

---

# Corporate Internet Reporting and Firm Performance: Evidence from Banks, Diversified Financial, and Insurance firms in Sri Lanka

Birasanth Nagarajah<sup>a</sup>, Ajanthan Alagathurai<sup>b\*</sup>

<sup>a</sup>*BBK Partnership (Pvt) Ltd, Jaffna, Sri Lanka*

<sup>b\*</sup>*Department of Accounting, University of Jaffna, Sri Lanka*

---

## A B S T R A C T

The aim of this study is to examine the impact of Corporate Internet Reporting (CIR) on firm performance for a sample of 68 banks, diversified financial, and insurance firms in Sri Lanka over the year 2018. The researcher used content analysis to retrieve the internet reporting items. This study used a checklist of 105 items, which were adopted from previous studies. The current study observed that the mean of the content element disclosure score for the sample is about 77.3%, whereas the mean of the presentation element disclosure score for the sample is about 57.6%. Further, the result of the regression analysis revealed that the content element disclosure only has a significant positive association with return on assets. However, both the content element and the presentation element have no significant association with return on assets or Tobin's Q. Hence, the findings of this study provide a clear understanding to stakeholders of the firm to make better investment decisions as it is an international requirement.

**Keywords:** corporate Internet reporting, firm performance, CE disclosure, PE disclosure

---

## 1. Introduction

The information technology revolution, in particular the advent of computer technology, has significantly affected accounting practice and accounting communication. Many firms are now utilizing the advantages of the web for disseminating financial information. Firms' stakeholders, such as shareholders, employees, creditors, customers, suppliers, need fast and reliable financial information for decision making (Sia et al., 2016). In ancient times, firms

---

\*Corresponding author: [ajanthan@univ.jfn.ac.lk](mailto:ajanthan@univ.jfn.ac.lk)

communicated their financial information with their stakeholders through the traditional paper-based annual reports. These paper-based annual reports have serious limitations and are becoming increasingly less timely; especially with the increase in geographic investor dispersion, they have become less useful for the decision making purpose (Debrenceny et al., 2002), whilst the internet allows firms to reach a much wider spectrum and variety of stakeholders at relatively lower costs, with the reduction in incidental requests from non-shareholder financial statement users (Khadaroo, 2005; Boesso & Kumar, 2007).

Nowadays firms improve their information technology infrastructures and communicate their all-financial related materials and other information through the internet. The most common Corporate Internet Reporting (CIR) is defined as the use of the internet as a form of media by the firms for voluntary dissemination of financial and investor-related information through websites (Debrenceny et al., 2002; Fisher & Lasward, 2003; Marston & Polei, 2004; Oyelere et al., 2016). This CIR provides firms new opportunities to replace and enhance traditional ways of investor and stakeholder communication, enabling disclosure of financial and investor-related information to a wider audience where the specific needs of the information users would be met, and ensuring equitable access to information through the use of descriptive content and attractive presentation formats available on firms' websites (Ajward & Silva, 2019; Kelton & Yang, 2008). More than that, users can benefit in a variety of ways relying upon the extent to which the abilities of the medium are exploited; possibilities include enhanced timeliness, ease of access and search, and improved facilities for data extraction, automatic comparisons, and analysis. The capability of the medium to handle the reporting of greatly expanded information fits well with recent calls in accounting for increased disclosure of a broad range of information (Almilia & Budisusetyo, 2008). Information asymmetry can be diminished by the firms when they disclose the bulk of information with the help of internet platforms (Diamond & Verrecchia, 1991; Sia et al., 2016). High disclosure of information can lead to good results because it enhances the firms' image, reputation, and trustworthiness (Sia et al., 2016).

The internet is a one of a kind data exposure instrument that gives data promptly to a worldwide crowd (Abdelsalam et al., 2007), reveals up-date data to build productivity and adequacy (Kelton & Yang, 2008), diminishes data deviation (Cormier et al., 2012; Puspitaningrum & Atmini, 2012), and improves openness or potential adaptability of use of data (Ojah & Mokoaleli-Mokoteli, 2012). With regards to financial reporting, the internet works with the further developed accessibility of financial information and boosts investment (Aly et al., 2010), advances a more elevated level of straightforwardness contrasting with the conventional type of annual reports (Ali-Khan et al., 2013), and in this way influences the investors' dynamic interaction (Hodge, 2001).

The demands of voluntary disclosure via internet reporting increase the curiosity among investors at present (Aly et al., 2010). As shown by a study by Shehata (2014), finding out more available information would help investors' decision-making reach the optimum level. Sia et al. (2015), examine the impact of CIR on firm performance of non-financial listed companies in Malaysia. The findings of the study suggest that firms should disclose more information through the internet in order to ensure the accessibility of financial information for stakeholders, and this will present a better image and reputation of the firm's best practices in financial performance. Furthermore, the ability of firms to provide more timely information has been enhanced, as distribution of information via the internet can take place as soon as it is produced, further enhancing pricing efficiency (Giner & Jorge, 2002).

