evidence from Sri Lanka. *Accounting & Taxation, 7*(1), 75-91.

Ayuba, B., & Oba, V. C. (2016). Firm traits and web-based disclosures in top Nigerian firms. *Acta Universitatis Danubius. OEconomica, 12*(1), 25-38.

Abdelsalam, O. H., & Street, D. L. (2007). Corporate governance and the timeliness of corporate internet reporting by U.K. listed companies. *Journal of International Accounting, Auditing and Taxation, 16*(2), 111-130. doi:10.1016/j.intaccaudtax.2007.06.001

Abdelsalam, O. H., Bryant, S., & Street, D. L. (2007). An examination of the comprehensiveness of corporate internet reporting provided by London-listed companies. *Journal of International Accounting Research, 6*(2), 1-33.

Srvastava, P. K. (2011). *Banking theory & practice*. Hamalaya Publishing House.

Pathak, B. V. (2011). *The Indian Financial System.* Dorling Kindersley.

Pertiwi, A. D. (2013, August). Comparing internet financial reporting index between bank and non bank. *Journal of Internet Banking and Commerce, 18*(2).

Pervan, I. (2006, January). Voluntary financial reporting on the internet-analysis of the practice of croatian and slovene listed joint stock companies. *Financial Theory and Practice, 30*(1), 1-27.

Oyelere, P., & Kuruppu, N. (2012). Voluntary internet financial reporting practices of listed companies in the United Arab Emirates. *Journal of Applied Accounting Research, 13*(3), 298-315. doi:https:// doi.org/10.1108/09675421211281353

Ho, P.-L., & Taylor, G. (2013). Corporate governance and different types of voluntary disclosure. *Pacific Accounting Review, 25*(1), 4-29.

Dutta, P., & Bose, S. (2007). Web-based corporate reporting in Bangladesh: An exploratory study. *The Cost and Management, 35*(6), 29-45.

Samanta, P., & Dugal, M. (2016). Basel disclosure by private and public sector banks in India: Assessment and implications. *Journal of Financial Regulation and Compliance, 24*(4), 453-472. doi: http://dx.doi.org/10.1108/JFRC-12-2015-0065

Debreceny, R., & Gray, G. (1999). Financial reporting on the internet and the external audit. *The European Accounting Review, 8*(2), 335-350.

Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics, 8*(1), 23-40. doi:10.2307/3003485

Boubaker, S., Lakhal, F., & Nekhili, M. (2011). The determinants of web-based corporate reporting in France. *Managerial Auditing Journal, 27*(2), 126-155.

Abraham, S., Marston, C., & Jones, E. (2015). Disclosure by Indian companies following corporate governance reform. *Journal of Applied Accounting Research, 16*(1), 114-137. doi:https://doi.org/10.1108/JAAR-05-2012-0042

Savvas, C., & Savvides, N. S. (2012). Market risk disclosures of banks: A cross-country study. *International Journal of Organizational Analysis, 20*(4), 379-405. doi:https:// doi.org/10.1108/19348831211268599

Nahar, S., Azim, M., & Jubb, C. (2016). The determinants of risk disclosure by banking institutions: Evidence from Bangladesh. *Asian Review of Accounting, 24*(4), 426-444. Retrieved from https://doi.org/10.1108/ARA-07-2014-0075 Permanent

Sharma, N. (2013, May). Web-based disclosures and their determinants: Evidence from listed commercial banks in Nepal. *Accounting and Finance Research, 2*(3).

Shehata, N. F. (2014). Theories and determinants of voluntary disclosure. *Accounting and Finance Research, 3*(1), 18-26. doi:10.5430/afr.v3n1p18

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics, 87*(3), 355-374. doi:10.2307/1882010

Dolinsek, T., Tominc, P., & Skerbinjek, A. L. (2014). The determinants of internet financial reporting in Slovenia. *Online Information Review, 38*(7), 842-860.

Baumann, U., & Neir, E. (2004, September). Disclosure, volatility and transparency: An empirical investigation into the value of bank disclosure. *FRBNY Economic Policy Review*.

Verma, D. (2010). Web-based business reporting in Indian corporate sector. *Journal of Knowledge Management Practice, 11*(1).

