

# **The Journal of ARSYM**

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**Cover Page by:**

Dr. R.M.T.N. Rathnayake  
Lecturer  
Department of Accountancy  
Wayamba University of Sri Lanka

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# The Impact of Integrated Reporting on Firm Performance: Evidence from Listed Companies in Sri Lanka

**Gunarathne, A.G.T.N.<sup>1</sup>, Priyadarshanie, W.A.N.<sup>2</sup>**

*Department of Business Management, Faculty of Business Studies & Finance,  
Wayamba University of Sri Lanka*

*<sup>1</sup>thilini1323@gmail.com, <sup>2</sup>nadeesha@wyb.ac.lk*

## ABSTRACT

The paper aims to identify the impact of adaptation of Integrated Reporting (IR) on the firm market and financial performance. Return on Equity (ROE) and market capitalization (MC) were considered as the dependent variables. Integrated reporting was the independent variable of this study. A quantitative research approach is used in this study. Panel Regression was employed to examine the impact of IR on the firm performance. This research relies on secondary data which was collected from published annual reports of listed companies on the Colombo Stock Exchange (CSE). Data was collected from a sample of 50 companies listed in different sectors over consecutive five financial years from 2016 to 2020. There were 250 firm-year observations. According to the results of the study, there is a significant and weekly negative relationship between IR and ROE. That means IR has a significant impact on the financial performance. Market capitalization and IR have a significant relationship indicating IR exhibits substantial influence on the market performance. The findings of this study will assist annual report preparation and regulators in implementing International Integrated Reporting Framework in the Sri Lankan context. Findings have several implications for annual report preparers and policy makers since IR has significant impact on both financial performance and market performance. Regulatory bodies and standard setters may have implications with relation to the laws and regulations governing voluntary disclosures. More importantly study highlights implications for policy makers and practitioners on how investors make use of the accounting information and the voluntary information disclosed in annual reports in their decision-making. This study has contributed to the existing literature on adaptation of Integrated Reporting as it is examined whether IR significantly impact on firm performance.

**Keywords:** *Colombo Stock Exchange, Firm Performance, Integrated Reporting*

## 1. INTRODUCTION

With the release of the International Integrated Reporting Framework (IIRF) by the International Integrated Reporting Council (IIRC) in 2013, integrated reporting (IR) received attention as a new reporting format. Many previous studies have revealed a growing trend to adopt IR practice in the preparation of annual reports, and these guidelines appear to have a dramatic impact on IR adopters around the world, including in Sri Lanka. It is critical in this context to

measure its impact on IR users in terms of financial performance and market performance of firms. IR entails providing both financial and non-financial information in addition to environmental, social, and governance data, in the same document (Adams & Simnett, 2011). Although several studies have seemingly addressed this issue, these studies are constrained by their choice of method and contextual setting. Therefore, the impact of IR on firm performance is still questionable and it makes this area further investigated. However, in the Sri Lankan context, there are limited studies on this issue. For instance, in South Africa where IR adoption is mandatory, Lee and Yeo (2015) found a positive association between the quality of IR information and the firm value. Islam (2020) investigated the relationship between IR and firm's performance in terms of operational, financial and market growth performance and revealed that IR has significant positive impact on all three type of performance of companies in Bangladesh where IR adoption is voluntary. As IR seeks to explain to financial capital providers how an entity develops value over time, this study assessed the influence of integrated reporting on firm performance of Sri Lankan listed companies by filling an empirical gap. Therefore, this study comes in to fill the void by establishing whether there is an impact of integrated reporting on firm performance of listed companies of CSE, Sri Lanka. The conclusions of this study have several implications for practitioners, professional accounting organizations, business schools, and external corporate information consumers such as legislators and investors. For international policymakers like the IIRC, this study emphasizes the need for precise guidance in the development of integrated reports, such as a specific matrix rather than a principle-based framework. Furthermore, by utilizing the results of this study, regulators and policy-makers can design suitable policies.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Literature**

The various theories that will be utilized to guide the research are examined in this part. Integrated Reporting (IR) is one of the most recent efforts to improve non-financial reporting and responsibilities to encompass the company's social and environmental issues (Melloni et al., 2017). This reporting structure brings together important information about a company's aim, administration, operations, and possibilities in a way that shows how the company creates value. Different studies can be used to determine the influence of IR on firm performance. In this study's theoretical approach, the importance of agency theory, stakeholder theory, and legitimacy theory is investigated. Some of the most widely used firm performance variables are as follows: ROE and market capitalization are all important criteria to consider.

