

An Assessment of Compulsory Environmental Reporting by Listed Hotels in Mauritius

Beebeejaun Ambareen  ¹

1. Law Department, University of Mauritius

ABSTRACT

In 2016, the new Mauritius Code of Corporate Governance has made it mandatory for public interest entities to disclose some environmental information in their annual reports. Five years following the entry into force of this new Code, this research aims at firstly assessing the level of environmental reporting by hotels listed on the stock exchange of Mauritius, secondly investigating the relationship between environmental reporting and financial performance of these hotels and lastly, assessing the impact of these hotels' attributes on environmental reporting measured by their size, multinational characteristics and certification. Both qualitative and quantitative research methods will be adopted. In particular, data on each listed hotels' environmental reporting and financial performance will be taken from their annual reports for the years 2017 to 2021 and some statistical tests will be performed on these data. The findings of this research will be of use for all organisations across the tourism and hospitality industry that intend to adopt environmental or other ESG measures. These research findings may also be of help to academics, policymakers, organisations and investors to promote eco-friendly behaviour and in turn, sustainable economic development.

KEYWORDS

Corporate Governance, Environmental Reporting in Mauritius, Financial Performance and Environment, Hotels and Environmental Reporting.

ARTICLE HISTORY

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1. Introduction

Undeniably, the tourism industry creates numerous jobs and business opportunities whilst simultaneously uplifting the economic situation of any economy and Mauritius is of no exception. Mauritius is a small island located in the Indian Ocean with a population of 1.3 million as of January 2022 and having a gross national income of USD10,230 per capita (Economic Development Board, 2022). In addition to agriculture, financial services and manufacturing, tourism represents a vital economic pillar for Mauritius which contributed around 20% of the country's Gross Domestic Product in 2019 before the spread of the coronavirus although this figure has dropped to 4.6% in 2020 due to the negative repercussions on the travel and tourism industry during Covid-19 (Statista, 2022).

Essentially, to build economic resilience for the tourism sector, numerous schemes are made available by the Mauritian authorities for the development of luxurious hotels to accommodate the rise in tourist arrivals from various parts of the globe. Consequently, as of September 2022, there are 112 hotels duly licensed by the Mauritius Tourism Authority in addition to other tourist residences and guest houses for which no official figures are made available concerning their numbers (Tourism Authority, 2022). Nevertheless, one cannot undermine the impact on the environment both at the national level in terms of water and land usage, and waste production, and internationally for example by emitting carbon dioxide (Prakash et al., 2022). As such, it becomes imperative to gauge the effect of a hotel's environmental performance by establishing a system of environmental reporting which will help in targeting environmental efforts, cutting wastage and costs, monitoring progress and enhancing the repute and image of the respective hotel. In this respect, the awareness of environmental issues has prompted the Mauritian government to include some legal provisions relating to environmental reporting in the Mauritius Code of Corporate Governance back in 2016 (Code).

Basically, Section 75(2)(a) of the Mauritius Financial Reporting Act 2004 imposes a mandatory obligation on Public Interest Entities (PIEs) to comply with the Code and the list of PIEs is mentioned in the first schedule of the said act which includes inter alia entities listed on the Stock Exchange of Mauritius (SEM), financial institutions licensed by the Bank of Mauritius or the Financial Services Commission and other statutory bodies established by the relevant acts of parliament. Hence, apart from the Code's provisions on environmental reporting which are compulsory for adherence by PIEs only, there is no other regulation or statute for institutions in Mauritius to disclose environmental matters although this is considered as a means to reduce environmental damage as mentioned by Prakash et al. (2022). In this context, the research objectives of this study are three-fold, firstly assessing the level of environmental reporting by hotels listed on the Stock Exchange of Mauritius, secondly investigating the relationship between environmental reporting and financial performance of these hotels and lastly assessing the impact of these hotels' attributes on environmental reporting measured by their size, multinational characteristics and certification. Mauritius listed hotels are chosen as the target population of this study for 2 reasons, firstly because their activities are directly related to the environment and secondly, because listed entities are a category of PIEs which have to mandatorily comply with environmental reporting as per the Code.

In order to achieve these research objectives, both qualitative and quantitative research methods will be adopted. In particular, data on each listed hotels' environmental reporting and financial performance will be taken from their annual reports for the years 2017 to 2021, which are accessible freely on their respective websites. Thereafter, some statistical tests will be performed on the data collected using the SPSS software to investigate the relationship between environmental reporting and financial performance. Additionally, a qualitative document analysis and content analysis will be applied to scrutinise the Code's provision on environmental reporting as well as some existing literature on the researched topic and to determine the variables for the study.

