DOI: http://doi.org/10.4038/wjm.v13i2.7576

Wayamba Journal of Management, Vol.13, Issue 2 - December 2022

Impact of Integrated Reporting on Firm Performance in the Listed Companies in Sri Lanka

D.C.P. Ranaweera[1] & J.R.N.N. Jayawardhana[2]
[1,2] Department of Commerce, Faculty of Commerce and Management,
Eastern University, Sri Lanka
SRI LANKA
chamodranaveera@gmail.com[1], nirashajr@esn.ac.lk[2]

Abstract

The impact of integrated reporting on the firm performance of Sri Lankan listed companies was investigated in this study. A new reporting framework called integrated reporting tries to improve the ability of the investors for assessing the prospects of the firm and to remedy the shortcomings of the traditional reporting model of accounting. The study has included an analysis of quantitative data gathered from 42 companies listed on the Colombo Stock Exchange between 2016 and 2020. STATA - 14 software was used to analyze the data, which included panel regression analysis, correlation, and descriptive statistics. It has concluded that integrated reporting impacts the firm performance of the listed companies were based on the Return on Asset and Return on Equity. The study's findings demonstrated that Integrated Reporting has a significant negative impact on firm performance based on Return on Asset and Return on Equity while having a significant positive impact on firm performance based on Earnings per share.

Keywords: Earning Per Share, Integrated Reporting, Return on Asset, Return on Equity

1. INTRODUCTION

1.1 Background of the Study

In the business world, stakeholders expect beyond profit as disclosing non-financial information, corporate responsibility, and environmental-friendly businesses. As a result of that companies started voluntary disclosure of non-financial information and began Corporate Social Responsibilities (CSR) projects to attract the loyalty of stakeholders by giving value to society through social responsibility. Meanwhile, the International Integrated Reporting Council proposed a new approach to corporate reporting called "Integrated Reporting" in 2013.

The COVID-19 pandemic attacks business activities globally. Due to that most of the stakeholders are willing get a comprehensive view of how the companies create value as well as the impacts faced beyond the companies during the pandemic period. It is intended that integrated reporting will be able to provide stakeholders with appropriate information. Integrated reporting produces financial and non-financial data into a single report, which is a significant improvement over traditional corporate reporting.

The International Integrated Reporting Council (IIRC) issued the

integrated reporting framework in December 2013 (IIRC, 2013), and it presented the fundamental concepts and principles that organizations can use to incorporate both non-financial and financial performance through an integrated report. The goal of the Integrated Reporting framework is to improve the quality of information available to capital providers, encourage a more consistent approach to corporate reporting, and improve accountability for the diverse range of resources that companies use and effect, as well as to support value creation over time (Chen & Perrin, 2017). The IR framework is divided into three components: three fundamental concepts, seven guiding principles, and eight content elements. The IR framework, through the concept of 'information connectivity,' enables a company to bring these elements together to better communicate its significance narration (IIRC, 2019).

The Colombo Stock Exchange (CSE) registered listed companies make a huge role in Sri Lankan development and gross domestic production. Under the Sri Lankan context, there are 288 listed entities registered in CSE representing 19 Business sectors. Further in the Sri Lankan context, there are many numbers of CSE registered companies that adapted to the integrated reporting framework under IIRC, and the integrated reporting council of Sri Lanka plays a significant role in the Sri Lankan context. The primary goal of an integrated report is to show financial capital providers how a company grows in value over time.

The IR framework fills a critical gap by bridging the gap between financial and non-financial capital and promoting the importance of non-financial capital, such as human, social, relationship, intellectual, and natural capital, alongside financial and manufacturing capital. As a result, it is critical to examine the extent to which Sri Lankan companies are utilizing the framework at the national level. Integrated reporting also makes a huge role in Sri Lankan companies as sustainable reports.

In today's context, there are many types of research to identify the impact of international integrated reporting requirements in many countries in the world. And also, there are many types of research available about integrated reporting mainly focusing on the IIRC and its impact on the integrated reporting field. When considering prior research in Sri Lanka regarding with integrated reporting concept, most of the researchers are focused on integrated reporting adoption in Sri Lanka, integrated reporting and financial performance, and also factors affecting integrated reporting quality Cooray et al, (2020). There is a lack of studies available in Sri Lanka to identify the impact of integrated reporting and its effect on company performance. As a result, the purpose of this study was to fill a research gap by investigating the integrated reporting and performance of companies listed on the Colombo stock exchange.

1.2 Research Questions

1. Is there any significant impact of integrated reporting on the Return on Asset (ROA) of

listed companies in Sri Lanka?
2. Is there any significant impact of integrated reporting on the Return on Equity (ROE) of listed companies in Sri Lanka?
3. Is there any significant impact of integrated reporting on the Earnings per Share (EPS) of listed companies in Sri Lanka?

