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A Publication of Students' Research of the
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The Journal of ARSYM (JARSYM) is a refereed journal published bi-annually by the Faculty of Business Studies & Finance, Wayamba University of Sri Lanka. The aim of the JARSYM is to disseminate high-quality research findings on a variety of timely topics generated by the undergraduate and postgraduate researchers in the Wayamba University of Sri Lanka. Furthermore, it opens up avenues for the undergraduates involved in the industry to share their inventions, state-of-the-art discoveries and novel ideas. The main philosophy behind the JARSYM is to enhance the research culture within the faculty, thereby within the Wayamba University. All research articles submitted are double blind reviewed prior to publishing. Views expressed in the research articles are not the views of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka or the Editorial Board.

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Aims and Scope

The Journal of ARSYM (JARSYM) is a refereed bi-annual journal committed to publish undergraduate research papers of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka. The JARSYM publishes theoretical and empirical papers spanning all the major research fields in business studies and finance. The aim of the JARSYM is to facilitate and encourage undergraduates by providing a platform to impart and share knowledge in the form of high quality and unique research papers.

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- Priority is given for novelty, originality, and to the extent of contribution that would make to the particular field.

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- Disaster and crisis management
- E-commerce & business communication
- Economics
- Entrepreneurship and small business
- Finance
- Human resource management and organizational behavior
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Impact of Environmental Management Accounting (EMA) Practices on Financial Performance of Domestic Licensed Commercial Banks in Sri Lanka

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ABSTRACT

The purpose of this research paper is to look into the Environmental Management Accounting (EMA) practice used by domestically licensed commercial banks in Sri Lanka to achieve financial Performance. This is an exploratory study that uses primary data to solve the research question of how does the EMA practice impacts the financial performance of domestic licensed commercial banks in Sri Lanka. The EMA practice is being used as an independent variable, and factors which including environmental information, environmental evaluation, environmental cost savings, and environmental laws were used to quantify the independent variable, whereas financial performance, which is measured using profitability and revenue growth is the dependent variable. The population of this study included all the domestic licensed commercial banks in Sri Lanka. As the population is of a manageable size all the 13 domestic licensed commercial banks were considered as the sample. All the primary data related to the study, a total of 130 responses were collected through a well-structured questionnaire from the top, middle, and lower-level managers of the domestic licensed commercial banks. The data were analyzed through descriptive statistics, correlations, and multiple regression using SPSS software. The correlation shows that Environmental Information, Environmental Evaluation, Environmental Laws, and Environmental Cost Saving have a statistically significant positive relationship with financial performance. Multiple regression analysis demonstrated that EMA practice has a positive impact on FP in licensed commercial banks in Sri Lanka, and it accepted all the hypotheses of this study. The findings point the way toward establishing a solid knowledge platform for future EMA development. According to the findings, the government should create a legislative and regulatory approach to manage environmental issues, and banks should comply with them to reduce penalties and increase financial performance. This study report adds to the growing collection of empirical studies on EMA practices in Sri Lanka.

Keywords: Domestically Licensed Commercial Banks, Environmental Management Accounting, Financial Performance

1. INTRODUCTION

1.1. Background to the study

Business organizations believe that some environmental costs are not significant to their business function. There are some production costs of

environmental elements that do not incur to the organization's operations. Environmental management accounting (EMA) will be helped to manage this environmental issue of every organization. Environmental Management Accounting can be demonstrated as collecting, generating, analyzing, and, using environmental financial information to make decisions (Bartolomeo, et al., 2000). At present Sri Lankan organizations are performing the environmental accounting practices such as measurable accounting, carbon emission, accounting for energy, eco-friendly capital budgeting, activity-based costing, assessments of environmental impact, life cycle analysis, and biodiversity accounting. The product costs considerably changed as a result of the proactive approach to environmental concerns. As a result, companies must analyze all business costs (including environmental costs) to make better decisions (Jasch, 2003). Businesses rely on that environmental costs are inconsequential to their operations. Organizations are not affected by the fact that certain manufacturing costs have an environmental aspect. EMA and reporting also hold businesses accountable for how much environmental protection they incorporate into their corporate decision-making. An organization's decisions should consider the effect of its operations on the environment as well as all other stakeholders. EMA also aids companies in determining how much resources they are destroying from the environment and how much money they are contributing back to the environment.