#### **2.1.1 Agency theory**

Jenson and Meckling first proposed agency theory in 1976. According to agency theory, companies with a higher agency issue are more likely to reveal more information due to the greater difficulty of information asymmetry (Frias-Aceituno et al., 2012). There is a contradiction between managers and shareholders, according to the agency theory (Marita et al., 2020). Therefore, the



agency problem is usually caused by information asymmetry between owners and managers, which can be minimized by disclosing non-financial information, which aligns manager's and minority interests' interests (Frias-Aceituno et al., 2012). Based on the agency theory, IR disclosure can be considered one of the monitoring mechanisms for the company's performance (Wen and Heong, 2017). According to the agency theory, conflicts between managers and shareholders can be reduced if companies enhance their disclosure, and this enhanced disclosure can help corporations to achieve their goal of increasing their value (Lobo and Zhou, 2001). To adopt IR, companies must consider both financial and non-financial information as indicators of long-term performance rather than only financial information regarding short-term performance (De Villiers et al., 2014). Companies can benefit from improved financial performance when they can meet the information demands of both management and owners (Nasi et al., 1997). It illustrates that increased corporate information disclosures can reduce information asymmetry, which is in line with agency theory and as a result, it is expected that the firm performance of the company can be improved as well (Lok and Phua, 2021). Therefore, Agency theory appears to apply to IR and firm performance, according to these researchers.

### **2.1.2 Stakeholder theory**

According to the stakeholder theory, a company must be able to recognize stakeholder interests to achieve its objectives (Freeman, 1984). Multiple capitals' disclosure in integrated reports gives an overview of the company's financial and non-financial performance (Ahmed Haji and Hossain, 2016). This disclosure demonstrates how businesses create value reactions for businesses and stakeholders (Coulson et al., 2015). Companies must continually adapt their operating and reporting behaviors since different categories of stakeholders have varying degrees of power to compel and influence corporate actions and activities (Islam and Deegan, 2010). The stakeholder theory's core concept is that a company must manage its relationships with its stakeholders, get their buy-in, and adjust its activities to be responsive and that doing so successfully will lead to the company's success (Adegbe et al., 2019). In corporate reporting, management must guarantee that information is provided that is satisfactory not only to the owners (shareholders) but also to all other interest groups within the stakeholder context (Adegbe et al., 2019). The application of stakeholder theory is based on two main ideas: first, stakeholder theory allows the firms to achieve good performance by helping managers identify the purpose of the company, and second, stakeholder theory pushes managers to determine the relationship they want to create with stakeholders in their environment to fulfill the purpose of the organization. As a result, while shareholders and profits are critical, they become outputs rather than drivers in the value creation process (Freeman et al., 2004). Similarly, IR aims to enhance sustainability and address the needs of various stakeholders in addition to creating value for shareholders (investors) (Tweedie and Martinov-Bennie, 2015). To create value, organizations, and managers must consider the interests of all groups who are affected or can affect their actions, according to the stakeholder theory (Freeman, 1994). Furthermore, because investors are themselves, stakeholders, the focus of IR on capital

providers (investors) does not exclude the application of the stakeholder theory (Suttipun, 2017). According to these studies, stakeholder theory appears to apply to IR and firm performance.