1.3 Research Objectives

1. To identify the impact of integrated reporting on the Return on assets (ROA) of listed companies in Sri Lanka.
2. To in the impact of integrated reporting on the Return on Equity (ROE) of listed companies in Sri Lanka.
3. To identify the impact of integrated reporting on the Earnings per Share (EPS) of listed companies in Sri Lanka.

1.4 Significance of the Study

The study is a good motivation to other companies that have not adopted to integrate reporting to prepare financial reporting in accordance with the IIRF and have advantages on it. This will be more beneficial to its stakeholders who are investors, employees, suppliers, customers, lenders, social groups, environmental organizations, government, etc. Further, this study will contribute to the literature by investigating the adoption of IR and its impact on firm performance. And it will be a good motivation for the companies which did not comply with the IR framework.

1.5 Empirical Review

Jeroe, (2016) examines the effects of IR and non-financial information on the performance of 44 organizations globally during the years 2012 and 2013. The reporting of IR and non-financial information was found to be detrimental to corporate success. The financial performance of five companies in Bahrain between 2012 and 2015 is the subject of an investigation by Albetairi et al, (2018). The business model index, risk and opportunities index, strategy and resource allocation index, and performance disclosure index were used in the study as IR indices, forming the explanatory variables. The results showed that IR indices have mixed effects on firm performance, with the risk and opportunities index having the most significant negative impact.

The impact of the Integrated Report on company value in African nations between 2013 and 2016 was examined by Cosma et al, (2018). The study used firm value as an exposed variable, which was approximated by stock returns, and IR as an exposed variable, which was approximated by the national market index return, utilizing the normal least square regression technique to reveal that IR has a positive effect on firm performance. Between 2010 and 2016, Bijlmakers (2018) investigated the impact of internal relations on company value in 56 European banking firms. The results showed that IR had no discernible impact on company value. The study employed Tobin Q since it was projected to do so. It also used the IR index, size, growth, discretionary accruals, return on equity, and earning

quality as predictors. In the Malaysian context, Luk et al, (2017) stated that there were four out of the eight IR content elements, specifically risks and opportunities, business model, performance disclosure, and governance, have a significant positive impact on the financial performance of the companies.

The prior researchers Athanasios Pavlopoulos, Chris Magnis and George Emmanuel said that the companies that have higher integrated reporting quality had shown lower agency cost than the companies with lower level of integrated reporting quality (Athanasios Pavlopoulos, 2017). Hence, the integrated reporting disclosure helps to reduce agency problems of the companies and to enhance the quality of information among their stockholders (Hamad, Draz, & Lai, 2020).

2. METHODS

2.1 The Conceptual Framework

This study was used integrated reporting as the independent variable. Then, firm performance is a dependent variable. The firm performance of this study was measured by using accounting-based measures and market-based measures. Both ROA and ROE are considered accounting measures. EPS is a market-based measure of the firm performance.

2.2 Research Design

Design the research so that the necessary data can be collected and analyzed to arrive at a solution (Sekaran & Bougie, 2016). The research design is longitudinal under descriptive research design. Therefore, the researcher can gather data over the years by using the same sample. The study is focused on a positivist approach as a research philosophy. This study selected 42 IR-adopted companies that are listed in the CSE for five years (2016-2020) to evaluate whether the companies that publishing of an IR has any effect on firm performance. IR mainly focuses on the short, medium, and long-term time horizons of the organizations.

2.3 Sampling Plan

A population is a group of individuals having one characteristic that distinguishes them from the other groups Yeong et al, (2018). According to this study context, the targeted population has considered the 80 Listed Companies on Colombo Stock Exchange as per the market statistics on 19th October 2020 which adopted integrated reporting. According to Sekaran and Bougie (2016), the sample is defined as a subset of the population in question and consists of a selection of members from the population. The researcher chose 42 listed companies from a total of 80 to investigate the impact of IR on firm performance as measured by return on asset, return on equity, and earnings per share.

2.4 Data Collection

Data can be gathered from either primary or secondary sources. To meet the objectives, this study relies entirely on secondary data. Secondary data is statistical material that was not created by the investigator but was obtained from someone else's records (Kothari, 2004). The study mainly has used previously collected data known as secondary data through CSE

website and annual reports by referring to listed companies.

2.5 Method of Measurement

The data is measured systematically. Further, this study is contributed to the literature by investigating IR and its impact on firm performance. All the data presenting a yearly basis for five years, from 2016 to 2020. Collected data can be presented in graphical tables connecting to the objectives of the study. IR Disclosure score checklist is used to collect the data used to measure the integrated reporting of the annual reports for the five years from 2016-2020. The disclosure information was obtained from annual reports, and each index item was individually checked. For each company, the total of the index scores for each company and year was calculated.