"The banking sector is a major source of financing to many industries and businesses" (Suganya, and Kengatharan, 2018). As the banking sector plays a major role, the economy of a country cannot survive without well-performed banks which leads to the continuous economic growth of the country. This banking function requires a great sense of responsibility and accountability on the behalf of the bank, because it may result in indirect pollution if banks fail to do proper due diligence on the adverse environmental consequences of specific businesses and industries before funding them. This financing role of banks makes massive accountability and responsibility for every bank as this indirectly impacts the pollution of the environment, if banks failed to have proper validated measurements concerning the negative environmental impacts before financing (Arulrajah & Saumya, 2016). In the context of the Sri Lankan organizational view, there are few studies on EMA, and still at its initial stage. It is little that more researches talk about the application and practice of EMA on financial performance regarding the banking sector yet it provided with more competitive advantages. Initially, this research lends empirical support to findings and observations about the factors that have accelerated the adoption of EMA in the banking sector.

1.2. Problem Identification and Justification.

The fundamental use of EMA is to expand the environmental management process which directs to recognize the exploitation of environmental performance, this has moved the focal point of traditional bookkeeping from provision of financial information to the reduction of asset utilization and effective consumption of natural resources (IFAC, 2005). EMA practice will provide the best environmental and financial performance by influencing the decision-making process of the organization (Schaltegger, et al., 2008).

However, the level of awareness and a better understanding of the environmental cost generated by the organization and the opportunities that can be gained through a proper environmental management process is lost in present (Deegan, 2001).

In the Sri Lankan context, it has been generally observed that there is an empirical gap that relates to the impact of EMA practice on the financial performance of the domestic licensed commercial bank sector in Sri Lanka. In general, these selected domestic commercial banks have implemented various EMA practices to have some benefits of both environmental and financial. Yet, this area of research has not been analyzed closely in Sri Lanka. This lack has provoked to conduct this empirical study, to fill the gap by adding to the existing collection of information on the EMA practice which can be used to manage the environmental impacts by domestic banks predominantly. This study attempts to expand the impact of EMA practice in the banking sector. Further, the influences of EMA to have high financial performances through the management of environmental factors of the banking sector have not been yet analyzed in the context of Sri Lanka.

1.2.1. Research Question

- How does the Environmental Management Accounting (EMA) practice impact the financial performance of domestic licensed commercial banks in Sri Lanka?

1.2.2. Research Objectives

- To analyze the impacts of EMA practice on the financial performance of domestic licensed commercial banks in Sri Lanka

2. LITERATURE REVIEW

2.1. Theories applied in EMA practice

Based on three theories, including contingency theory, institutional, and legitimacy theory, this study developed hypotheses concerning factors use to measure the EMA practice. The contingency theory refers to the structure of an organization, while the other theory is concerned with the link between organization and society. Early empirical studies examining the relationship between key determinants and Exception of Chang (2007), who tried to point out that the three main obstacles to the implementation of EMA had been money issues, government restrictions, and organizational behavior.

2.1.1. Contingency Theory

Pioneering researchers such as Burns and Stalke, Hage, and Lawrence and Lorsch, concisely defined contingency theory in 1960. This idea demonstrates that an organization's structure is influenced by the environment's uncertainty. Contingency theory is a branch of organizational behavior theory that examines how uncertainty variables like technology, culture, and environment have influenced organizational decision making (Islam, J., & Hu, H. A, 2012). Furthermore, Qian and Burritt (2009), acknowledged that an organization must meet its functional requirements while remaining consistent with its organizational structure and management process to achieve its goals.

Uncertainties are the functional aspects of an organization, such as its strategy, technology, scale, and resources. Parker (1997) developed a contingency framework that linked environmental accounting, environmental strategy and uncertainties in the environment of the organization. Despite the limited usage of contingency theory in environmental accounting research (Bouma & van der Veen, 2002), it is agreed here that the contingency perspective is potentially valuable for explaining environmental accounting, particularly environmental management accounting. Furthermore, Muslichah (2004) suggested that efficient management accounting is dependent on many factors, including the environment, organizational features, and management decision-making perspectives. It was also revealed that the strategy of an organization and the design of an organization and the design of an accounting system have a beneficial or a positive relationship.

2.1.2. Legitimacy Theory

Legitimacy theory argues that an organization and the society in which it functions have some sort of relationship (Fernando, S. and Lawrence, S., 2014). Because organizations consume resources from society and give products and services to that society, they are not isolated units (Niap, 2006). According to legitimacy theory, once managers believe that providing specific information is critical to an organization's survival, they will pursue strategies to provide continuous information to achieve or uphold legitimacy. The role of legitimacy theory in volunteer environmental reporting has been the subject of the majority of publications. A society can notice changes in an organization's environmental performance, according to Hoffman (2001). Environmental considerations may be incorporated into an organization's accounting process for a variety of reasons. To put it another way, accountability in disclosing environmental information to the public can be critical to reforming the accounting system. The legitimacy theory states that business success is legitimate when it is regarded to be fair and deserving of assistance, or when it is accepted by society. An organization may participate in a legitimization process to earn or increase integrity, retain its existing sense of legitimacy, or to recover or safeguard its damaged or endangered legitimacy (O'Donovan, 2002). Deegan C. (2002), believes that when managers believe their organization's actions aren't under the social expectations, corrective strategies are expected, according to legitimacy theory. Whenever society expects businesses to act responsibly toward the environment, businesses will rise to the challenge and build legitimate internal procedures. EMA's application will be renewed as well because it plays a critical role in ways of identifying and establishing legitimacy (Chang, H.H, 2007).