### **2.1.3 Legitimacy theory**

According to legitimacy theory, corporations have implicit social contracts with the society in which they operate (Shocker and Sethi, 1973). This social contract compels an organization to adhere to a society's specific values, norms, and boundaries through the implementation of appropriate structures and processes (Dowling and Pfeffer, 1975). The ability of a company to achieve society's sustainability goal is critical to its long-term survival and firms should be requested to undertake legitimizing strategies if legitimacy gaps are noted (Fernando and Lawrence, 2014). Firms adjust their reporting strategy to improve their decision usefulness in line with stakeholders' information needs, according to legitimacy theory (Velte, 2021). A firm exposed to fewer risks needs a smaller risk premium in the calculation of its cost of capital, resulting in a higher firm value in the DCF model (Wahl et al., 2020). According to Higgins et al. (2014), some businesses adapt to the IR framework faster than other firms in their industry to become "the role model firm" and according to them, it is vital to the acceptance of IR at the national level. Legitimacy theory is related to IR disclosure and firms with a larger market value tend to legitimate their actions in society by incorporating more information on their performance in social, environmental, and governance sectors (Vitolla et al., 2020). The legitimacy theory, which is based on an implied contract between an organization and the community, argues that an organization must justify its existence in the eyes of society to continue and that voluntary disclosure strategies, such as IR and SEC filings, are one way to do so (Lai et al., 2016). The study has legitimacy because it demonstrates Sri Lankan businesses' endeavors to embrace and maintain the practice of IR. It can be shown that legitimacy theory can be applied to IR and firm performance based on previous research.

## **2.2 Empirical Review**

Integrated reporting is a new approach to corporate disclosure that is focused on a company's strategy for creating and sustaining value over the short, medium, and long term. According to the IIRC's framework, this process results in the creation of periodic integrated reports, which are described as a "concise information exchange about how an organization's business strategy, governance, quality, and potential, in the context of information security, result in the creation of value over the short, medium, and long term" (IIRC, 2013). The most recent significant advancement in corporate reporting is IR, which is a process based on integrated thinking that results in a company's periodic integrated report on value creation throughout time, as well as related communications and future growth. A concise statement of how an organization's strategy, governance, performance, and prospects, when seen in the context of its external environment, lead to the development of value in the marketplace is defined as an integrated report. As a result, IR integrates the majority of the material components of information currently reported in

numerous reporting strands and explains how they affect an organization's ability to create and sustain value in the market, as well as, short, medium, and long time frames are the three categories of time frames (IIRC,2013; Tili et al., 2019). Prior research applies indices or checklists produced based on IIRF as longitudinal analyses to assess the extent of IR adoption in various countries (Hassan et al., 2019). To "provide appropriate Coverage and Protection," the IIRF takes a principles-based approach. IR is an effort to increase the acceptance of business disclosures to improve the positive evaluation of management and investment decision-making (De Villiers and Hsiao, 2018). The IR index approach is used to measure IR disclosure, according to my study.

According to Islam (2020), the choice of one metric over another to measure firm performance is not clearly defined under any prevalent theoretical notion. Better performing organizations proactively adopt new reporting methods such as IR to represent their favorable financial and operational performance to various stakeholders (Vitolla et al., 2020). Before the use of IR, previous studies focused on determining the value relevance of financial information disclosure and its impact on firm performance for several years, but they did not consider to what extent non-financial information might have a significant impact on firm performance that should be considered (Beaver, 2002; Ernst and Young, 2014; El-Deeb, 2019). According to Kasbuna Teh and Ong (2016), Return on Assets (ROA) and Return on Equity (ROE) are the most commonly utilized metrics of financial performance for Malaysian listed companies when it comes to annual report disclosure studies. ROA is a statistic that measures a company's net profit yield from its capital assets investment and measures the efficiency of capital employed. ROE, on the other hand, is related to the amount of net profit earned from the company's investment by its shareholders (Epps and Cereola, 2008). Some studies used leverage to measure company performance, and it was noticed that empirical studies had conflicting results. Some researchers found a positive relationship between leverage and integrated reporting (Bradbury, 1992), while others found no significant statistical association (Hossain et al., 1995; Raffournier, 1995) or found a substantial negative relationship (Meek et al., 1995). As a result, the expected association's direction was not consistent or stable between investigations. Felix Ayadi (1996) identified four performance measures that indicate both the firm's profitability and the market value of its total capitalization. Despite their empirical limitations, surveys and financial studies [Mechlin and Berg (1980); Watts (1986)] have revealed that the most commonly used indicators are those based on the firm's profitability, namely, return on equity (ROE), the profit margin on sales, and return on total capitalization. According to Felix Ayadi (1996), a valid measure of performance should represent the market's assessment of the riskiness and timing of the firm's current investments' expected returns. Stakeholder decisions are influenced by information quality, as more transparent firms may choose to collaborate with, patronize, or work for them, resulting in increased sales and financial performance (Lev et al., 2009). According to this study, firm performance is the dependent component, which includes ROE and market capitalization. We gathered information on firm performance via integrated reports and company

websites, and the above variables were defined and measured as dependent variables.