2.6 Method of Data Analysis

Data were analyzed and evaluated by using univariate, bivariate analysis techniques, and multivariate techniques. The type of data analysis and evaluation is determined by the research problem and objectives. The study adopted panel data analysis. Because this study employs panel data analysis, the STATA package was used for data analysis. For the data analysis, there are two types of statistics: descriptive statistics and inferential statistics. Descriptive statistics is a discipline that quantifies the significant features of a dataset. It depicts the summary behavior of variables in a study, as well as how many observations are reduced to interpretable numbers like averages and percentages. The researcher employs mean, maximum, minimum, and standard deviation to describe properties. Inferential statistics includes methods based on probability theory such as estimation, interval estimation, and hypothesis testing. It includes two types of analysis: correlation analysis and regression analysis.

2.7 Hausman Test

In econometrics, a statistical hypothesis test known as the Durbin-Wu-Hausman test is named after James Durbin, De-Min Wu, and Jerry A. Hausman. The researcher can use a Hausman test to choose between fixed and random effects, with the null hypothesis being that fixed effects are preferable to random ones (Greene, 2008). In essence, it examines the relationship between the unique mistakes and the regressors; the null hypothesis is that they are not. Decision criteria for the results of the Housman Test:

- H0: The appropriate model is Random Effects.
- H1: The appropriate model is Fixed Effects.

2.8 Testing Hypotheses

The study's hypotheses are focused on how integrated reporting affects business performance in Sri Lankan listed corporations.

Hypothesis 1

H0: There is no significant impact of integrated reporting on the Return on Assets (ROA) of listed companies in Sri Lanka.

H1: There is a significant impact of integrated reporting on the Return on Assets (ROA) of listed companies in Sri Lanka.

Hypothesis 2

H0: There is no significant impact of integrated reporting on the Return on Equity (ROE) of listed companies in Sri Lanka.

H1: There is a significant impact of integrated reporting on Return on Equity (ROE) of listed companies in Sri Lanka

Hypothesis 3

H0: There is no significant impact of integrated reporting on Earnings per Share (EPS) of listed companies in Sri Lanka.

H1: There is a significant impact of integrated reporting on the Earnings per Share (EPS) of listed companies in Sri Lanka.

3. RESULTS

The data gathered from secondary sources is analyzed using univariate, bivariate, and multivariate methods to determine the influence of integrated reporting on the performance of listed firms in Sri Lanka.

3.1 Descriptive Statistics

The STATA software was used in this study to perform descriptive statistics for both independent and dependent variables. For each variable independently, this offers descriptive analysis such as minimum, maximum, mean, and standard deviation. The mean values were used to measure the central tendency, where the dispersion or variability was described by using the standard deviation values Saunders et al, (2009).

3.1.1 Descriptive Statistics of Integrated reporting

When considering integrated reporting there is a maximum value of 91.43 and a minimum value of 22.26. The efficiency has a mean value of 50.46 this means the typical value of efficiency is 50.5. The standard deviation of efficiency is 16.38. It reveals that the value of efficiency varies around the amount of the mean value of 50.46.

3.1.2 Descriptive Analysis of Return on Assets

When considering return on assets there is Maximum and minimum value of ROA are respectively 28.9 and -9.78. The average 3.42 ROA has a standard deviation of 4.45. It reveals that the value of ROA is around the mean value of 3.42.

3.1.3 Descriptive Analysis of Return on Equity

ROE maximum value of 56.71 and minimum value of -25.89. The mean value of ROE is 9.25; it is the average ROE for the period of 2016- 2020. It has a standard deviation of 8.81. It reflects those values of ROE vary around the mean value of 9.25.

3.1.4 Descriptive Analysis of Earning Per Share

When considering the EPS, there is a maximum value of 58.5 and a minimum value of -13.93. EPS has a mean value of 9.43. The standard deviation of ROE is 11.24. It reveals that the values of internet banking vary around the mean value of 9.43.

The mean of the independent variable IR is 50.46%, where the overall standard deviation is 16.37%, while the dependent variables are having the mean values of 3.42%, 9.25%, and

9.43% accordingly where the overall standard deviations of them are followed as 4.54%, 8.80%, 11.24%.

3.1.5 Descriptive Statistics Based on the year

According to Table 3.5, the highest mean value of ROA is 4.72 and represents the year 2016 and the lowest mean value of ROA is 1.93 in the year 2019. Further, the highest ROE is 11.57 in 2016 while the lowest value is 6.28 in 2019, whereas EPS' highest mean value was 10.54 in the year 2017 while the lowest value 7.069 in 2017 accordingly. And also, the highest mean value of IR is 67.65 and it represents the year 2020, where the lowest mean value of IR is 35.85 in 2016.