At present, this study will be amongst the first academic writings on the extent of environmental reporting by listed hotels in Mauritius and on the relation between environmental reporting, financial performance and hotels' attributes in the tourism accommodation industry. The study is carried out with the aim of combining a large amount of empirical, theoretical, and factual information that can be of use to various stakeholders and not only to academics. While the first section of the paper has introduced the background of the research, the objectives and methods to be adopted, the second section will discuss

relevance of environmental reporting, the evolution of the code of corporate governance over the years in Mauritius and its mechanisms, some existing literature on the positive, negative and no association between environmental reporting and financial performance. Section 3 will discuss the research design adopted for the quantitative analysis while section 4 will present the empirical results. Section 5 will present the conclusion, discussion and future scope of research in the related area of study.

2. Literature Review

2.1 Definition and Relevance of Environmental Reporting

From a scrutiny of existing literature on the researched topic of this study, it was noted that the terms environmental reporting, environmental disclosure and sustainability reporting are interchangeably used by various scholars to refer to the same practice of communicating environmental information to various stakeholders. In particular, Wu and Li (2022) mentioned that environmental reporting forms part of environmental accounting which translates in a deliberate and dynamic exposure of environmental plans of an organisation to the public. In this context, an all-encompassing definition has been given by the Association of Chartered Certified Accountants (ACCA) that explains environmental disclosure as “a description of objectives, explanations and numerical information such as emissions, resources consumed by enterprises in specific environments for environmental impacts” (Ong et al., 2016).

Indeed, some scholars like Bushman et al. (2007), Zhang et al. (2020) and De Villiers et al. (2022) have highlighted the benefits of environmental reporting such as an enhanced reputation for the reporting organisation. That is, by publishing environmental information, all stakeholders are acquainted with the transparent practices of the relevant entities and will be more confident about their future strategies in terms of sustainability. Similarly, Zhao and Chen (2022) advocated for the continued practice of environmental reporting by firms since they found that people are keener to work for companies that have good environmental performance reporting. Also, it has been witnessed that some businesses are requiring their suppliers to issue environmental reports so as to oversee the entire impact of their products and services. Hence, environmental reporting may help organisations to manage their supply chains more effectively (Zhang et al., 2020). As part of their external roles, some organisations’ activities undeniably impact on the environment and if not regulated and controlled appropriately, these may have severe repercussions for the future generation and for the sustainable growth of the respective enterprises as well. Consequently, environmental reporting is considered as a method to provide key performance data for further analysis with the view of enhancing environmental management, reducing risks and findings ways to save resources and reduce operating expenditure (Walls et al., 2012).

Consequently, further to the associated benefits with environmental reporting, several governments across the globe are encouraging businesses and organisations to report their environmental impacts to the public in general. These initiatives may take the form of the adoption of some subtle methods like sensitization campaigns or the issuance of voluntary disclosure guidelines, whilst others have resorted to some more strict approach like the enactment of legislation to make environmental reporting compulsory on businesses. Accordingly, Mauritius has followed the second position for the PIEs only.

2.2 The Evolution of the Mauritius Code of Corporate Governance

Basically, the only official document that mentions environmental reporting is the Mauritius Code of Corporate Governance that has undergone some changes over the years. In 2004, the National Committee for Corporate Governance (NCCG) published the Code of Corporate Governance for Mauritius which was of 144 pages long largely inspired from the UK Cadbury Report of 1992, including various principles governing the internal management of an enterprise. Among the main guiding principles of the 2004 Code were elaborated provisions on the roles of chairperson and Chief Executive Officer, the requirement for company’s boards to have at least 2 independent directors and 2 executive directors, the establishment of an audit committee and corporate governance committee and some recommendations guaranteeing auditor’s independence and sustainable integrity reporting. Essentially, the 2004 Code adopted a “com-

ply or explain" approach which implies that PIEs have to tick the box for areas of compliance whilst acknowledging simultaneously the other sectors of non-adherence and justifying the reasoning behind such non-compliance status. It is imperative to highlight that the 2004 Code included some limited provisions on environmental reporting mainly set out under its Section 7.4 which required the entities concerned to report in their respective annual reports the impact of their business activities on the environment and the policies and practices adopted to reduce any associated negative effects.