Some earlier studies have explored the relationship between IR and firm value such as (Marita et al., 2020; Nurkumalasari et al., 2019; Adegbeie et al., 2019; Lee et al., 2015; Dey, 2020; Ebimobowei and Uche, 2021; Moloji, 2020). And also some previous studies have investigated IR and financial performance such as (Wen and Heong, 2017; Matemane and Wentzel, 2019; Albetairi et al., 2018; Suttipun, 2017). Not only IR and financial performance but also IR and firm performance were studied in past studies, for example (Appiagyei et al., 2016; El-Deeb, 2019; Islam, 2020; Lok and Phua, 2021). When considering IR and firm performance, Islam (2020) determined that there is a significant and positive relationship between IR and firm performance by using a sample of 20 firms listed under ten different nonfinancial industries of the (DSE) in Bangladesh for three financial years and, by using content analysis and regression analysis. The aim is to observe the integrated reporting (IR) disclosure pattern and investigate its relationship with a firm's operational, financial, and market growth performance measured in the form of ROA, ROE, and market-to-book value ratio, in Bangladesh's voluntary disclosure regime. The dependent variable in this study is IRDIN, and the independent variables are market-to-book value ratio, ROE, and ROA while the control variables are financial leverage and the natural logarithm of total assets. Limitations of this study are; Small sample size may limit the generalizability of research findings in other voluntary disclosure regimes, and self-constructed IRDIN index ratings may be influenced by subjective assessment when evaluating annual reports. This study contributes to the existing limited literature on IR and firm performance, and it is also applicable to my research.

El-Deeb (2019) also found that the relationship between IR and firm performance was positive. Data from companies listed on the Egyptian stock exchange market from 2012 to 2017 was used in this study, which was analyzed using a group of statistical analyses. The independent variable in this research is IR, while the dependent variables are firm performance (as measured by ROE and debt ratio) and value (by using capitalized market value). This study aims to identify important problems, opportunities, strengths, and weaknesses that companies listed on the stock exchange market (EGX30) will face during the integrated reporting (IR) implementation process. This study provides insight into the future of implementing (IR) reporting, which can be used as a foundation for future research, and so this study provides evidence for my research as well. In the field of IR and financial performance, Wen and Heong (2017) found evidence of a significant effect on financial performance. Matemane and Wentzel (2019) stated that there was a positive relationship between IRQ and EPS, while there was no significant relationship between IRQ and Q-Ratio, IRQ and ROE, IRQ and ROA as well as IRQ and EVA over the period under review. According to Albetairi et al. (2018), determined that the findings indicate the increased risk and opportunities disclosure negatively, but significantly impact financial performance. Lee and Yeo (2015); Bernardi and Stark (2018); Zhou et al. (2017) discovered that there is a positive relationship between firm valuation

and IR disclosure, particularly in large and complex organizations, by investigating the relationship between IR disclosures and business performance. Many researchers looked into the relationship between integrated reporting and firm performance in general, as well as the leverage level assessed by the debt ratio in particular (El-Deeb 2019). IR is linked to creating value and communicating that value to financial capital providers, allowing them to better assess the firm they have invested in or plan to invest in in the future, and IR fosters integrated thinking in the organization, allowing for better allocation of the company's financial resources (Islam, 2020). It is assumed that implementing IR improves financial performance because of the critical focus on both value creation and financial capital (Islam, 2020). Salvi et al. (2020) studied the performance of companies and the existence of IR in their annual reports and discovered a positive relationship between the two. According to De Villiers et al. (2016), there is a significant association between the integrated reporting compliance level and the company's leverage level, which he explains by the external capital suppliers' requirement for information. Iatridis (2012) and Annandale et al. (2004) demonstrated how integrated reporting as an information system can assist management in reducing a variety of risks, including the need for borrowing funds, which was quantified in these studies using the debt ratio as a proxy for leverage level.