3.2 Unit Root Test

A fisher-type unit-root test for unit root is conducted to check the stationary. According to Fisher-type unit-root test results, all P-value is less than the 0.05 there for reject Ho, so the variables are stationary.

- Ho: variable is non-statistical
- H1: variable is stationary

3.3 Panel Correlation Analysis

Table 3.7 shows that there are statistically significant relationships between IR and ROA, EPS at the level of significance due to the p-value being less than 0.05. (p=0.0000). The correlation coefficient of -0.149 indicates weak negative relationships, whereas the coefficient value of 0.141 indicates a weak positive relationship as per the correlation scale of Gogtay & Thatte, (2017).

3.4 Panel Regression Analysis

Regression analysis was employed in this study to ascertain how the independent and dependent variables related to one another functionally. It primarily concentrates on two aspects: the relationship's strength and statistical significance. Since all firms have data for all years, researchers have access to balanced panel data. Usually, fixed-effects or random-effects models are used to estimate panel data models.

3.4.1 Suitable Model for Regression Analysis

For the question of whether to use the fixed-effects or random-effects model by calculating the value of Prob>chip2, Housman, (1978) proposed a test which is called the Housman test. To determine which of the two models should be preferred (i.e., whether the fixed effects or the random-effects model), the following hypothesis was investigated:

- H0: Random Effects Model
- H1: Fixed Effects Model

3.4.2 Fixed Effect Regression Analysis for ROA

The probability value is 0.7272 greater than 0.05. As a result, the random effect model was chosen to analyze the regression. The table shows R square 2.22, which represents the independent variable's explanatory power for the dependent variables. It means that the independent variable explains 2.22% of the variation in the dependent variable. When another variable is added to the model, the adjusted R square represents how well it explains the dependent variable.

The constant statistic is 5.782 units shows the model would predict

independent variables were zero. The coefficient is explained to what extend the independent variable has an impact on the dependent variable. The β coefficient of Integrated reporting is -0.047. It is significant (p=0.005) in firm performance (ROA) in listed companies in Sri Lanka. It is means there is a significant impact of Integrated reporting on firm performance in listed companies in Sri Lanka.

Based on the coefficient table the regression equation can be drawn as follows:

$Yit = \beta Xit + \alpha + uit + \varepsilon it$

ROA= 5.782-0.047(IR) + εit

3.4.3 Fixed Effect Regression Analysis for ROE

The probability is 0.0069 < 0.05. To examine the regression, a fixed effect model was chosen. The table shows a R square of 0.07, which represents the independent variable's ability to explain the dependent variables. It indicates that the independent variable accounts for 0.07% of the variation in the dependent variable. The adjusted R square shows how well a new variable will explain the dependent variable when it is included in the model.

The constant statistic is 15.703 units shows the model would predict independent variables were zero. The coefficient is explained what extend the independent variable has an impact on the dependent variable. The β coefficient of integrated reporting is -0.127. It is significant (p= 0.000) in firm performance (ROE) in listed companies in Sri Lanka. It is means there is a significant impact of integrated reporting on firm performance in listed companies in Sri Lanka.

Based on the coefficient table the regression equation can be drawn as follows:

$Y = \alpha it + \beta 1 IRit + \varepsilon it$

ROE=15.704 -0.129(IR) + εit

3.4.4 Fixed Effect Regression Analysis for EPS

The likelihood is 0.0522 > 0.05. As a result, a random model was chosen to examine the regression. According to the table, the independent variable's ability to explain the dependent variables has a R square of 1.99. This indicates that the independent variable explains 1.99% of the variation in the dependent variable. The adjusted R square shows how well a new variable will explain the dependent variable when it is included in the model.

According to the constant statistic of 9.368 units, the model would have predicted that all independent variables would be zero. The coefficient explains the magnitude of the influence of the independent variable on the dependent variable. The integrated reporting coefficient is 0.0013. However, it has little bearing on firm performance (EPS) in Sri Lankan public companies (p=0.970). This indicates that integrated reporting has little to no effect on the company performance of Sri Lankan listed corporations.

Based on the coefficient table the regression equation can be drawn as follows:

$Yit = \beta Xit + \alpha + uit + \varepsilon it$

EPS =9.368 + 0.0013(IR) + εit

3.5 Hypotheses Testing

The hypotheses testing is carried out using the results of the regression analysis. The entire hypotheses are tested using those results.