2.1.3. Institutional Theory

In contrast to contingency theory, which is centered on the technological environment, the institutional theory is related to the effects of situational variables on associations, with the organizational structure described as the set of criteria that individuals and groups should fulfill in gaining support and authenticity (Chang, H.H, 2007). The attitudes and intentions of social groups are heavily influenced by social values and conventions. Efforts that maintain social standards and guidelines will be considered as proper as a result of

institutionalization. The organization is a social concept that is still a part of the social structure (DiMaggio & Powell, 1983). Social standards and guidance have an impact on an organization, as well as the people who work there, the advantages that the organization generates, and how the company adapts to its surroundings. Three mechanisms, according to DiMaggio and Powell (1983), greatly impact an organization's governance decisions: coercion, norm, and imitation. The coercive process, specifically, relates to procedural rules, restrictions, and charges; the normative framework, to organizations' collective social views and beliefs; and the mimetic process, to the concept that when a sociological phenomenon or connection is approved and adopted in a sector, other individuals likely to act reasonably. (Schaltegger, et al., 2008). Chang (2007), has examined how EMA application has been influenced by the institutional setting of increased environmental consciousness. If there is a strong expectation in an organization's institutional framework that EMA must be implemented, the organization must take appropriate actions under society's demands. According to Qian and Burritt (2008), devised an EMA implementation strategy based on institutional components such as governmental interference, professional education and development, mimetic influence, and a professional association system.

2.2. EMA practice and Financial Performance

Bennett and James (1998) and Qian et al. (2011) suggested that one of EMA's main goals is to help enterprises with good data achieve sustainable growth by making better environmental decisions. The product costs considerably changed as a result of the proactive approach to environmental concerns. As a result, companies must analyze all business costs (including environmental costs) to make better decisions (Jasch, 2003). In traditional management accounting, many environmental costs are concealed, unaccounted for, and frequently distributed over multiple accounts (UNDSD, 2003). Environmental Management Accounting (EMA) is a unique and comprehensive branch of management accounting that assists managers in identifying, monitoring, and optimizing total company expenses and their implications by raising managers' knowledge of hidden and undervalued environmental costs (Burritt, 2004; Jasch, 2003). EMA can also identify lost opportunities for cost savings, innovative products, and obtaining a competitive advantage over its competitors by revealing expenses hidden by traditional accounting. Environmental and social disclosures, according to Deegan (2002), have a positive justifying impact on the organization, and environmental management practices are critical factors for a firm's longer-term market competition.

To begin with, total annual costs present a grim image of expenditures for businesses because EMA also determines the level of inefficiency costs. Accordingly, businesses aim to discover, analyze, and cut costs by first identifying and tracking expenses down to their origins and then looking for new and better ways to decrease costs and enhance performance in their production processes (Gale, 2006a; Jasch, 2003). Secondly, it allows decision-makers to evaluate better cost information when creating new methodologies, as well as helps to identify the advantages and disadvantages of technological advances. However, according to Bartolomeo et al. (2000), EMA does not

result in the development of entirely new procedures, but rather in incremental adjustments to current ones. Third, EMA's techniques enable to improve business performance and reduce material wastages.

EMA, according to Xiaomei (2004), is a new part of accounting aimed at achieving an economic and social development goal by employing basic accounting theories to identify, evaluate, and disclose an organization's environmental performance and the environmental consequences of its economic activities. Companies are gradually deciding that maximizing profits at any cost is no longer the most advantageous way to operate their firm and improve their competitive edge, according to Schaltegger, Burritt, and Peterson (2003). Even though many companies claim some environmental management accounting activity, Bartolomeo et al. (2010) mentioned in their detailed survey that this reflects only a few exploratory projects instead of a thorough and structured application, such as accounting function was not essential to many corporate environmental management activities. Traditional management approaches of financially acceptable practices are unable to detect all internal costs arising from pollution in the environment, therefore simply identifying costs is insufficient to make waste control.