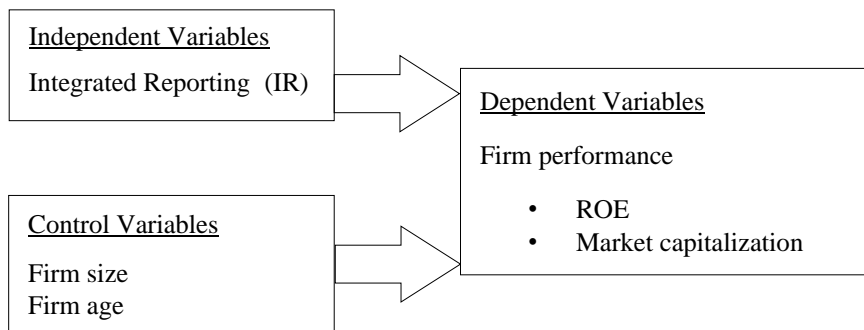
When it comes to IR and firm value, several studies have indicated that IR has a positive impact on firm value such as (Lee and Yeo, 2015; Dey, 2020; Ebimobwei and Uche, 2021). Wahl et al. (2020) stated that there is no significant effect of IR on firm value while Moloi (2020) stated that there is a significant impact of IR on firm value. In addition, Marita et al. (2020) determined that not all components in IR had an impact on the firm value. Studies about IR and firm value, IR, and financial performance are also relevant to my study. Because those researches included some measurements for firm value and performance such as ROE and market capitalization. Those criteria apply to my research as well. As a result, all the past studies mentioned above apply to my study. Based on the literature review, it can be seen that all the studies on this topic have been carried out in other countries, and it is difficult to find studies in the Sri Lankan context. According to the literature review, there is a significant, positive relationship between IR and firm performance. However, sometimes it varies depending on the measures used to measure the firm's performance. As a result, the purpose of this study is to determine whether IR has an impact on firm performance and, if so, what kind of impact it has in the sample of Sri Lankan listed companies.

### **3. METHODOLOGY**

This research relies on secondary data which was collected from published annual reports of listed companies on the Colombo Stock Exchange (CSE). Data was collected from a sample of 50 companies (IR adapted and not adapted companies) listed in 19 sectors over five consecutive financial years from 2016 to 2020. The stratified sampling method was used to select the sample from each

sector. This research belongs to the positivism category which is connected with the deductive approach.

Integrated reporting was the independent variable in this study. An integrated reporting index including 40 items was developed based on the International Integrated Reporting Framework (IIRF) to measure the Integrated Reporting. Firm performance was the dependent variable. Return on Equity (ROE) was used to measure the firm financial performance while Market Capitalization was used to measure the market performance. Firm size and firm age were considered as control variables. Figure 01 illustrates the conceptual framework of this study.



**Figure 1: Conceptual Framework**

The following regression models can be developed in accordance with the conceptual framework:

Model 1

$$ROE = \alpha + \beta_1 IGRI + \beta_2 FZ + \beta_3 FA + \epsilon$$

Model 2

$$MC = \alpha + \beta_1 IGRI + \beta_2 FZ + \beta_3 FA + \epsilon$$

This study will use panel regression analysis with panel data to measure the impact of independent variable on the dependent variables. The conceptual framework, models, and existing literature are used to construct the following hypotheses, which are consistent with the research objectives.

H1: There is a significant positive impact of the adaptation of Integrated Reporting on ROE

H2: There is a significant positive impact of the adaptation of Integrated Reporting on Market Capitalization

## Operationalization

**Table 1: Operationalization of the Variables**

Variable	Indicator	Measurement	Previous researches
<u>Independent variable</u>			
Integrated reporting	IR index	$IRI = \sum_{t=1} \frac{di}{n} = \frac{TS}{MS}$	Lipunga (2015)
<u>Dependent variable</u>			
<b>Firm performance</b>			
Earnings per share	EPS	Profit after tax / No of common stock outstanding	Lucyanda and Siagian (2012)
Return on equity	ROE	net income/shareholder's equity	Lipunga (2015)
Tobin's Q Market capitalization	Tobin's Q	(Equity market value+ book value of total liabilities) / Total assets Share price* No: of shares	Lee and Yeo (2016)
<u>Control Variables</u>			
- Firm size	Total assets of the company	Natural log of total assets	Dey (2020)
- Firm age	Listed years	Natural log value of no: of years since the listed date in CSE	Dey (2020)