Hypotheses 1

The β coefficient of integrated reporting is -.047. It is significant (p= 0.005) in firm performance (ROA) in listed companies in Sri Lanka. Its means there is a significant negative impact of Integrated reporting on firm performance in listed companies in Sri Lanka. So, there is enough evidence to reject the null hypothesis. It concluded that:

H1: There is a significant impact of integrated reporting on the Return on Equity (ROA) of listed companies in Sri Lanka.

Hypotheses 2

The β coefficient of integrated reporting is -0.128. It is significant (p= 0.000) in firm performance (ROE) in listed companies in Sri Lanka. It means there is a significant negative impact of Integrated reporting on firm performance in listed companies in Sri Lanka. So, there is enough evidence to reject the null hypothesis. It concluded that:

H1: There is a significant impact of integrated reporting on the Return on Equity (ROE) of listed companies in Sri Lanka.

Hypotheses 3

The β coefficient of integrated reporting is 0.0013. But it is not significant (p= 0.970) in firm performance (EPS) in listed companies in Sri Lanka. This means there is no significant impact of integrated reporting on firm performance in listed companies in Sri Lanka. So, there is not enough evidence to reject the null hypothesis. It can be concluded that there is no significant impact of integrated reporting on the Earnings Per Share (EPS) of listed companies in Sri Lanka

H0. There is no significant impact of integrated reporting on the Earnings Per Share (EPS) of listed companies in Sri Lanka.

4. DISCUSSION

This section's goal is to describe and examine the rationales for the research findings that were drawn from the analyses of the preceding chapter's outcomes. This covers the description of the interrelationship between independent and dependent variables as well as the testing of the regression model relating integrated reporting and firm performance of listed businesses in Sri Lanka that was described in the preceding part.

4.1 Discussion on Descriptive Statistics

The descriptive statistics for all the variables and the dimensions under this study: Integrated Reporting (IR), Return on asset (ROA), Return on equity (ROE), and Earning Per Share (EPS) are presented in table format. The study has considered the analysis over the last five years from 2016 to 2020 accordingly to the CSE Listed Companies in Sri Lanka.

Under the descriptive analysis, it has covered both independent and dependent variables/dimensions, where it reveals that the highest mean

value with the highest standard deviation among the variables. According to that, the independent variable of IR is having a mean of 50.46 with a standard deviation of 16.34. Further, among the dependent variable dimensions, the highest mean of 9.45 is having PS standard deviation of 11.24, while ROA is having the lowest mean value of 3.43 with a standard deviation of 4.45.

4.2 Discussion on Panel Correlation Analysis

The correlation analysis, which was examined in the previous section utilizing pairwise correlation, discusses the link between dependent and independent variables. Furthermore, by taking into account that independent variable apart from dependent variables, it may be possible to determine the effect of integrated reporting on company performance in Sri Lankan listed businesses. The correlation is performed using the correlate command of the STATA.

4.2.1 Relationship between Integrated Reporting and ROA

The impact of integrated reporting on firm performance based on ROA is negative. Because the p-value is less than 0.05, the relationship is statistically significant. As a result, it is possible to conclude that there is a significant relationship between the IR and ROA of Sri Lankan listed companies. This finding is consistent with previous research. According to Samy and Deeb, (2019), integrated reporting has a negative and significant relationship with firm performance as measured by Return on Asset.

4.2.2 Relationship between Integrated Reporting and ROE

The impact of integrated reporting on firm performance based on ROE is negative. However, it is not significant at 0.05 levels because the p-value is greater than the 0.05 level. As a result, it is possible to conclude that there is no significant relationship between IR and ROE of Sri Lankan listed companies. According to a previous study by Nurkumalasari et al, (2019), the Pearson correlation supported a negative insignificant correlation between the IR level of compliance and the return on equity based on statistical analysis results that included descriptive analysis.

4.2.3 Relationship between Integrated Reporting and EPS.

There is a positive relationship between integrated reporting on firm performance based on EPS. That relationship is statistically significant since the p-value is less than 0.05. Therefore, it can be concluded that there is no significant relationship between the IR and EPS of listed companies in Sri Lanka.

Hurghis, (2015) discovered that the financial performance of the company has no effect on the extent to which the issued integrated report is compliant with the IIRC Framework. This is something new for the participating organizations, the framework is optional, the concepts and criteria are quite flexible, and releasing this kind of report is also a learning exercise. The decision to release an integrated report, however, shouldn't be based on the company's financial performance because this style of reporting encourages integrated thinking, which

enhances the quality of the information available to those who provide financial capital and leads to a more effective and efficient allocation of resources.

4.3 Discussion on Panel Regression Analysis

According to the model of this study, the results found the effect of four independent variables on the share price among the listed companies in Sri Lanka.