Khalid and Lord (2012) backed up Bartolomeo et al. (2010)'s statement that financial considerations have always been the primary concern, though they use ecologically friendly practices in some situations. Companies will prefer to adopt any environmental-related techniques as long as it gives benefits to the organization financially. Organizations should not trade off their environmental requirements to obtain cheaper materials or goods from Customers, and they should focus on environmentally safe tools and methodologies, and financial firms should focus on ensuring that they only approve environmentally viable projects and financing decisions, among other recommendations. Environmental management accounting (EMA) is defined by Jasch (2003) as a combined approach that allows data from financial accounting, cost accounting, and material flow balances to be transferred to increase material efficiency, protect the environment, and financial burden, and lower pollution control costs.

Long-term expenses can be decreased by implementing more effective energy practices, reducing the usage and waste of other resources, and establishing more effective waste management and cleanup, as outlined by Laitner (2002). According to Babakri, Bennett, Raos, and Franchetti (2004), more quantitative proof after the adoption of an EMS has been presented, such as cost savings from using recycled products or materials, and able to gain the advantages by following such recyclable procedures.

However, because corporations have not recorded or assessed the costs and advantages of making environmental enhancements in many cases, the balance of costs and benefits remains unknown, which can support skeptics' reasoning towards investing in environmental protection (Hamschmidt and Dyllick, 2001). This could also be related to issues determining advantages since environmental management systems may not have been in a position for long

enough to collect complete amounts of information (Babakri, Bennett, Raos, and Franchetti 2004).

Environmental management accounting (EMA) is defined by Jasch (2003) as a combined approach that allows data from financial accounting, cost accounting, and material flow balances to be transferred to increase material efficiency, protect the environment, and financial burden, and lower pollution control costs. Many environmental management accounting studies identify a favorable relationship between financial performance and the level of company environmental information (Waddock and Gravess, 1997)

3. METHODOLOGY

3.1. Population and Sample

The population targeted for this study includes all the 13 domestic licensed commercial banks in Sri Lanka. Out of 24 licensed commercial banks, of which, 13 are domestically incorporated banks, while the other 11 are local branches of foreign banks. However, only 13 domestic licensed commercial banks were included in this analysis. As the population is of a manageable size and possible to collect data from the entire population, the sample size is also the total population of 13 domestically incorporated licensed commercial banks in Sri Lanka.

3.2. Data Collection

All the data related to the study was obtained from all the three-level managers in finance department of the domestic licensed commercial banks. Questionnaires have been distributed among those three-level managers, and in this list of questions, all the 13 domestic licensed commercial banks were asked about their EMA practices, which are commonly practiced or adopted by these Banks. The impact of Environmental Management Accounting practice on financial performance will be discussed in detail, with a focus on quantitative factors. The information of the research has been gathered from the year 2015-2019 based on the availability of data. The sample of this study was the whole population of 13 domestic licensed commercial banks. Managers were asked about the profitability and revenue growth during that past 5-year period through the questionnaire. There is a special reason to select this period for this research because this period can identify lower levels of market fluctuations.

3.3. Measurement of Variables

The independent variable of this research is EMA practice which was used to test the hypotheses. The four dimensions Environmental Information (EI), Environmental Evaluation (EE), Environmental Laws (EL), and Environmental cost savings (ECS) are used to measure this independent variable. Different researchers have used these variables in different ways to measure this independent variable. The dependent variable is the financial performance of the Domestic licensed commercial banks of Sri Lanka, and it will be measured using profitability and revenue growth.

3.4. Research Hypothesis

3.4.1. Producing Environmental Information and Financial Performance (USEPA,1998)

Identifying environmental expenses and associated financial streams is a real technique to get higher management's attention by connecting environmental responsibilities to costs. The USEPA (1998) stated that the concept of environmental costs was determined by how a business intended to use the information, such as capital budgeting or product development. For the conversion, management accounting approaches such as measuring performance, functional budgeting, costing, and pricing are used; all parts of providing environmental information are beneficial to the organization. Accordingly, the first hypothesis developed as:

H1: There is a significant impact of producing Environmental Information on financial performance.

3.4.2. Environmental Evaluation and Financial Performance

Firms must examine the internal and external advantages and costs of their operations to achieve the corporate goal of being environmentally friendly. Understanding the environmental costs and benefits of procedures and products may help organizations assess costs and pricing products more accurately, as well as develop future operations, products, and services that are more ecologically friendly. A profitability study should be performed using proper time frames and variables that do not eliminate long-term savings and advantages. An accurate evaluation of the investment portfolio responses to environmental costs should be conducted, taking into account the impact of resource price fluctuations as well as potential regulation changes. The second hypothesis is,

H2: There is a significant impact of Environmental Evaluation on financial performance.