Many studies have been carried out in the context of CIR in a global context aimed at understanding the extent of CIR adoption in a particular country; furthermore, certain studies are determining the factors that drive the adoption of CIR among the firms. Most of the studies only assess the impact of the firm-related economic factors and technological infrastructure on the extent of CIR (Aly et al., 2010; Ojah & Mokoteli, 2012; Spanos, 2014). Some other studies have been carried out to identify the impact of corporate governance on CIR (Al Maskati & Hamdan, 2017; Botti et al., 2014; Kelton & Yang, 2008). Some of the studies investigated the relationship between board composition and CIR (Sandhu & Singh, 2019); whereas only limited studies have been carried out to identify a relationship between CIR and firm performance (Elsayed, 2010; Sia et al., 2016).

As a result, this research examines the impact of CIR on firm performance in Sri Lankan banks, diversified financial and insurance firms as per the Global Industry Classification Standard (GICS) classification. This study might assist investors, future investors, policymakers, government, corporate managers, and economists on a range of venues to sustain their corporate objectives.

## **1.2. Research problem**

Firms' stakeholders need fast and reliable financial information to satisfy their requirements for timely decision-making. Internet reporting can be used as a new information communication tool to provide information quicker and in time in better and more effective ways (Jones & Xiao, 2003). Listed firms that have and are in need of the potential to attract future investors to ensure more capital flow for the firm to secure sustainable growth tend to adopt the modern trend of practicing web presence for voluntary information dissemination. The existence of information asymmetry is an important driver of investor uncertainty (Debrenceny et al., 2002). When the firm discloses more and more information, it will reduce information asymmetry and then help to attract more investors (Alebrahim, 2018).

In the developed countries, it is a very common phenomenon that firms use the internet to disclose all information to shareholders from time to time. However, in developing countries, this is not much developed and it is still in the beginning stage (Alebrahim, 2018). Sri Lanka is a developing country, so this study is needed and it will help to improve the internet reporting fruitfully. Although numerous studies were done in different countries, some of the researchers found mixed outcomes, where some concluded that there is a positive impact on the firm performance (Hunter & Smith, 2009; Sia et al., 2016), and some conclude that there is no impact over the firm performance (Alebrahim, 2018). Moreover, there is a dearth of studies in the Sri Lankan context. Therefore, this study aims to test this issue furthermore in the Sri Lankan context, specifically in the case of banks, diversified financial and insurance firms, which are listed in Colombo Stock Exchange (CSE), Sri Lanka during the time period of one (1) year.

## **2. Review of the relevant literature**

There is considerable literature devoted to investigating CIR in many aspects and different countries. Many studies have discussed theoretically and empirically the nature and extent of corporate reporting and its role, determinants, consequences, and relationship to the performance of the firms.

The rapid expansion in web-based reporting through the internet has not gotten away from the consideration of researchers and many have carried out empirical studies of

corporate reporting on the internet. Despite the fact that previous studies have considered firms functioning in both developed and developing nations, there is still a need for empirical studies on web-based disclosure practices because of the dynamic nature of internet reporting (Das, 2015). The related studies fall into three types, one of which documents the utilization of the web in a specific country. This sort of study gives the audience an impression of the number of firms that provide information, how much information they give, how successfully they utilize the web, and how firms vary from one another concerning web-based disclosure. The second group of papers analyzes the potential differences in the design and contents of websites of firms situated in various nations. They test hypotheses on the basis of perceived differences in capital market structures and different cultural backgrounds, among others. As opposed to the studies in the first group, these commonly select a couple of measures of web utilization or aggregate them into one or a few criteria. The third group of studies recognizes differences between firms' websites and attempts to test empirically for factors that may drive these differences (Pirchegger & Wagenhofer, 1999).

In assessing the descriptive studies conducted related to the concept of CIR in terms of the extent of CIR practices adopted by firms, studies carried out in various nations portray the differences in the level of nations adopting the advancements in the technology for the voluntary dissemination of financial information. A research conducted by Burrus (1997) found that the quickly changing business environment is compelling firms worldwide to develop reporting strategies that can help them create competitive advantages. Compared to the traditional printed reports, the internet offers a lot more freedom to convey financial information, and its significance in this regard is rapidly increasing (Pirchegger & Wagenhofer, 1999). The dissemination of financial information via the World Wide Web is already common practice for a growing number of listed firms around the world (Lymer & Debreceeny, 2003). The internet offers firms new opportunities to supplement, replace, and enhance traditional ways of investor and stakeholder communication.