4.3.1 The Impact of Integrated Reporting on ROA

According to the findings of regression analysis between these two variables, IR and ROA, Return on Asset has a significant negative impact on ROA. with a p-value of 0.005, significant at 5% (Sig.0.05), and a coefficient of - 0.047 As a result, it can be stated that integrated reporting and firm performance based on ROA have a significant impact.

According to a previous study by Kelvin, (2014), IR has an impact on return on assets and return on equity, as well as the maintenance of business resilience and competitiveness in a volatile market. Furthermore, Susanti et al, (2020) discovered that return on the asset has a significant impact on integrated reporting and firm performance. In contrast, Vitolla, (2018) discovered a significant impact of integrated reporting and return on assets.

4.3.2 The Impact of Integrated Reporting on ROE

The result revealed of regression analysis between these two variables, IR and ROE, Return on Equity is found to have a significant negative impact on ROE with the p-the value of 0.000, which is significant at 5% (Sig.0.05) with the coefficient of -0.128. Therefore, it can be expressed that there is a significant impact on integrated reporting and firm performance based on ROA.

Rao and Reddy, (2013) discovered that IR influences return on asset and return on equity in order to maintain business resilience and competitiveness in a volatile market. Susanti et al, (2020) discovered that integrated reporting has a significant impact on firm performance based on return on equity.

4.3.3 The impact of Integrated Reporting on EPS

The result revealed of regression analysis between these two variables, IR and EPS, earning per share is found to have an insignificant positive impact on EPS. with a p-value of 0.970, which is significant at 5% (Sig.0.05) with a coefficient of -0.0013. Therefore, it can be expressed that there is an insignificant impact on integrated reporting and firm performance based on ROA.

The previous study by Adegboyegun et al, (2020) discovered that firms may not necessarily consider IR as important if there is no evidence of a positive contribution to performance; thus, the question becomes, will IR improve firm performance better than traditional reporting style. Meanwhile, existing studies in the literature have yielded mixed results in terms of the effect of IR on performance, with evidence of mixed, positive, and negative effects, and some even

discovering insignificant effects (Bijlmakers, 2018).

3.4 Discussion on Hypothesis Testing

According to the study, the researcher has formulated a hypothesis, which will accept the significant value of the panel regression analysis as it deals with the impact of the study variables. Because the p-value for the regression analysis's results with the Return on Asset (ROA) and Return on Equity is less than 0.05 (p = 0.000 0.05), the null hypothesis was rejected (ROE). The regression results of the study are also insufficient to disprove the null hypothesis because the Earnings Per Share p-value is more than 0.05 (p = 0.000 > 0.05). (EPS).

5. CONCLUSION

Conclusions of the study have been made by considering the results of the research questions by using the panel data analysis and observations. This study considered 42 Sri Lankan listed companies for the fiscal years 2016-2020. To achieve the study objectives, the researcher used descriptive analysis, correlation analysis, and regression analysis.

5.1 Impact of Integrated Reporting on Return on Assets (ROA) of Listed Companies in Sri Lanka

The first goal of the research is to determine whether integrated reporting influences firm performance as measured by the Return on Assets (ROA) of CSE Listed Companies in Sri Lanka. The results of panel regression analysis on the Random-effects Model show that Integrated Reporting has a significant negative relationship with firm performance based on ROA = - 0.0467, p=0.005.

5.2 Impact of Integrated Reporting on Return on Equity (ROE) of Listed Companies in Sri Lanka

The first goal of the research is to determine whether integrated reporting influences firm performance as measured by the Return on Assets (ROA) of CSE Listed Companies in Sri Lanka. The results of panel regression analysis on the Random-effects Model show that Integrated Reporting has a significant negative relationship with firm performance based on ROA = - 0.0467, p=0.005.

5.3 Impact of integrated reporting on Earnings per Share (EPS) of listed companies in Sri Lanka

The third objective of the study is to ascertain whether integrated reporting affects the earnings per share of Sri Lankan companies that are listed on the CSE. This objective is met by panel regression analysis on the random-effects model, which demonstrates a non-significant positive link between Integrated Reporting and firm performance as measured by EPS = -.00134, p=0.000.

5.4 Recommendations

There haven't been many published studies on the impact of integrated reporting on firm performance in Sri Lankan listed companies. This research can help you better understand the impact of integrated reporting on firm performance in Sri Lankan listed companies. Integrated reporting has a significant negative impact on firm performance as measured by Return on Asset and Return on Equity, according to the

findings of this study. Most listed companies in Sri Lanka have not fully implemented the integrated reporting framework due to the local context. As a result, integrated reporting has little impact on company performance.