3.4.3. Environmental Evaluation and Financial Performance

It has been suggested that a company's compliance with government restrictions is merely the first step on the road to long-term development (Magara, Aming, & Momanyi, 2015). Companies must track the usage of hazardous substances and pollution to comply with environmental legislation (and/or environmental regulatory compliance). Environmental compliance measures were implemented primarily to limit the risk of fines or penalties. Proactive coping strategies, such as environmental cleanups and paying penalties for breaking the law, are a costly burden for businesses, reducing profitability and severely impacting cash flow. This concept provides the following hypothesis:

H3: There is a significant impact of compliance with Environmental Laws on financial performance.

3.4.4. Tracking of Environmental Cost Saving and Financial Performance

As a consequence of climate change, companies are challenged to manage efficiency in a manner that produces profitability while minimizing environmental impact. One technique to assure waste reduction, including

environmental sustainability is to incorporate environmental costs and benefits into the financial management accounting system. Environmental managers can utilize EMA technology to detect and control environmental expenses that can aid companies to rationalize environmentally friendly manufacturing initiatives and identifying ways to cut costs while improving sustainability practices.

H4: There is a significant impact of tracking Environmental cost savings on financial performance.

3.5. Conceptual Framework

The conceptual framework of the study is based on the deduction method and for analysis of data collected from primary resources quantitative techniques were employed and which has designed to represent these independent and dependent variables. The model for the study can be presented based on the review of literature on EMA practice and the financial performance of banks, and the framework is shown below.

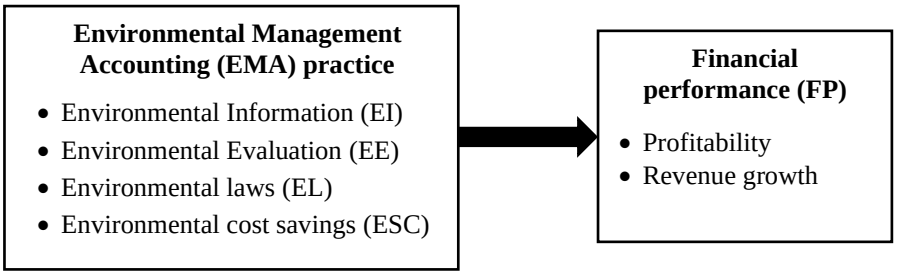

Figure 1: Conceptual Framework

Source: Developed by Researcher, 2021

3.6. Analysis Techniques

Due to the use of statistical and primary data, the descriptive quantitative approach is used to determine the conclusions of this data analysis. The information was gathered, coded, revised, and entered into a Statistical Package for Social Science (SPSS). The degrees of EMA implementation and estimated financial success levels in Sri Lanka's domestic banks were investigated using frequency distribution tables and descriptive statistics. The correlation value between EMA practice and financial performance was measured using inferential statistics utilizing Spearman's Correlation Coefficient. To identify the impact of EMA practices on financial performance, multiple regression was used.

4. FINDINGS

4.1. Descriptive Analysis

4.1.1. Frequency distribution analysis for variables

The commission took the view that evaluating the descriptive statistics was an excellent routine to guarantee that data were usually as expected under the conditions of mean, standard deviations, etc. (Garson, 2012). This survey addressed 130 respondents representing thirteen domestic banks from the top, middle, and lower-level managers. Using descriptive statistics to evaluate data was a good process for ensuring that data were usually as expected under the

conditions of mean, standard deviations, and so on. Accordingly, mean values for EI, EE, EL, and ECS are 3.877, 3.723, 3.797, and 3.769 respectively. Around 77% of the respondents indicated that there was adequate, timely, accurate, reliable, and concise environmental information and, environmental evaluation. Around 80% of the respondents had a positive view on the compliance of environmental laws, but only 75% of respondents are satisfied with their environmental cost-saving procedures.

4.2. Exploratory Data Analysis

4.2.1. Testing for Outliers

The presence of outliers would radically change the analysis of the outcome and would also violate the normality of the data set. Owing to this reason, it should be investigated carefully to make sure that there were no outliers within the data set. The most common sources of outliers were errors of data entry, not defining missing values, unintended sampling, true non-normal distribution. (Garson, 2012). Boxplot diagrams indicated the outliers of the data set. By considering the below boxplots, it could be concluded that the data set of the study had no outliers.