In evaluating a decade of academic and professional research, Lymer (1999) found that, as of the last part of the 1990s, Europe lags behind the U.S in both the amount of data reported on the web and the effective utilization of the internet technology. Further, he noted that there was a considerable divergence of corporate usage of the internet within and between European nations, with the UK being the first in the list and Spain being the last. The online filing facility of corporate information offered by the Securities Exchange Commission (SEC) during the 1990s persuaded these firms to provide the actual data on their own websites. Debreceeny et al. (2002) specifically focused on the importance of the disclosure environment as a driver of CIR presentation and content. Fisher et al. (2004) analyzed the key audit implications of CIR, while Gowthorpe (2004) investigated the communication issues related to IFR practices of smaller listed firms. Marston and Polei (2004) studied the CIR practices of German firms between 2000 and 2003 and found significant improvements in the quantity and presentation of financial information on corporate websites.

Previous research has shown that many firms worldwide have published their financial information via the internet (Ali Khan et al., 2007; Oyelere et al., 2003). The pronounced increase in the number of companies reporting their financial report through the internet had a big impact on legislation, financial framework, and information systems (Khan, 2006). A prominent study conducted by Kelton and Yang (2008) using 284 firms listed in New York Stock exchange indicates that all the firms had websites and among that

only 7 websites did not possess specifically dedicated information for investor relations, yet it indicates that the majority complies with investor relations information. As a common practice, this study also has adopted content and presentation dimensions in building up the CIR index, which accounts for 36 items in the index, among which 24 are content attributes and the rest belong to presentations. The findings of the study indicate that on average 14 items of the content list of 16 are adopted by most of the firms, and out of the presentation attributes the majority are compiled by the firms on an average of more than 75%.

One of the studies that identify the relationship between engagement in CIR practices and share prices were also investigated in a study by Lai et al. (2010). The research used data from 522 firms listed on the Taiwan Stock Exchange. The outcomes indicated that 490 (85.66%) of the sampled firms had their own websites and 206 (39.5%) of them engaged in online disclosure practices. The results revealed that the share prices of firms with online reporting responded more quickly compared to firms without online reporting disclosure. In addition, the outcomes suggested that firms that disclosed more information online could expect their stock prices to react faster than those with lower levels of online reporting. Besides, the results revealed that firms engaging in online reporting disclosure have the potential to harvest higher cumulative abnormal returns. The findings also showed that the degree and scope of online reporting had a substantial effect on the shares' abnormal return.

Yassin (2017) studies the Jordanian public shareholding companies listed on the ASE at the end of 2011 to evaluate the CIR practices in practice and reveals that out of the sample of 228 listed companies, only 144 companies' claim to possess websites where the website is the main utility for financial disclosure through the internet, and among that only 65% of the companies disclose financial and other related information on the internet. Further, this study has measured CIR in terms of Content and Presentation dimensions that indicate overall compliance with content is 69% and 97% for presentation attributes, which depicts that in terms of the quality of the information provided an enhancement is required. Many empirical studies on disclosure have attempted to identify the association between disclosed information and firm performance. However, these studies vary in terms of disclosure types and firm performance proxies. Several studies have examined the relationship between paper-based disclosure, either mandatory or voluntary, and firm performance (Nekhili et al., 2016). However, only a few studies have examined the impact of internet disclosure on firm performance (Elsayed, 2010). With respect to firm performance, many proxies have been used in prior studies. Although some studies use one measure for firm performance, such as market-to-book ratio, return on assets (ROA), or Tobin's Q (Sia et al., 2016); Aly et al. (2010) found that profitability, foreign listing, and industrial type have a significant positive association with the amount and presentation formatting of information disclosed on Egyptian companies' web sites. However, firm size, leverage, liquidity, and auditor size, have a non-significant association with Corporate Internet Reporting.

Sia et al. (2016) investigate the effect of CIR on firm performance for a sample of 583 non-financial firms in Malaysia over the year 2013. Their result revealed that CIR significantly affects firm performance. This implies that more related information that is routinely disclosed on the firm's websites can offer more worth to the firms. Moreover, the findings of this study support the resource-based hypothesis and the signaling hypothesis between corporate internet reporting and firm value. Further, the findings of the study suggest that firms should disclose more information through the internet in order to ensure the accessibility of financial information for decision-makers, and this will render a better

image and reputation of the firm's good practices in financial performance. Alebrahim (2018), conducted a study to determine the impact of CIR on the profitability of the firms. The study utilizes a self-developed disclosure index, which comprises 196 items, to measure the CIR of 170 Saudi listed firms. The findings show that the level of CIR is, on average, moderate compared to their counterparts in developed nations. Finally, it is statistically evident that CIR has no significant influence on the profitability of Saudi firms.