Subsequently, 12 years following the establishment of the 2004 Code, the NCCG decided to revise the Code in 2016 so as to align its provisions with updated laws and guidelines and to apply governance lessons from major financial scandals both in Mauritius and at the international level. The 2016 Code is of 61 pages long and includes 8 guiding principles on (1) governance structure, (2) structure of the board and its committees, (3) director's appointment procedures, (4) directors' duties, remuneration and performance, (5) risk governance and internal control, (6) reporting with integrity, (7) audit and (8) relations with shareholders and other stakeholders. Moreover, this new Code has departed from the "comply or explain" concept to adopt the "apply and explain" approach which requires the board to focus on explanations in the entity's annual report concerning the manner in which the company has applied the Code's principles. Rather than emphasizing on a tick-the-box methodology, the new Code recognises that the extent of compliance with the guiding principles differs according to individual circumstances of the entity, more precisely the size, sector and complexity of the organisation and the nature of risks and challenges that it faces.

Closely associated to the requirement for environmental reporting is Principle 6 of the Code which mentions that the "board shall present a fair, balanced and understandable assessment of the organisation's financial, environment, social and governance position, performance and outlook in its annual report and on its website". In fact, each principle of the Code is accompanied by a section relating to its implementation guideline and for Principle 6, the Code requires the narrative section of the annual report of the PIE to disclose the following 6 key elements of environmental information:

- (1) Environmental commitments – This refers to the awareness by organisation of the importance of environmental issues and the framework they have established to manage and prevent environmental impacts arising from their business activities.
- (2) Environmental disclosure – It means that the annual report must disclose the measures undertaken by the entity to minimise environmental harm.
- (3) Environmental evaluation – It refers to the methodology devised by the entity to quantify the environmental impacts of their activities.
- (4) Environmental monitoring – This requires an analysis of previous years' environmental impacts compared to that of the current year reported in the annual report.
- (5) Environment carbon reduction policy – It relates to the specific reporting of carbon reduction schemes adopted by the organisation and its future plans in this regard.
- (6) Environmental management responsibilities – It relates to defining the roles and responsibilities of staff within the organisation that have the duty to manage the established environmental framework to adhere to the entity's environmental commitments.

Apart from these 6 environmental reporting key factors established by the Code, Mauritian laws are silent on some other forms of environmental reporting that have been set out by existing literature such as reporting on products and technologies contributing to the sustainable use of the environment (Zhang et al., 2020), detailing specific action plans to protect soil, water and climate (Chaklader & Gulati, 2015) or disclosing the amount of environmental expenditure for engaging in environmental protection activities (Ragini, 2012). It is apposite to note that according to Section 76 of the Mauritius Financial Reporting Act 2004, a PIE has the obligation to file annual report which includes the corporate governance reporting to the Financial Reporting Council (FRC) not later than 6 months after its balance sheet date. The FRC in turn may review the annual report to determine whether the provisions of the Code have been complied with but nevertheless, there is no official data on the number of reviews conducted by the FRC in this context.

In fact, no research has been conducted yet to investigate the extent to which PIEs adhere to the above-mentioned 6 environmental reporting elements, which this existing study purports to fill in the research gap. Moreover, this research will also analyse the relationship between environmental reporting and firm's financial performance and the relevant literature on this subject will be discussed below.

2.3 The Relationship between Environmental Reporting and Financial Performance

There is a wealth of literature demonstrating the positive relationship between environmental reporting and financial performance. For example, Chiu et al. (2020) investigated the sustainability practices among listed companies on China's stock market with a particular focus on the energy industry for the years 2016 and 2017. An environmental disclosure index was established by the researchers and the impact of various variables on this index was assessed. It was found that companies having a high ROA, firm size, leverage and environmental accreditation status are more likely to publish environmental information. These findings corroborate with the results of an early study conducted by Murray et al. (2006) who sought to explore the relationship between social and environmental disclosure and the financial market performance of the UK's largest companies. The results revealed that companies with higher returns are more likely to have an elaborated disclosure of social and environmental information.

Similarly, another robust study conducted on some 230 European companies undertaken by Moneva and Ortas (2010) used accounting indicators such as return on assets (ROA), return on equity (ROE), profit margin (PM), earnings per share, cash-flow and operating profits to measure financial performs of these firms. A partial least squares model was applied and the results demonstrated that enterprises which obtained higher rates of environmental performance and reporting showed better financial performance levels. Likewise, a recent study by Wu and Li (2022) analysed the same variables' relationship for heavy polluting enterprises in China from 2008 to 2019. The findings showed a positive relationship between both mandatory and voluntary environmental reporting and financial performance.