Huafang, X., & Jianguo, Y. (2007). Ownership structure, board composition and corporate voluntary disclosure: Evidence from listed companies in China. *Managerial Auditing Journal, 22*(6), 604-619. Retrieved from https://doi.org/10.1108/02686900710759406

IYengar, V. (2011). *Introduction to banking.* Excel Books.

Fuertes-Callén, Y., Cuellar-Fernández, B., & Pelayo-Velázquez, M. (2014). Determinants of online corporate reporting in three Latin American markets. *Online Information Review, 38*(6), 806-831. doi:http://dx.doi.org/10.1108/OIR-10-2013-0240

Zikmund, B. C. (2013). *Business research methods.* CENGAGE Learning.

ANNEXURE 1

Sr. No.	Items of Information (101)
	General Information (GI)
1	About Us
2	Vision Statement
3	Mission Statement
4	Product and Services
5	Quick Glance to 3 Year Performance
6	EMI Calculator
7	Disclaimer
8	Follow Us on (Facebook/Twitter/LinkedIn)
9	Recruitment
10	Awards
11	Interest Rate and Service Charges
12	Customer Care Corner
13	Mobile Banking
14	Tele Banking
15	SMS banking
16	Date of Establishment
17	Official Address
18	Historical Overview of Firm
	Investor Related Information (IRI)
1	Chairman Message
2	Historical Share Prices
3	Shareholding Pattern
4	Credit Rating information
5	E-Mail to Investor Relation/alerts
6	Address, Fax or Phone Number for Investor Relations
7	Text Speeches and Presentation (AGM, EGM or Roadshow)
8	Presentation of Financial Data or Investor's Presentation
9	Call Transcript
10	Top Ten Shareholders
	Financial Information (FI)
1	Current Year Quarterly Report
2	Past Years Quarterly Report
3	Current Year Interim Statement
4	Past years Interim Statement
5	Current Year Annual Report with Full Text
6	Past Years Annual Report with Full Text at least last 10 years
7	Current Year Annual Report in Sections
8	Past Years Annual Report in Sections
9	Current year Auditor Report
10	Past years Auditor Report
11	Current year Balance Sheet
12	Past years Balance sheet
13	Current year Income Statement
14	Past years Income statement
15	Current year Cash Flow Statement
16	Past years Cash Flow Statement
17	Current year Notes to Financial Statements
18	Past years Notes to Financial Statements
19	Management Discussion and Analysis
20	Concise information on Key Ratios At least last 3 Years
21	Concise information on Financial Data At least last 3 Years
22	GAAP Basis
23	Basel III Disclosure
	Corporate Governance Information (CGI)
1	Detail About Chairman
2	Detail About Directors
3	Compensation of the Members of Management Board
4	Information regarding Director's Dealing
5	Disclosure on Compensation Committee
6	Information on Audit committee
7	Picture of all Directors
8	Picture of Chairman Only
9	Disclosure of Stock Code
10	Corporate Social Responsibility Report/Policy
11	Complete Report on Corporate Governance
12	Reports on Corporate Governance from last 3 Years
13	Existence of a code of Ethics
	Ease of Accessibility (EOA)
1	English Webpages
2	Frequently asked Questions(FAQs)
3	Help/Information ICON
4	Sitemap
5	Pull Down Menu
6	Click Over Menu
7	Search Option
8	Next/Previous Buttons to Navigate the website
9	E-Mail Hyperlink to Investor Relation
10	Online Information Order Service to Investor
11	List of Mailing
12	Webmaster information
13	Page divided into Frames
14	To Get Investor Relation Information at One Click
15	To Get News or press Release At One Click
16	One Click To Contact Us
17	Separate section for Annual Reports

18	Loading of full Home page (less than ten seconds)
19	Print option in friendly Format
20	Link to Stock Exchange Websites
21	Link to Parent and Subsidiaries
22	Bank Operating more than 10 Countries
23	Local language Support
24	Important Links
	Technological Aspects (TA)
1	Presence of Hyperlinks in Annual Reports
2	Excel format of Financial data
3	PDF format of Annual Reports
4	HTML Format
5	Chat Room
6	Graphic Images
7	Video or sound files
8	Data in XBRL Format
	Timeliness Information (TI)
1	Current News or Press Releases (Such as Earnings Release date and Share Repurchases)
2	Same day Stock Prices information
3	Events Calendar which include dates of earing release, press conferences and AGM
4	Disclosure of "last updated" information on web home page
5	The website is recently updated (last week)