Kuruppu et al. (2015), analyzed the utilization of the internet as a vehicle for the voluntary communication of financial information by publicly listed firms on the CSE, Sri Lanka. The 244 firms listed on the CSE were investigated and the findings indicate that CIR is still at the beginning stage in Sri Lanka, and there are substantial opportunities and challenges for all interested parties. While 59% of firms maintain websites, only 63 of these (about 43%) effectively utilize their websites to communicate information. This shows that firms in Sri Lanka don't completely enjoy the advantages of engaging in CIR. However, the electronic version of annual reports of the latter CIR firms was found to be highly accessible, with 87% of the websites permitting users to find information in three mouse clicks or less. In line with previous CIR research, this study seeks to answer the following research question:

*RQ1: What is the impact of corporate internet reporting on the financial performance of listed banks, diversified finance, and insurance companies in Sri Lanka.*

### 3. Methods

#### 3.1. Sampling design

Data used in the current study have been obtained from different sources including companies' annual reports and websites. All of the 68 financial companies listed on the CSE in December 2018 were targeted in the present study. The researcher selected financial firms due to their unique financial attributes, the intensity of regulation (Chang et al., 2014; Abed et al., 2012), and/or intensive use of leverage (Jiraporn et al., 2009 & Al-Fayoumi et al., 2010).

#### 3.2. Model specification

This study used multiple regression to examine the impact of CIR on firm performance. To test the hypotheses, the researcher uses the following primary regression models:

$$ROA = \beta_0 + \beta_1 CED + \beta_2 PED + \varepsilon \text{ ----- (1)}$$

$$Tobin's Q = \beta_0 + \beta_1 CED + \beta_2 PED + \varepsilon \text{ ----- (2)}$$

Where: ROA - return on assets, CED - content elements disclosure, PED - presentation elements disclosure,  $\varepsilon$  - error term

#### 3.3. Operationalization of variables

##### 3.3.1. Independent variable – CE and PE disclosure index

This study used the content analysis approach to measure the CIR. Based on the empirical studies reviewed, the researcher has developed a separate index for content element disclosure (CED) and presentation element disclosure (PED) as a checklist against the content analysis of attributes of CIR practices firms adopt. As suggested by Ajward and Silva

(2019), an unweighted disclosure index was used instead of a weighted disclosure index to avoid subjectivity. The disclosure index, based on twenty extant studies, consists of 105 total disclosure items, i.e., 78 content items and 27 presentation format items. When scoring under the disclosure index, “1” was awarded if a particular firm presents the required information; otherwise, “0” was awarded. Thereafter, the total score obtained for each company was divided by the maximum possible score to calculate the disclosure index value for each firm.

$$I_j = \frac{\sum_{i=1}^{n_j} X_{ij}}{n_{jj}}$$

$n_{jj}$  = n Number of relative items applicable to company j  
 $X_{ij}$  = “1” if the item is disclosed, otherwise “0”

The index mainly comprises two dimensions of content and presentation; and under the content dimension, six sub-dimensions illustrating different aspects of content-related information provided through the internet presence of firms were identified, and five sub-dimensions on how the firms were presenting their information on the internet were identified.

### 3.3.2. Dependent variable – financial performance

**Table 1: Definition and Operationalization of Variables**

Variable (s)	Definition and operationalization
Return on assets (ROA)	Company financial performance is the return on assets measured by profit after tax scaled by total assets
Tobin’s Q	Company market performance is Tobin’s Q measured by the total market value of the firm scaled by the total asset value of a firm

### 3.3.3. Hypotheses of the study

The following hypotheses were formulated by the researcher;

- $H_1$ : There is a significant impact of corporate internet reporting on return on assets
- $H_{1a}$ : There is a significant impact of content element disclosure on return on assets
- $H_{1b}$ : There is a significant impact of presentation element disclosure on return on assets
- $H_2$ : There is a significant impact of corporate internet reporting on Tobin’s Q
- $H_{2a}$ : There is a significant impact of content element disclosure on Tobin’s Q
- $H_{2b}$ : There is a significant impact of presentation element disclosure on Tobin’s Q

## 4. Data analysis

### 4.1. Descriptive statistic for independent and dependent variables

Table 2 indicates the mean, minimum, maximum, standard deviation, kurtosis, and skewness of Tobin’s Q and ROA, which are considered dependent variables in this study to measure the performance of a firm, and CIR like CED, PED which are independent variables to measure the corporate internet reporting disclosure pattern. The data (68\*1=68) was collected from the annual reports of the respective firms. Tobin’s Q has a mean value of 0.327, which deviates from the standard deviation (Std Dev) of 0.4022, and also it has the minimum value (Min) and maximum value (Max) of 0.0181271 and 2.254738 respectively. Similarly to TQ, ROA has a mean value of 0.256872 that deviates from the standard deviation (Std Dev) of 0.0956672 and has a minimum value (Min) and maximum value of -0.1628079 and 0.706706

respectively. In the same manner, CED and PED have mean values of 0.7733786 and 0.5767974 respectively, which deviate from standard deviation (Std Dev) 0.0761358 and 0.0835106 respectively. And have minimum values (Min) 0.5897436 and 0.3703704 and have maximum value (Max) 0.8846154 and 0.7407407 respectively.