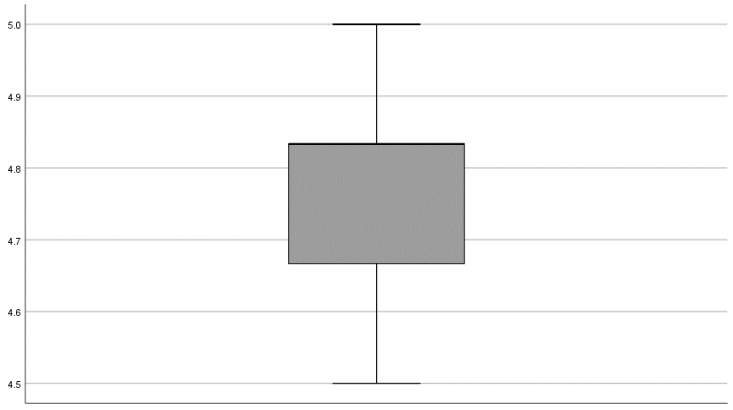

Figure 2: EI Outlier

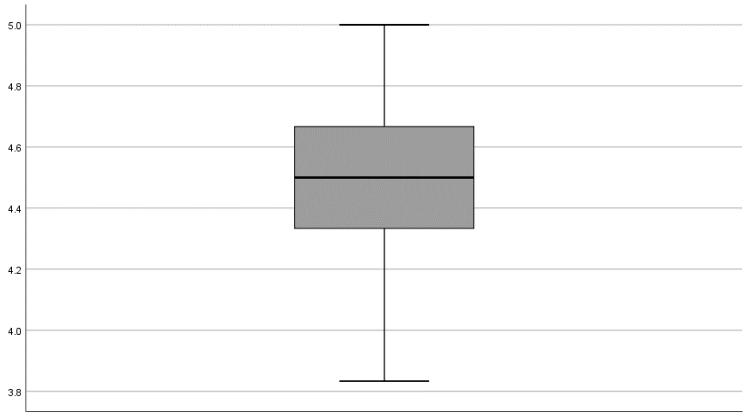

Figure 3: EE Outlier

Figure 4: EL Outlier

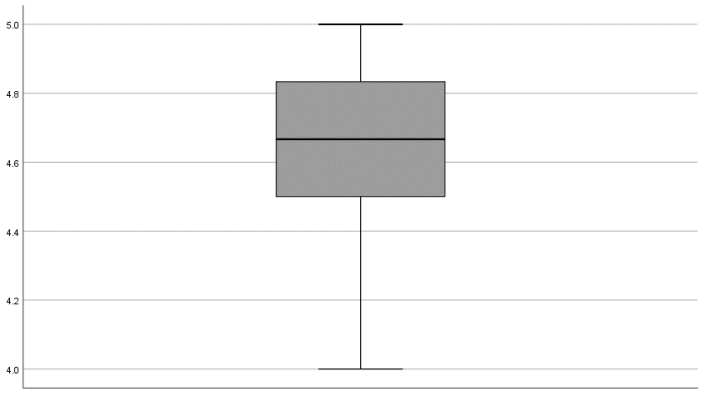

Figure 5: ECS Outlier

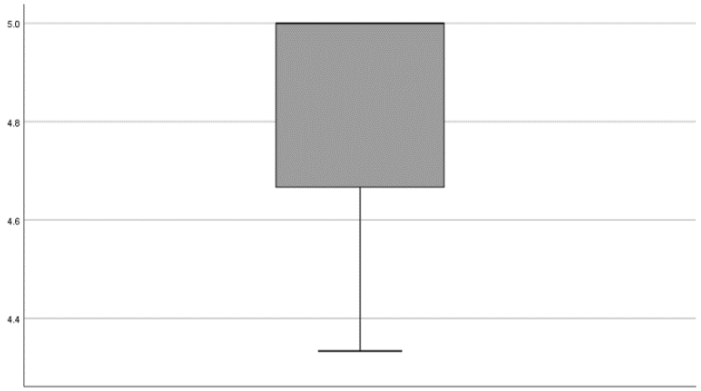

Figure 6: FP Outlier

4.2.2. Testing for Normality

The normal distribution has been the most commonly applied distribution of all distributions. In broad terms, most statistical methods believed normal distribution. Throughout the cases in which data have been non-normally distributed, alterations were necessary to accurate the data. The normality of the data set may be discovered both mathematically and vividly. Shapiro Wilk's and Kolmogorov Smirnov's assessments have been utilized to demonstrate the normality of the data set statistically. Corresponding to records, the data set

might be determined as normally distributed and the notion of normality has been acknowledged in the research.

Table 5: Test of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
MEAN_EE	.339	130	.000	.790	130	.000
MEAN_EL	.346	130	.000	.775	130	.000
MEAN_ECS	.327	130	.000	.821	130	.000
MEAN_EI	.293	130	.000	.816	130	.000
MEAN_FP	.305	130	.000	.793	130	.000

Source: (SPSS output, 2021)

4.2.3. Testing Homoscedasticity

The notion of homoscedasticity was described to make an equal variance and suggested that the variation across the regression line was identical for all the values of the forecast variable (X). Heteroscedasticity that the infringement of homoscedasticity had been present after the scope of the mistake in the expression varied through the amount of an independent variable. The survey created scatter plots for equally major structures and it verified the non-infringement of the homoscedasticity supposition.