In the same light, Saini et al. (2022) examined the relationship between Environmental-Social-Governance (ESG) disclosures and financial performance. The study involved a consideration of panel data of 1,170 firm-level observations from 2012 to 2020 and the findings supported the positive link between ESG disclosure which includes environmental reporting, and corporate financial performance. Also, a research conducted by Friede et al. (2015) found that the fulfilment of ESG criteria including its reporting brings a positive financial performance. The researchers adopted a comprehensive review of around 2,200 existing studies on the subject since the year 1970 and noted that 90% of the publications showed a positive relation, 10% showed a negative effect while the remaining 10% of papers found no relation. However, this study was only a descriptive analysis of existing publications, no firm's evidence was used to support the arguments.

In contrast, some scholars (although scarce in literature) have concluded that there is a negative or no association between environmental reporting and financial performance. For instance, Ezeagba et al. (2017) assessed environmental disclosures and financial performance in some selected food and beverage companies in Nigeria for the period 2006 to 2015. Financial performance was measured by return on equity, earnings per share, return on capital employed and net profit margin. The findings illustrated a negative relationship between environmental disclosures and return on capital employed and net profit margin each. Another study carried out by Nobanee and Ellili (2016) measured the level of corporate sustainability disclosure using annual data of listed banks in the UAE for the period 2003-2013 and it was found that environmental reporting had no significant effect on Islamic banks' performance in the UAE. Similarly, Cormier and Magnan (2007) analysed the link between environmental disclosure and financial performance of firms from Canada, France and Germany and it was found that environmental information has no significant influence on these firms' valuation of stock based on earnings.

It follows that the diverse research findings on the relationship between environmental reporting and financial performance stems from measurement issues like subjectivity or selection bias (Chiu et al., 2020). A more harmonised result may be achieved if each country's policies on voluntary environmental disclosures will be standardized. Accordingly, the link between two variables is still inconclusive although the positive relationship findings outweigh the negative or no relationship results (Friede et al., 2015). Moreover, no particular study has sought to assess this research topic for the Mauritian hotel sector in particular. For this study, the financial performance of listed hotels will be measured by the return on assets and leverage of each entity concerned. Hence, the following two research hypotheses were established:

H1a. There is a positive relationship between ROA and environmental reporting by Mauritius listed hotels.

H1b. There is a positive relationship between LEV and environmental reporting by Mauritius listed hotels.

2.4 Hotels' Attributes and Environmental Reporting

2.4.1 Size

Some researchers found that the larger an organisation is, the more it is subject to scrutiny of society in the disguised forms of political, environmental and regulatory pressures. Accordingly, large firms tend to report environmental information more than other entities (Chaklader & Gulati, 2015; Baalouch et al., 2019) and from this, hotel's size is referred to as an independent variable of this study for testing the following hypothesis:

H2. There is a positive relationship between SIZE and environmental reporting by Mauritius listed hotels.

2.4.2 Multinational Characteristics (MNC)

Organisations with MNC like forming part of a group of companies, direct investment in foreign countries or powerful organisations, tend to have a high level of environmental reporting (Meng et al., 2013; Ledoux et al., 2014). In fact, some institutional lenders consider the extent of environmental disclosure by multinationals to determine and allocate external sources of finance to the latter, which acts as a motivating factor for these entities to comply with environmental disclosure requirements. Moreover, multinationals are under the continuous scrutiny of media or governmental authorities and hence, they are more inclined to report environmental information so as to represent a sustainable entity for investors in addition to increasing their chances to attract funding. For this current study, the following hypothesis is yet to be tested in terms of MNC and environmental disclosure:

H3. There is a positive relationship between MNC and environmental reporting by Mauritius listed hotels.

2.4.3 Certification (CERT)

Studies have demonstrated that companies possessing environmental certification like ISO 14000 or Eco-Label, are more likely to have enhanced environmental reporting levels (Chaklader & Gulati, 2015; Chiu et al., 2020). Consequently, CERT is another independent variable for this study where it is measured as 1 if the respective hotel possesses a certification, or 0 if the hotel does not have any environmental certification, and the following hypothesis is formulated:

H4. There is a positive relationship between CERT and environmental reporting by Mauritius listed hotels.

3. Research Design

3.1 Data Collection

Essentially, this study aims at responding to 3 research questions, mainly what is the extent of environmental reporting compliance in accordance to the Mauritius Code, whether there is a relationship between the level of environmental reporting and financial performance and if firms' attributes have an impact on environmental disclosure. The targeted entities of this survey comprise of hotels listed on the

SEM mainly because of their heavy involvement in environmental activities and also, because literature is scarce on the environmental reporting level by the tourism and accommodation industry in Mauritius.