**Table 2: Summary of Descriptive Statistics**

STATS	CED	PED	TOBIN'S Q	ROA
MEAN	0.7733786	0.5767974	0.3279666	0.0256872
MIN	0.5897436	0.3703704	0.0181271	-0.1628079
MAX	0.8846154	0.7407407	2.254738	0.706706
SD	0.0761358	0.0835106	0.4022804	0.0956672
SKEWNESS	-0.7482201	-0.5376766	2.494892	5.369229
KURTOSIS	2.750834	2.749623	10.56576	39.35592

#### 4.2. Multicollinearity test

Multicollinearity is a high degree of correlation among several explanatory variables. There is no formal criterion for determining the bottom line of the tolerance value or variance inflation factor (VIF). Some argue that a tolerance value less than .1 or VIF greater than 10 roughly indicates significant multicollinearity (Jee, 2002). The largest VIF was obtained for CED (3.82), and the smallest VIF was for PED (3.07). The findings of this analysis explain that there is no multicollinearity, as the highest value of the VIF is less than 10 and the tolerance factor is below 1.

#### 4.3. Regression analysis

Table 3 presents findings of regression analysis with information on the impact of independent variables (CED and PED) on the dependent variable (ROA). In banks, diversified finance, and insurance firms, the R<sup>2</sup> value of the independent variables on the dependent variable indicates that 16.27% of the observed variability in the ROA can be explained by the CIR. The *f*-statistics and significance levels show that the model generates statistically significant outcomes ( $p < 0.05$ ). Further, it illustrates the adjusted  $r^2$  value of 0.1234, and this says 12.34 percent of influence is created by CIR on ROA. Whereas balance 87.66% impact is made by other factors which are not depicted in this model.

**Table 3: Model Summary of CIR on ROA**

Number of observations	68
$f(3,64)$	4.14
Prob> $f$	0.0095
R-squared	0.1627
Adj r-squared	0.1234

Source: STATA output

Table 4 displays the results of the coefficient estimation for each CED and PED. Among these two disclosures, only CED contributes significantly towards ROA of the sample



companies because it's a  $p$ -value of less than 5 percent significance level ( $p=0.046$ ;  $t=2.03$ ). The other variable, PED does not show any significant contribution towards ROA. This result is consistent with the previous finding of Aly (2010).

**Table 4: The relationship between the CIR and ROA**

ROA	Coef.	Standard Error	$t$	$P>(t)$	95% Confident Interval	
CED	0.5704655	0.2808944	2.03	0.046	0.0093144	1.131617
PED	0.1799256	0.229478	0.78	0.436	-0.2785094	0.6383607
Cons	-0.3705806	0.1152007	-3.22	0.002	-0.6007205	-0.1404406

Source: STATA output

Table 5 presents findings of regression analysis with information on the impact of independent variables on the dependent variable. In banks, diversified financial and insurance industry, the result of  $R^2$  value indicates that 18 percent observed variability in the market performance (Tobin's Q) can be explained by CIR. The  $f$ -statistic (0.04) and significance level ( $p < 0.05$ ) show that model generates statistically insignificant outcomes. So, the model is rejected.

**Table 5: Model Summary of CIR on Tobin's Q**

Number of observations	68
$f(3,64)$	0.04
Prob> $f$	0.9901
R-squared	0.0018
Adj r-squared	-0.0450

Source: STATA output

**Table 6: The relationship between CIR and Tobin's Q**

Tobin's Q	Coef.	Standard Error	$t$	$P>(t)$	95% confident Interval	
CED	0.0355628	1.28965	0.03	0.978	-2.540809	2.611935
PED	0.3078366	1.053586	0.29	0.771	-1.796943	2.412616
Cons	0.3537682	0.5289127	0.67	0.506	-0.7028565	1.410393

Source: STATA output

## 5. Results and discussion

### 5.1. Results

There is no significant relationship between CIR and Tobin's Q. However, developed countries found that CIR has a significant effect on Tobin's Q at the 5 percent significant level. This research finding is consistent with prior studies, such as Brown et al. (1995), Hunter and Smith (2009), Krishnan and Sriram (2000), and Sia et al. (2016).