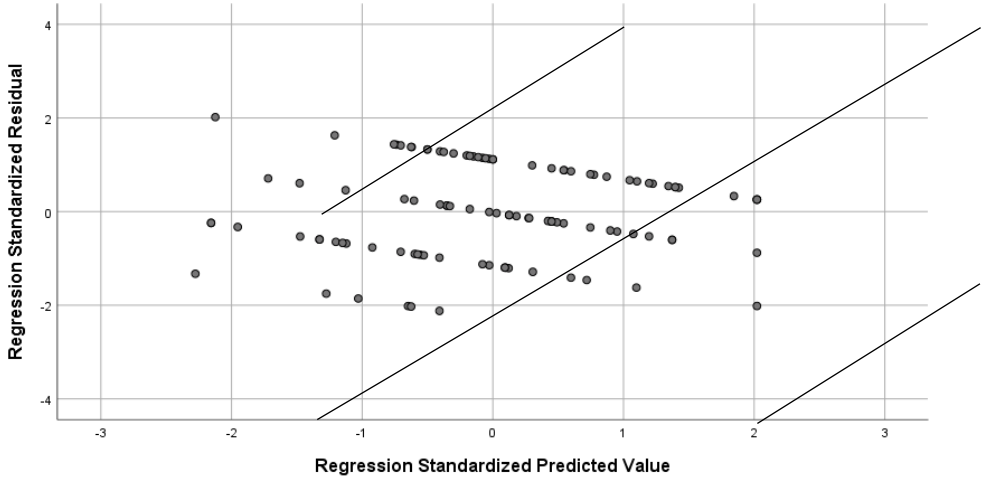

Figure 7: Homoscedasticity of the Study using Scatter Plot

Source: (SPSS output, 2021)

4.3. Inferential Statistics

4.3.1. Testing Multicollinearity

Multicollinearity remained an excessively superior correlation between the independent variables; and as a consequence of this, the special effects of those independents could not have been divided. If the tolerance value was not more than 0.2, that independent ought to be declined from the study owing to multicollinearity (Garson, 2012). Corresponding to Hair in 2009, this cut-off amount was 0.1. The law of thumb for the VIF value was that VIF ought to be a smaller amount than 10. Nevertheless, agreeing to Garson (2012), VIF be supposed to not be greater than 4.

The chart below shows the tolerance and VIF values of the exogenous variables of the research. As it demonstrated all tolerance amounts of the exogenous variables remained larger than 0.1 and VIF amounts were also not more than the key amount of 10. Consequently, all the variables of the survey were independent of one another and have not established the dilemma of multicollinearity.

Table 6: Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	MEAN_EI	.189	5.303
	MEAN_EE	.149	6.730
	MEAN_EL	.351	2.847
	MEAN_ECS	.163	6.116

Source: (SPSS output, 2021)

4.3.2. Correlation Analysis

The correlation coefficient used to be a gauge of the intensity of the connection between or among variables. Values of the correlation coefficient have always been between -1 and +1. A correlation coefficient of +1 designated that two variables were flawlessly connected in an optimistic linear logic, a correlation coefficient of -1 designated that two variables remained flawlessly connected in a negative linear logic, then a correlation coefficient of 0 designated that here stood no linear relationship between the two variables. The nearer it happened to 1 the stronger the relationship.

Table 7: Correlation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.480	.169		2.846	.005
	MEAN_EI	.120	.073	.152	1.635	.004
	MEAN_EE	.241	.098	.258	2.454	.015
	MEAN_EL	.339	.070	.329	4.814	.000
	MEAN_ECS	.193	.087	.222	2.222	.028

Source: (SPSS output, 2021)

Corresponding to the findings that come up demonstrated in table 3, the correlation coefficients of the EI, EE, EL, ECS, and FP revealed a 0.823, 0.837, 0.813, 0.840 correlation coefficient that has been solid in strength because all were beyond 0.5. After taking into account the P-value in the preceding table, it is characterized by utilizing sig. (2-tailed) and three out of four relationships in the above table, sig. (2-tailed) was 0.000 which showed 100% significance (Table 3).

4.3.3. Testing Hypotheses: Regression Analysis

Multiple regression analysis remained deemed as an expansion of simple regression analysis. By and large, multiple regression analysis had been utilized when the investigator sought to forecast the amount of a variable based upon

additional variables in the research. Essentially, two types of variables might be observed in multiple regression analysis.