As of August 2022, there are only 5 Mauritius-based hotels listed on the SEM and it was decided to consider the annual reports of each hotel from each financial years ended 2017 to 2021, representing a five-year period starting from the financial year 2016/2017 when the new Code has become operational on PIEs. Information was thus collected from a total of 25 annual reports available on each respective 5 hotels' websites, to find data on environmental disclosure, financial performance and characteristics of each entity in terms of their size, certification and multinational characteristics. The data collected was thus processed and coded accordingly so that the relevant statistical tests could be performed using the SPSS software Version 21. Prior to elaborating on the statistical tests, it is relevant to discuss the various variables used for the purposes of this study.

3.2 Measurement of Variables

3.2.1 Environmental Reporting Index (ERI) as the Dependent Variable

As mentioned in Section 2.2 earlier, PIEs have to disclose 6 environmental information in their annual reports pertaining to environmental (1) commitments, (2) disclosure of measures, (3) evaluation of impact, (4) monitoring, (5) carbon reduction policy, and (6) management responsibilities. Each of these requirements may be measured using either weighted or unweighted scores (Ragini, 2012). However, the issue with weighted scoring is that every person has a subjective view of each environmental information which implies that some will see a piece of information as more important than the others. Consequently, it was decided to attribute equal importance to the 6 distinct environmental disclosure requirements as per the Code. Accordingly, each information was measured by 1 if it was disclosed or 0 if it was not reported in the annual report. Hence, the following formula was used to calculate the total ERI for each hotel in each year of study:

$$\text{ERI} = \text{Total number of environmental information reported in annual report} \div 6$$

3.2.2 The Independent Variables

a) Financial Performance

A research proposition was established earlier to investigate if there is a positive relationship between environmental disclosure and financial performance of listed hotels in Mauritius. Consequently, financial performance has been measured differently by various scholars but the most used one refers to Return on Asset and Leverage, as discussed in more details hereunder.

(i) Return on Asset (ROA)

Some studies have used market performance indicators like return on equity to measure the relationship between the adoption of sustainability practices and financial performance, which have unfortunately led to contradicting results. This is because stock valuation measures are based on external market performance indicators in general without much relying on internal accounting procedures which more aptly reflect an organisation's performance. In this respect, existing literature on the researched topic of this study such as Chiu et al. (2020) and Zhang et al. (2020) made use of ROA as an accounting-based measure to illustrate how the entity is making use of their shareholders' and creditors' assets, as an independent variable. Indeed, the capacity to generate profit using total assets in one accounting year is demonstrated by the ROA which represents the profitability of the entity.

ROA is therefore measured by net income divided by total assets of each listed company for the 5 financial years distinctly.

(ii) Leverage (LEV)

From a review of existing literature, it was noted that heavily indebted firms are more likely to have higher levels of environmental disclosures and hence complying much better with reporting obligations

(Zhang et al., 2020; Wu & Li, 2022). This is because they are keener to disseminate enhanced quality environmental disclosure so as to mitigate the negative effect of a highly leveraged institution from investors.

LEV is thus measured by calculating debt to assets ratio of each Mauritian listed hotels for the 5 financial years separately.

(b) Entity's Size (SIZE)

SIZE is one among the hotels' attributes that may have an impact on environmental reporting as established by existing literature. Essentially, the size of a company may be measured in terms of number of employees, total assets or turnover. For this study, the listed hotels' sizes are measured according to their respective total assets for each year of study.

(c) Multinational Characteristics (MNC)

MNC is determined by the presence of hotels in terms of their subsidiaries, branches or affiliates in more than one jurisdiction. Consequently, the dummy used for MNC under this study is 1 which refers to a hotel that is a multinational and 0 if the hotel is not for each year of study.

(d) Certification (CERT)

Dummy values are used to measure CERT that is 1 refers to a hotel which has environmental certification, and 0 if the hotel does not possess any CERT for each year of study.

3.2.3 Model Design

Further to the above hypotheses, a multiple regression equation was derived to test the relationship between the various independent variables and the dependent one as follows:

$$ERI = Y = \beta_0 + \beta_1(ROA) + \beta_2(LEV) + \beta_3(SIZE) + \beta_4(MNC) + \beta_5(CERT) + \varepsilon$$

where β_0 is the constant, β_1 to β_5 are regression coefficients and ε is the error term.