In developed countries, more companies are using websites as an effective medium of communication based on the fact that it is cost-effective, dynamic, and constantly flexible in the global world. As a result, the internet has become an influential medium being

constantly utilized for presenting corporate information, such as financial reports. Further, in these developed countries investors fully focused on the CIR of the firms and have up-to-date information. On the other hand, in developing countries, companies are reluctant to update their websites satisfactorily and do not update all information on their websites. According to Ajward and Silva (2019), the majority of the listed firms in Sri Lanka have a very lower level of reporting disclosure practices via the internet. Also, investors in these countries mainly focus on the earning per share, the market price of the share, and some other book-based measures than seeking corporate information about the market price of the assets of the companies. Due to this reason, market-based performance (Tobin's Q) didn't show any significant results with CIR. Although, book-based measure (ROA) has a significant association with the disclosure of corporate information measures.

**Table 7: Summary of the Hypotheses Testing**

<b>Hypotheses No</b>	<b>Impact of CIR on firm performance</b>	<b>Expected Relationship</b>	<b>Results</b>	<b>Outcome</b>
H <sub>1a</sub>	CED on ROA	Significant + / -	$p < 0.05$	Accepted
H <sub>1b</sub>	PED on ROA	Significant + / -	$p > 0.05$	Rejected
H <sub>2a</sub>	CED on Tobin's Q	Significant + / -	$p > 0.05$	Rejected
H <sub>2b</sub>	PED on Tobin's Q	Significant + / -	$p > 0.05$	Rejected

## 5.2. Contribution of the study

This study provides empirical evidence on CIR and firm performance of banks, diversified financial, and insurance companies which are listed on CSE, Sri Lanka. The findings of the study are intended to offer valuable insights to various parties. Prior studies focused on developed countries and very few studies were done in emerging countries. There is a lack of prior literature in Sri Lanka comprising CIR and firm performance. So, this study contributes to the extant literature and fills the existing gap in the literature by providing empirical evidence regarding CIR and firm performance.

The first beneficiary of this study will be the corporate managers because they are accountable to the owners of the company. They show their accountability through internet reporting. This study also helps them to disseminate additional information in a timely manner, add more flexibility, and reduce disclosure costs. This type of disclosure can improve the disclosure quality and the transparency to satisfy all users' needs.

Further, this study offers national and international, individual, and institutional investors alternative investment options for maximizing their return and wealth. So that they may make the best decision for their investment. It is also useful for investors as it provides analysis regarding value creation through CIR disclosure, and indicates that they can adopt CIR practices on their annual reports and their websites. This study can be used as a reference by regulatory bodies for further investigation on the means of how companies can create their market value with the adoption of CIR.

CIR plays a major role in attracting potential investors to the firms; thus, this study will enable them to understand the importance of their role in ensuring transparency among

the owners and minimizing the information gap which will be improving their quality of service. The financial information disclosed via the internet is mostly up-to-date and is presented in various multimedia formats, making the information easier to use in decision-making.

Moreover, this study helps stakeholders to direct their efforts more effectively and also helps to suggest that firms should take the background of their shareholders into account in their CIR strategy. Given the companies' willingness to fulfill the needs of stakeholders for accurate information on a timely basis, CIR demands a continuous updating of information disclosed online.

### **5.3. Directions for future studies**

CE and PE disclosure index developed in this study may not have fully or properly captured all aspects of corporate internet reporting disclosures. In this study, researchers could not fully consider the quality of CED and PED because banks, diversified financial, and insurance firms disclosed their activities quantitatively and researchers are not sure that firms have published pure information on their websites. Secondly, the study used secondary data gathered from 68 banks, diversified financial, and insurance firms which are small in size compared to nonfinancial firms which are listed on CSE, Sri Lanka. Thirdly, the current study used only a few aspects of disclosures. Further studies could consider other aspects too. This study may further be extended by choosing different industries and more disclosures items of CIR may be included for further research. Fourth, investors should not only pay attention to the firm performance on ROA and Tobin's Q measures but also look at other financial and market measures, such as dividend pay-out, and earning management proxies. Future studies should take into consideration those proxies for examination. Furthermore, the findings are based on research in a single country and may not be generalizable. Therefore, it is suggested that further research should be conducted on the same topic with different sectors or industries or different countries. Finally, the future study should take into consideration some control variables like board size, firm size, industry type, etc to get better outcomes.