Despite the fact that companies publish IR, the level of adoption of integrated reporting elements into reports is slightly lower. In the Sri Lankan context, several companies have adopted IR for their reporting, but they only disclose certain elements. According to the findings, no company in Sri Lanka fully complies with the integrated reporting framework. Further investigation is therefore needed on how integrated reporting affects financial performance in businesses that have completely adopted the framework. The influence of integrated reporting on business performance as assessed by Return on Asset (ROA), Return on Equity (ROE), and Earnings Per Share may be better understood through this study (EPS).

5.5 Suggestions for Further Research

The study has numerous areas where further research can be done based on the study's limitations, findings, and the researcher's experience over the research period. Future research must include a wide range of variables other than firm performance and integrated reporting. This study only looked at 42 companies that were listed on the CSE between 2016 and 2020. Researchers should expand their research by increasing the sample size, adding more variables, and extending the time period. If a better researcher can obtain a standard answer, the research period is over. Perform extensive research in each industry. The study's findings should be interpreted with these suggestions in mind, and future researchers should try to overcome them as they go forward.

There are some limitations to this study. For starters, the sample size is small (i.e., 42 listed companies). Second, the research period is brief (i.e., 5 years). Third, because the study was conducted in Sri Lanka, it suffers from the limitations of country-specific factors and thus cannot be generalized to firms in other countries. The study's findings should be interpreted with these limitations in mind, and future researchers should try to overcome them as they conduct additional research in this area.

APPENDIX

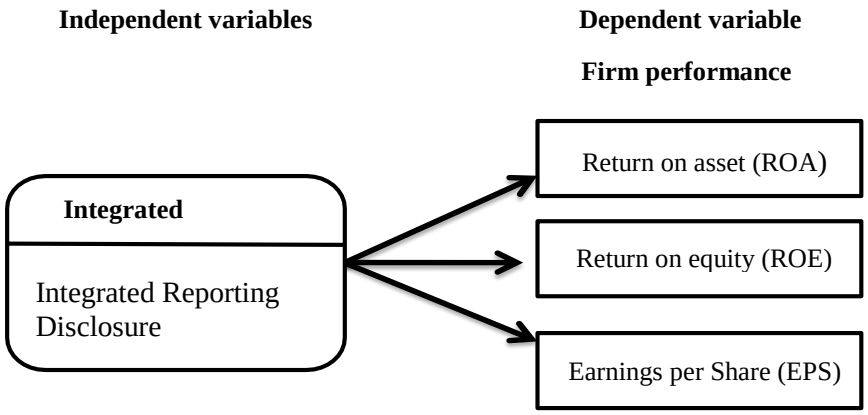

Figure 2.1: The Conceptual Framework

(Source developed by researcher)

Table 3.1: Descriptive Analysis of Integrated reporting

Descriptive statistics	
No of companies	42
No of observation	210
Minimum	22.86
Maximum	91.43
Mean	50.46
Standard deviation	16.37

(Source: Survey Data)

Table 3.2: Descriptive Analysis of Return on Assets

Descriptive statistics	
No of companies	42
No of observation	210
Minimum	-9.78
Maximum	28.9
Mean	3.428
Standard deviation	4.45

(Source: Survey Data)

Table 3.3: Descriptive Analysis of Return on Equity

Descriptive statistics	
No of companies	42
No of observation	210
Minimum	-25.89
Maximum	56.71
Mean	9.25
Standard deviation	8.81

(Source: Survey Data)

Table 3.4: Descriptive Analysis of Earning Per Share

Descriptive statistics	
No of companies	42
No of observation	210
Minimum	-13.93
Maximum	58.5
Mean	9.44
Standard deviation	11.24

(Source: Survey Data)

Table 3.5: Descriptive Statistics based on the year

Year	Descriptive Statistics	ROA	ROE	EPS	IR
2016	Mean	4.724762	11.57429	9.237381	35.85
	Sd	4.925566	8.761229	11.42363	7.810464
2017	Mean	4.016429	10.54595	10.535	41.97286
	Sd	4.642866	8.246792	12.34815	8.778927
2018	Mean	2.947619	10.37643	10.37881	49.04786
	Sd	3.290861	10.40441	12.20553	11.12734
2019	Mean	1.927619	6.298095	7.069524	57.52881
	Sd	2.288941	6.280555	9.003309	13.5163
2020	Mean	3.526905	7.469762	9.957381	67.64857
	Sd	5.868854	9.071535	11.08739	16.61857

(Source: Survey Data)

Table 3.6: Unit Root Test

Variable	Statistic	P Value
ROA	282.4642	0.0000
ROE	164.8405	0.0000
EPS	184.0446	0.0000
IR	540.0474	0.0000