An assumption that underlies the regression model requires that there should be no problem of multicollinearity. Multicollinearity implies that the same information is shared by variables (Ho, 2006). Accordingly, there is a high level of intercorrelations and inter-associations among the independent variables. The problem is that multicollinearity results in an unstable parameter estimate which makes it difficult to assess the effect of independent variables on the dependent ones and also to obtain significant relationships. Multicollinearity on the data collected is tested by analysing the tolerance and Variance Inflation Factor (VIF). Nunkoo (2012) states that the tolerance value is a measure of the percentage of the variance in the predictor variable that cannot be accounted for by the other predictors in the model. A small tolerance value indicates an overlap between the independent variables in the study. The reciprocal of the tolerance value is the VIF value, computed as $1/\text{tolerance}$. According to Ho (2006) and Field (2000), the acceptable margins of tolerance and VIF values are > 0.3 and < 10 respectively.

4. Research Findings

Some basis statistical tests were performed on the SPSS software on the data collected from the 25 annual reports and the means, standard deviations, skewness and kurtosis of each variable are illustrated in Table 1.

Table 1. Descriptive Statistics

	Number (Annual Reports)	Minimum	Maximum	Mean	Standard Deviation (SD)	Skewness	Kurtosis
ERI	25	0.17	1	0.43	0.28	0.59	-1.20
ROA	25	-0.90	0.79	0.07	0.61	-0.26	-1.46
Leverage	25	0.02	0.9	0.44	0.29	0.16	-1.41
MNC	25	0.00	1.00	0.40	0.50	0.43	-1.97
CERT	25	0.00	1.00	0.80	0.41	-0.16	0.59
SIZE	25	13.46	18.34	15.43	1.81	0.45	-1.44

Source: Own Elaboration

Table 1 demonstrates the minimum and maximum values of each variable along with their respective average means and standard deviations. The skewness and kurtosis values of each variable were also calculated to investigate the distribution of data in order to figure out the relevant correlation test to be applied later on. Essentially, it is imperative to highlight that the average mean score of the ERI stands at 0.43 (SD=0.28), which indicates that less than 50% of Mauritius listed hotels report environmental information as required by the Code of Corporate Governance since each item was attributed equal weightage of 1 over a total of 6 as described in Sections 2.2 and 3.2.1 earlier. Hence, there is a greater push required for Mauritius hotels to increase their disclosure and transparency in terms of environmental mechanisms and other related matters.

Concerning MNC, it is noted that only 2 of the 5 listed hotels have an international presence which is evidenced by Table 1 illustrating the average mean value of 0.40 (SD=0.50). It can thus be deduced that Mauritian listed hotels are mostly managed at the local and domestic level and one of the reasons behind may be due to the fear of expanding in other markets. Regarding the CERT variable, it was noted that 5 of the 6 hotels under this study possess some particular categories of environmental certification such as MCERTS, EMAS or ISO 14001 (Mean=0.80, SD=0.41). Moreover, a notable decrease in the financial performance of these listed hotels was noted during the financial year 2020/2021 more specifically in terms of the ROA. This is mainly attributed to the decrease in tourism activities during Covid-19 emergency situations such as lockdown and social distancing measures established by the Mauritian government.

Table 1 also illustrates that each variable's respective skewness and kurtosis values range from -2 to +2, which demonstrates that data follows a normal distribution (Hair et al., 1998; George & Mallery, 2010; Gravetter & Wallnau, 2014). Moreover, it was decided to conduct a correlation test between all variables under the study and according to Zou et al. (2003), the correlation coefficient value is generally interpreted in the below Table 2 as follows:

Table 2. Description of Correlation Coefficients

Correlation Coefficient Between	Description
-0.2 and +0.2	Little or No Correlation
+0.2 and +0.4 or -0.4 and -0.2	Very Weak Correlation
+0.4 and +0.6 or -0.6 and -0.4	Weak Correlation
+0.6 and +0.8 or -0.8 and -0.6	Moderate Correlation
+0.8 and +1 or -0.8 and -1	High Correlation

Source: Own Elaboration

Due to the normality of data distribution, the Pearson correlation test was applied on the SPSS software and the results are portrayed in Table 3 hereunder:

Table 3. Results of Inter-Variables Correlation (** Correlation is significant at 0.01 (2-tailed))

	ERI	ROA	LEV	MNC	CERT	SIZE
ERI	1					
ROA	0.69**	1				
LEV	0.80**	0.58**	1			
MNC	0.82**	0.72**	0.55**	1		
CERT	0.21	0.13	0.14	0.19	1	
SIZE	0.73**	0.56**	0.76**	0.57**	0.00	1

Source: Own Elaboration

Further to the interpretation given by Zou et al. (2003) described earlier, a weak or no correlation is noted between CERT and ERI, ROA, LEV, MNC and SIZE ($r=0.21, 0.13, 0.14, 0.19$). However, the correlation between ERI and ROA ($r=0.69$), LEV ($r=0.80$), MNC ($r=0.62$) and SIZE ($r=0.73$) each falls under the category of “moderately correlated”. Moreover, the relationship between ROA and LEV ($r=0.80$) and that with MNC ($r=0.82$) demonstrates a high correlation while the correlation between ROA and SIZE ($r=0.56$) falls under the category of “weakly correlated”. A moderate correlation has been noted between LEV and SIZE ($r=0.76$) while a weak relationship has been revealed between MNC and SIZE ($r=0.57$).