In the current study, environmental information, environmental evaluation, environmental laws, environmental cost-saving were the independent variables that have been carried out as the X value, at the same time as the dependent variable, the financial performance had been considered as the Y values. A confidence level of 95% has been applied during the whole process.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin - Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.892[a]	.795	.789	.379	.795	121.309	4	125	.000	1.265

a. Predictors: (Constant), MEAN_ECS, MEAN_EL, MEAN_EI, MEAN_EE
b. Dependent Variable: MEAN_FP

Source: (SPSS output, 2021)

This study consisted of 0.795 R2 value and that indicated this model has 79.5% of the variance in environmental information, environmental evaluation, and environmental laws, environmental cost-saving that remained foretold by financial performance. This presented the complete power of connotation in the prototypical. Adjusted R-square signified 78.9% value and that explained this dependent variable has been designated by the individual variables. EMA application significantly and positively affected the financial performance of the domestic licensed commercial banks in Sri Lanka (r = 0.892). 89.2% of the financial performance is explained by the four independent variables. Therefore, that concluded this regression model was well fitted.

The Durbin-Watson static assessment remained as an examination achieved in instruction to measure the attendance of autocorrelation in the regression model of the research. Rendering to the above table, a value of 1.265 destined that here remained optimistic autocorrelation in the assessment model.

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.901	4	17.475	121.309	.000[b]
	Residual	18.007	125	.144		
	Total	87.908	129			

Source: (SPSS output, 2021)

This was an arithmetical assessment frequently used in occurrences anywhere there stood more than two groups, 0.000 – Statistically Significant or 0.05, or any value fewer this would outcome in substantial result although 0.05, or slightly value larger than this value remained non-important. Rendering to the table exposed above the general model was 0.000 that substantially below the 5% confidence substantial level. This model showed a significant result because the P-value was zero which indicated less than 0.05.

As exposed above, the analysis designated that the Beta values of the independent variables remained 0.152 (Sig. value = 0.004), 0.258(Sig. value = 0.015), 0.329(Sig. value = 0.000), 0.222(Sig. value = 0.028) in EI, EE, EL, ECS correspondingly, in addition it remained significant at 95% of confidence level. Therefore, it demonstrated that environmental information, environmental evaluation, environmental laws, environmental cost-saving have positively impacted financial performance in licensed commercial banks in Sri Lanka. Based on the above values, the multiple regression line equation is as below.

$$Y = (-0.48) + 0.120(EI) + 0.241(EE) + 0.339(EL) + 0.193(ECS) + \varepsilon$$

5. DISCUSIONS AND CONCLUSION

5.1. Conclusion

Environmental Management Accounting (EMA) practice is a newer technique in the field of management accounting. EMA must be adjusted towards the firm's specific requirements instead of being used as a generic solution (Schaltegger, et al., 2008). Acceding to the Larojan and Thevraban (2014), there is a Significant positive correlation exists between EMA practice and financial performance of the listed manufacturing companies in Sri Lanka. Further EMA practice has positively impact on profitability of Sri Lankan enterprises (Gunerathne, et al.,2014). Accordingly, this study results also align with those previous literature. Using a representative dataset, this study explored a strongly positive relationship between EMA practices and FP. And also, EI, EE, EL, and ECS which were used to measure the EMA practices were positively and strongly impacted the bank's financial performance separately. These study findings can be used as the basis for further researches and investigation in form of literature on EMA practice in the Sri Lankan banking sector and further beneficial to other researchers who wish to undertake a study relates to the practice of EMA on financial performance other than the banking sector.

As the banking sector plays a major role in the Sri Lankan economy it impacts all the other sectors directly or indirectly. Although there are some inherent limitations, the results suggested that a study on EMA concept might be implemented to produce a well-equipped environmental framework within banks, reducing economic recession, inflationary effects, and wastage by using more effective strategies.

5.2. Implications of the findings

The conclusions also guide other organizations who are having problems pricing strategies and managing asset wastage in the globalization era of technology, which is accompanied by rising levels of pollution. The findings should also serve as a reminder to accounting regulators and standard setters to include and emphasize EMA practice in accounting standards, as developing countries are unfamiliar with the concept. Therefore, these results imply government regulators, policymakers, researchers, managers, potential and existing shareholders, academics, accounting regulators, and other stakeholders.

5.3. Recommendations for further Studies

The findings of this study offer opportunities for further investigations. The researcher has to experience the ability to provide suggestions and recommendations for further researchers to gain more worthy if any research will be conducted by them in this field. Further, the researcher can add much variety of techniques to generalize their findings. Furthermore, the study might be expanded to analyze EMA practice and financial success utilizing direct interviews rather than questionnaire surveys, which would have a greater impact on the managers' ability to provide an accurate and non-biased judgment. And also, a need for policymakers and standard setters to include the EMA practices on financial performance in the harmonized International Financial Reporting Standard and other local GAAPs due to its relevance to business organizations.

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