(Source: Survey Data)

Table 3.7: Panel Correlation Analysis

Variable	IR	ROA	ROE	EPS
IR	1.0000	-	-	-
ROA	-0.1488	1.0000	-	-
ROE	-0.0259	-	1.0000	-
EPS	0.1409	-	-	1.0000

(Source: Survey Data)

Table 3.8: Fixed Effect Regression Analysis for ROA

Fixed effects (within) regression	Number of obs = 210
Group variable: company name	Number of groups = 42
R-sq:	Obs per group:
within = 0.0428	Min = 5
between = 0.0097	Avg = 5.0
overall = 0.0222	Max = 5
	F (1,167) = 7.47
corr(u_i, Xb) = -0.0403	Prob > F = 0.0069

(Source: Survey Data)

ROA	Coef.	Std. Err	t	P>|t|	[95%Conf.	Interval]
IR	-.0488218	0.0178607	-2.73	0.007	-0.840836	-.01356
cons	5.892342	0.9266115	6.36	0.000	4.06296	7.721724

(Source: Survey Data)

sigma | 3.4420469

sigma | 3.1172814

Table 3.9: Random Effect Regression Analysis for ROA

Random-effects (within) regression	Number of obs = 210
Group variable: company name	Number of groups = 42
R-sq:	Obs per group:
Within =0.0428	min = 5
between =0.0097	avg = 5.0
overall = 0.0222	max = 5
	Waldchi2(1) = 7.77
corr(u_i, Xb) = 0	Prob > chi2 = 0.0053

(Source: Survey Data)

ROA	Coef.	Std. Err	z	P>|z|	[95%Conf.	Interval]
IR	-.0466398	.0167299	-2.79	0.005	-.0794298	-.0138498
cons	5.782233	.9998173	5.78	0.000	3.822627	7.741839

(Source: Survey Data)

Table 3.10: Fixed Effect Regression Analysis for ROE

Fixed Effects (within) regression	Number of obs = 210
Group variable: company name	Number of groups = 42
R-sq:	Obs per group:
within = 0.0866 between= 0.0361 overall = 0.0007	Min = 5
	avg = 5.0
	Max = 5
	F(1,167) = 15.83
corr(u_i, Xb) = -0.2459	Prob > F = 0.0001

(Source: Survey Data)

ROE	Coef.	Std. Err	t	P>|t|	[95%Conf.	Interval]
IR	-.1278264	.032126	-3.98	0.000	-.1912518	-.064401
cons	15.70336	1.666694	9.42	0.000	12.41285	18.99387

(Source: Survey Data)

sigma_u | 7.5483984

sigma_e | 5.6070484

Table 3.11: Random Effect Regression Analysis for ROE

Random-effects (within) regression	Number of obs = 210
Group variable: company name	Number of groups = 42
R-sq:	Obs per group:
within = 0.0866 between = 0.0361 overall = 0.0007	min = 5
	avg = 5.0
	max = 5

(Source: Survey Data)

ROE	Coef.	Std. Err	z	P>|z|	[95% Conf.	Interval]
IR	-0.1041819	0.0309095	-3.37	0.001	-0.1647633	-0.0436005
Cons	14.5102	1.913409	7.58	0.000	10.75999	18.26041

(Source: Survey Data)

sigma_u | 6.6449545

sigma_e | 5.6070484

Table 3.12: Fixed Effect Regression Analysis for EPS

Fixed effects (within) regression	Number of obs = 210
Group variable: company name	Number of groups = 42
R-sq:	Obs per group:
Within = 0.0012 between = 0.0708 overall = 0.0199	Min = 5
	avg = 5.0
	Max = 5
	F(1,167) = 0.20
corr(u_i, Xb) = -0.2049	Prob > F = 0.6540

(Source: Survey Data)

EPS	Coef.	Std. Err	t	P>|t|	[95% Conf.	Interval]
IR	-.016658	.0370955	-0.45	0.654	-.0898946	0565785
cons	10.27623	1.924513	5.34	0.000	6.476716	14.07574

(Source: Survey Data)

Table 3.13: Random Effect Regression Analysis for EPS

Random-effects (within) regression	Number of obs = 210
Group variable: company name	Number of groups = 42
R-sq:	Obs per group:
within = 0.0012 between = 0.0708 overall = 0.0199	min = 5
	avg = 5.0
	max = 5

(Source: Survey Data)

EPS	Coef.	Std. Err	z	P>|z|	[95% Conf.	Interval
IR	.0013422	.0359183	0.04	0.970	-.0690563	.0717407
Cons	9.367886	2.335507	4.01	0.000	4.790377	13.94539

(Source: Survey Data)

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