Having correlations between the variables under this study indicates the existence of strong relationship among them and this forms the underlying basis to perform some more advanced test since the correlation test does not show cause and effect. Accordingly, a regression analysis was performed on the data obtained and the results are illustrated in Table 4 below.

Table 4. Results of Regression Analysis (**Statistically significant at 0.05 level (2-tailed))

	UnStd. Coeff.	Std Error	Beta (β)	<i>t</i>	<i>p</i> -value-	Tolerance	VIF
ROA	0.13	0.05	0.27	2.34	0.03**	0.42	2.38
LEV	0.06	0.18	0.06	0.31	0.76	0.46	2.17
MNC	0.28	0.10	0.49	2.78	0.01**	0.32	3.13
SIZE	0.04	0.02	0.25	2.67	0.02**	0.31	3.23
CERT	0.18	0.071	0.26	2.55	0.12	0.37	2.71

Source: Own Elaboration

Table 4 presents the results of the regression analysis carried out on the SPSS software with ERI as the dependent variable and the financial performance and firm's attributes (MNC, SIZE, CERT) as the independent ones. As explained earlier, the multiple regression analysis underlies the assumption of no multicollinearity and accordingly, Table 4 displays the VIF and tolerance values all of which are within the acceptable range of 0.3 and 10 (Field, 2000; Ho, 2006) which indicates no issues of multicollinearity. As mentioned earlier, the ROA of each hotel was found to be lower during the financial year 2020/2021 due to the Covid-19 pandemic. Nevertheless, since only one financial year's performance is impacted of the total 5 years, the net effect on ERI is noted as being immaterial. The findings therefore reveal a statistically significant and positive relationship between ERI and ROA ($\beta=0.13, t(25)=2.34, p<0.05$). Accordingly, hypothesis H1a is supported which implies that there is a positive relationship between ROA and environmental reporting by Mauritius listed hotels. In other words, hotels having better financial performance are more likely to disseminate more environmental information in their annual reports. This finding is in line with existing literature that were previously established by Chiu et al. (2020) and Zhang et al. (2020).

The results also reveal a statistically positive correlation between ERI and MNC ($\beta=0.28, t(25)=2.78, p<0.05$) and with SIZE ($\beta=0.04, t(25)=2.67, p<0.05$) which are consistent with the findings of Meng et al. (2013), Ledoux et al. (2014), Chaklader and Gulati (2015) and Chiu et al. (2020). As such, hypotheses H2 and

H3 are supported which implies that there is a positive relationship between SIZE and MNC each with the level of environmental reporting by Mauritius listed hotels. For firm's size, it can be explained that the larger an organisation is, the more it is expected to disclose environmental information since it is more prone to the public's lens and scrutiny and attract more attention from regulators. This reasoning also applies for multinational characteristics since the institutional shareholders are now increasingly considering ESG reporting which includes environmental disclosures when making investment decisions. Hence, to attract investors, listed hotels need to report environmental information in their annual reports. The relationship between ERI and the variables LEV and CERT are not individually significant at a 5% significance level. These findings are inconsistent with the results derived by Wu and Li (2022), Chiu et al. (2020) and Zhang et al. (2020) who found a positive correlation between ERI and each of LEV and CERT.

5. Conclusion

The objectives of this research were to assess the level of environmental reporting by hotels listed on the SEM, investigate whether there is a relationship between the extent of environmental reporting and financial performance of these hotels and examine the impact of these hotels' attributes on environmental reporting in terms of size, multinational characteristics and certification.

Primarily, the statistical tests effectuated reveal that while the Mauritius Code of Corporate Governance has explicitly introduced 6 environmental reporting areas for PIEs to disclose in their annual reports, the ERI for listed hotels in Mauritius is still low with an average mean score of 0.43 (SD=0.28). Unfortunately, there is no system of continued monitoring for PIEs' compliance with the Mauritius Code despite that the Financial Reporting Council of Mauritius is empowered by the laws of Mauritius to look into reporting requirements on a case-by-case basis. There is also no legal sanction imposed on PIEs for non-disclosure of environmental information as per the Code's requirements. This shortcoming in turn questions the adequacy of the Mauritian legal and regulatory framework to adopt and report environmental initiatives.