### **5.4. Implications for theory and practices**

#### *5.4.1. Implications for theory*

The findings of this study support agency theory, signaling theory, and stakeholder theory. Agency theory is a principle that is used to explain and resolve issues in the relationship between business principals and their agents. There is a conflict of interest between them. Shareholders need to monitor the management's performance in a close and timely manner, so managers must provide a sufficient amount of information about the business, and provide timely information about the corporate performance. Widely spread internet reporting successfully reduces the agency cost as a new means of communication between managers and stakeholders of the firm (Boubaker et al., 2011). Therefore, it reduces agency costs by improving the quality of financial reporting and reducing the information asymmetry between inside managers and outside shareholders. Similar to agency theory, the signaling theory also recognizes the separation of ownership and management and recognizes that the market pressures motivate managers to disclose information. Managers may wish to send signals to interested parties. In this regard, disclosure is considered to be one of the means that can be used (Das, 2015). Stakeholder theory considers the relationship between managers and all stakeholders (Alebrahim, 2018). This forces the firm to balance between these conflicting interests by disclosing more information voluntarily (Collier, 2008). In order to satisfy the different needs of stakeholders, firms can communicate with their

stakeholders and gain a competitive advantage by using the internet as an easy and widespread channel of information dissemination (Bolivar & Senes-Garcia, 2004). Findings, which provide all information and disclosures to stakeholders for decision making, are supported with agency theory, signaling theory, and stakeholder theory.

#### 5.4.2. Implication for Practices

The findings of this study demonstrate that CIR has a significant and positive impact on these firms which implies that the investors of these firms are strongly relying on the internet to make their investment decisions. It is important for investors because they need more rich and transparent information from the firms. CIR is a way to deliver all information of the firm to the stakeholders in a timely manner via the internet. Many investors like to watch the share price and other information of the firm, for decision-making purposes. The corporate internet reporting disclosures boost the confidence of investors regarding their wealth and lead them to act in the best interest of the investment by deciding to take useful decisions.

## References

- Abed, S., Al-Attar, A., & Suwaidan, M. (2012). Corporate Governance and Earnings Management: Jordanian Evidence. *International Business Research*, 5(1), p216.
- Ajward, R., & Silva, C. (2019). The impact of firm characteristics on corporate internet reporting: evidence from Sri Lanka listed companies. *SSRN Electronic journal*, 1, 6-24.
- Al-Fayoumi, N., Abuzayed, B., & Alexander, D. (2010). Ownership Structure and Earnings Management in Emerging Markets: The Case of Jordan. *International Research Journal of Finance and Economics*, 38, 28-47.
- Al maskati, M., & Hamdan, A. (2017). Corporate governance and voluntary disclosure: Evidence from Bahrain. *International journal of Economics and accounting*, 8.
- Alebrahem, N. (2018). Corporate internet reporting, firm characteristics, corporate governance and firm financial performance of saudi listed companies.
- Almilia, L., & Budisusetyo, S. (2008). Corporate internet reporting of banking industry and LQ45 firms : An indonesia example. *SSRN Electronic Journal*.
- Aly, D., Hussainey, K., & Simon, J. (2010). Determinants of corporate internet reporting: Evidence from Egypt. *Managerial auditing journal*, 25, 182-202.
- 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*, 269-296.
- Bolivar, R., & Senes-Garcia, B. (2004). The corporate environmental disclosures on the internet: the case of IBEX 35 Spanish companies. *Intereational journal of accounting auditing and performance evaluation*, 1, 215-266.
- Botti, L., Boubaker, S., Hamrouni, A., & Solonandrasana, B. (2014). Corporate governance efficiency and internet financial quality. *Review of accounting and finance*, 13(1), 43-64.
- Boubaker, S., Nekhili, M., & Lakhali, F. (2011, 2). The determinants of web-based corporate reporting in France. *Managerial accounting journal*, 27(2), 126-155.
- Burrus, D. (1997). Designing your future. *journal of lending and credit risk management*, 80, 37-39.
- Chang, Chou, R. K., & Huang, T. H. (2014). Corporate governance and the dynamics of capital structure: New evidence. *Journal of Banking & Finance*, 48, 374- 385.
- Chek, I. T., Mohamad, Yanus, J., & Norwani, N. (2013). Corporate social responsibility (CSR) disclosure in consumer products and plantation industry in Malaysia. *American international journal of contemporary research*.
- Craven, B., & Marston, C. (1999). Financial reporting on the Internet by leading UK companies. *European accounting review*, 8(2), 321-333.