## 4. RESULTS AND DISCUSSION

The findings of this study revealed that the averagely companies have complied with IIRF at 77.6% level when they are preparing their integrated annual reports. The Hausman test was used to select the most appropriate regression model (Fixed Effect Model or the Random Effect model) to analyze the panel data. The hypotheses tested under the Hausman test are as follows,

$H_0$  = Random Effect Model is Appropriate

$H_1$  = Fixed Effect Model is Appropriate

When considering the ROE, the probability value of the Chi-Square Statistic is 0.025, which is significant at the 5% significant level suggest that the alternative hypothesis is accepted. Thereby Hausman test concluded that the fixed effect model is more appropriate to analyze the model 01.

**Table 2: ROE (Fixed effect model)**

Variable	Coefficient	t-Statistic	Prob.
C	1.660	1.364	0.173
IGRI	-0.518	-3.087	0.002
FZ	-0.045	-0.851	0.395
FA	-0.0007	-0.225	0.821
R-squared	0.901	F-Statistic	6.336
Adjusted R-squared	0.875	Prob(F-Statistic)	0.0003

The following equation can be derived using the Fixed Effect Regression Model's results.

$$ROE = 1.660 - 0.518 IGRI - 0.045 FZ - 0.0007 FA$$

This independent variable is significant since the p-value ( $p=0.0023$ ) is less than 0.05. And the t-statistic value is -3.087. According to this study, it is specific that there is a significant impact of integrated reporting on ROE. The coefficient value is -0.518. It specifies that there is a negative impact of integrated reporting on ROE. This will course to accept *H1* to satisfy the first objective.

When considering **market capitalization**, the probability value of the Chi-Square statistic is zero, which is significant at a level of 5%. Accordingly, the fixed-effect model is the best model to assess the model 02 that explains market capitalization as the dependent variable of the model.

**Table 3: Market Capitalization (Fixed effect model)**

Variable	Coefficient	t-Statistic	Prob.
C	21.173	10.174	0
IGRI	-0.839	-2.922	0.003
FZ	0.094	1.042	0.298
FA	-0.008	-1.609	0.109
R-squared	0.970	F-Statistic	164.70
Adjusted R-squared	0.963	Prob(F-Statistic)	0

Based on the results of the Random Effect Regression Model, the Following equation can be identified,

$$MC = 21.173 - 0.839 IGRI + 0.094 FZ - 0.008 FA$$

The coefficient value is -0.839. It specifies that there is a negative impact of integrated reporting on MC. The Probability value of the coefficient is 0.0039 which is significant at a 5 % confidence level. Based on the above result, it can be concluded that there is a negative and statistically significant impact of integrated reporting on market capitalization. This will course to accept *H2* to satisfy the second objective.

## 5. CONCLUSION AND IMPLICATIONS

The objective of this study was to identify the impact of the adaptation of IR on the firm market performance and financial performance. Results revealed that there are a significant negative impact of IR on ROE and also has a significant negative impact on Market capitalization. Thereby, all hypotheses are rejected.



However, results are contradicting with the findings of other researchers (Yeo, 2016; Islam, 2021) who revealed a positive impact of IR on ROE and market capitalization. These results may be due to the complexity of the integrated annual report which is not understandable for the users of corporate annual reports. Abhayawansa et al. (2018) also pointed out that the improvements resulting from the adoption of integrated reporting are not relevant to analysts, as the reports do not provide the information required by analysts in sufficient detail or preferred format. The findings of this study will assist annual report preparers and regulators in implementing IIRF in the Sri Lankan context. Findings have several implications for annual report preparers and policy makers. Annual report producers should concentrate more on delivering important information clearly in their annual reports. Furthermore, policymakers should develop more specific guidelines for conveying non-financial information via annual reports. However, there are some limitations of the study. This study is based on the secondary data and There may be inherent limitations of using secondary data such as low accuracy of data. Future researchers can continue this study further by expanding the sample size and increasing the number of firm performance variables and also considering views of managers.

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