Additionally, existing literature has established a positive link between environmental reporting and financial performance. The same relationship was tested for Mauritius listed hotels and the results reveal a statistically significant correlation between ERI and ROA. It follows that hotels with better financial performance wants their stakeholders to know that they are sustainable and care for the environment by disclosing their environmental measures. This finding is consistent with the studies conducted by Chiu et al. (2020) and Zhang et al. (2020) respectively. However, no significant relation was found between ERI and each of leverage and certification.

Lastly, while investigating the effect of firm's attributes on ERI, it was noted that hotels with bigger sizes and possessing multinational characteristics are more committed to disclose environmental information in their annual reports in accordance with the requirements of the Mauritius Code of Corporate Governance. This implies that larger hotels and those with a presence in various countries tend to be more accountable to the society at large by showcasing their initiatives and endeavours to protect the environment to their stakeholders. This finding is in line with previous literature on the subject such as Baalouch et al. (2019), Chaklader and Gulati (2015), Ledoux et al. (2014) and Meng et al. (2013).

Undeniably, with climate change being in the limelight, the Mauritian government has been sensitive and proactive by requiring Public Interest Entities to consider environmental reporting as per the Mauritius Code of Corporate Governance. This mandatory reporting requirement forces Mauritius listed hotels to be more innovative and adopt sustainable practices. In this attempt, it becomes imperative for hotels to prioritise environmental practices in order to obtain positive attentions from stakeholders. Nevertheless, there is a need to institute a penalisation and sanction framework for those PIEs that do not comply with the Mauritius Code environmental reporting requirement. This is because a low level of environmental reporting has been noted for listed hotels in the country and apart from sensitization and educational campaigns along with some other subtle methods, a stricter approach is required since environmental issues concerns each and every one of us. In particular, there is a higher need for the Financial Reporting Council notably to be more active in scrutinising the level and extent of environmental reporting by PIEs in their annual reports since this institution has been bestowed upon such capacity under the Financial Reporting Act of Mauritius. Consequently, PIEs will be on their guard to ensure that the appropriate envi-

ronmental matters are properly disclosed in their annual reports instead of facing the constant risk of being penalised by the Financial Reporting Council. This enhanced reporting and compliance with the Code will thus ensure more transparency and will be appealing to investors who search for environmentally friendly investment opportunities.

As of now, there is no research published on the extent of environmental reporting as a requirement of the Code in Mauritius. Hence, the findings of this research will be of use for all organisations across the tourism and hospitality industry in Mauritius that intend to adopt environmental or other ESG measures. These research findings may also be of help to academics, policymakers, organisations and investors to promote eco-friendly behaviour and in turn, sustainable economic development. Future studies in this line of research may be conducted for other PIEs such as those operating in the banking sector, financial services sector or for public and parastatal bodies to assess their level of environmental reporting compliance as required by the Mauritius Code.

Nevertheless, each research is accompanied by some limitations and one of them related to this study concerns the restricted number of hotels that are listed on the Stock Exchange of Mauritius which stands at only 5. Hence, the low level of environmental reporting deduced in this study may not be the same for other entities operating in the tourism industry especially bearing in mind that there are 112 hotels duly licensed by the Mauritius Tourism Authority although the majority of them are not listed and accordingly, the compulsory environmental reporting obligations do not apply to them. As such, the research findings have to be interpreted in the light of this limitation. It is therefore suggested that some future research be conducted on this subject matter in the context of the non-listed Mauritian hotels that report environmental matters on a purely voluntary basis and some other tourism related organisations as well.

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ORCID

Beebeejaun Ambareen  <https://orcid.org/0000-0002-6508-8379>

Notes on contributors

Ambareen Beebeejaun is a law academic at the University of Mauritius where she teaches Trusts, Revenue, Company and Insolvency Law. Prior to joining the University, Ambareen was a Senior Legal Executive in the Investment Funds and Financial Intermediaries team at BLC Chambers, where she has advised on capital and investment vehicles structuring. She holds a bachelor of law degree with honors, a Masters of Law in International Business Law and a PhD in International Tax Law. She has also completed the Association of Chartered Certified Accountants (ACCA) qualification and is an ACCA Affiliate. Her research areas of interest range from business law, corporate law, governance, gender issues, taxation and financial services law.