- Das, S. (2015). An Investigation of corporate internet reporting in an emerging economy: A case study of Bangladesh. Retrieved from : <http://sure.sunderland.ac.uk/id/eprint/5703/>
- Debrenceny, R., Gray, G. L., & Rahman, A. (2002). The determinants of internet financial reporting. *Journal of accounting and public policy*, 21, 371-394.
- Diamond, D., & Verrecchia, R. (1991). Disclosure, Liquidity, and the cost of capital. *Journal of Finance*.
- Elsayed, A. (2010). The key determinants of the voluntary adoption of corporate internet reporting and its consequence on firm value: evidence from Egypt. Retrieved from <https://pearl.plymouth.ac.uk/handle/10026.1/343>
- FASB. (2000). *Business reporting research project- Electronic distribution of business reporting information*.
- Fisher, R., Laswad, F., & Oyelere, P. (2004). Corporate Reporting on the Internet: Audit Issues and content analysis of practices. *Managerial auditing journal*, 19(3), 412-439.
- Giner, B., & Jorge, M. (2002). The Use of the Internet for Corporate Reporting by Spanish Companies. *The International Journal of Digital Accounting Research*, 2, 53-82.
- Gowthorpe, C. (2004). Asymmetrical Dialogue? Corporate Financial Reporting Via the Internet. *Corporate communications an international journal*, 9(4), 283-293.
- Hunter, S., & Smith, M. (2009). Impact of internet financial reporting on emerging markets. *Journal of international business research*, 8(2), 21-41.
- Jiraporn, P., Singh, M., & Lee, C. I. (2009). Ineffective Corporate Governance: Director Busyness and Board Committee Memberships. *Journal of Banking & Finance*, 33(5), 819-828.
- Jones, M., & Xiao, J. (2003). Internet reporting: Current trends and Trends by 2010. *Accounting Forum*.
- Kelton, & Yang. (2008). The impact of corporate governance on internet financial reporting. *Journal of accounting and public policy*.
- Khadaroo, I. (2005). Corporate reporting on the internet: Some implications for the auditing profession. *Managerial auditing journal*, 20(6), 578-591.
- Kuruppu, N., Oyelere, P., & Jabri, H. A. (2015). Internet financial reporting and disclosure practices of publicly traded corporations: evidence from Sri Lanka. *Accounting and Taxation*, 7, 75-91.
- Lai, S.-C., Lin, C., Li, H.-C., & Frederick, H. (2010). An empirical study of the impact of internet financial reporting on stock prices. *The international journal of digital accounting research*, 10, 1-26.
- Lasward, F., Fisher, R., & Oyelere, P. (2000). Internet financial reporting, opportunities and challenges. *African finance journal*, 2(2), 40-46.
- Lymer, A. (1999). The internet and the future of corporate reporting in Europe. *The European accounting review*, 8(2), 289-301.
- Lymer, A., & Debrenceny, R. (2003). The auditor and corporate reporting on the internet: Challenges and institutional responses. *International journal of auditing*, 7(2), 103-120.
- Marston, C., & Polei, A. (2004). Corporate reporting on the Internet by German companies. *International journal of accounting information system*, 5, 285-311.
- Mohamed, E., Oyelere, P., & Al-Busaidi, M. (2009). A Survey of Internet Financial Reporting in Oman. *International journal of emerging markets*, 4(1), 56-71.
- Nekhili, M., Hussainey, K., Cheffi, W., Chtioui, T., & Tchakoute-tchuigoua, H. (2016). R&D narrative disclosure, corporate governance and market value: evidence from France. *Journal of Applied Business Research*, 32, 111-128.
- Ojah, K., & Mokoteli, T. (2012). Internet financial reporting, infrastructures and corporate governance: An international analysis. *Review of development finance*, 2, 69-83.
- 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).

- Oyelere, P., Fisher, R., & Lasward, F. (2003). The determinates of internet financial reporting by New Zealand listed companies. *Journal of International Financial Management and*, 14, 24-63.
- Pinto, L., & Picto, w. (2016). Configurational analysis of firms' performance: Understanding the role of Internet financial reporting. *Journal of Business research*, 69(11), 5360-5365.
- Pirchegger, B., & Wagenhofer, A. (1999). Financial information on the internet: A survey of the hompage of Austrian companies. *The European accounting review*, 8(2), 383-395.
- Sandhu, A., & Singh, B. (2019). Board composition and Corporate reporting on interent: Indian evidence. *Journal of financial reporing and accounting*, 17(2), 292-319.
- Shehata, N. (2014). Theories and Determinants of Voluntary Disclosure. *Accounting and finance research*, 3, 18-26.
- Sia, C. J., Brahmana, R., & Memarista, G. (2016). Corporate internet reporting and firm performance:Evidence from Malaysia. *Contemporary Economics*.
- Spanos, L. (2014). Corporate reporting on the internet in a European emerging capital market: The Greek case. *European Journal of Economics,Fiannce and administrative science*, 7.
- Yassin, M. M. (2017). The determinants of internet financial reporting in Jordan: Financial versus corporate governance. *International journal of business information systems*, 25(4), 526.