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| RESEARCH ARTICLE

Employing Internal Audit System towards Business Sustainability: Evaluating its Impact on the Triple Bottom Line Perspective in the Manufacturing Industry

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| ABSTRACT

This study aims to formulate a model to show how Internal audit implementation affects the Triple Bottom Line Business Sustainability of Manufacturing Companies in the National Capital Region (NCR) Area. These factors are categorized into three: (1) Financial Performance, (2) Corporate Social Responsibility, and (3) Environmental Consciousness. Moreover, it indicated some additional factors that could affect, such as net worth, firm size, and years of operation. This study stems from the lack of clarity based on existing studies on the practical contribution of internal audits to firm performance. This study is a correlational design under the quantitative research design. This is also considered a moderation analysis design in which the moderating effect of internal audit cost and firm profile on the relationship between internal audit and firm performance were considered. Documentary analysis was employed through publicly listed companies' documents on their corporate website. The researcher used both descriptive and inferential statistics. Multivariate analysis was performed on the gathered data in which there are multiple dependent variables, which was explained by one independent variable – internal audit implementation. Key findings of this study show that internal audit has a significant effect on firm performance, t(301) = 2.5, p = 0.012. It shows that internal audit has been found to have an effect on firm performance, $\beta = 0.139$, p = 0.012. This supports the probability that firm performance increases around 0.139 per 1 level increase of internal audit. On the other hand, internal audit has a significant impact on corporate social responsibility, t(301) = 2.27, p = 0.023. It indicates that internal audit has an effect on corporate social responsibility, $\beta = 0.127$, p = 0.023. It means there is a probability that, for 1 level increase in internal audit, there is an accompanying 0.127 increase in corporate social responsibility. Lastly, the data gathered indicates that the effect of internal audit on environmental consciousness is non-significant, t(301) = 1.53, p = 0.127. The probability that environmental consciousness increases around 0.114 per 1 level increase of internal audit are supported.

KEYWORDS

Financial Performance, Corporate Social Responsibility, Environmental Consciousness, Internal Audit, Internal Audit Implementation, and Firm Profile

ARTICLE INFORMATION

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1. Introduction

Several literatures point out that the importance of having a reliable internal audit system helps companies achieve their goals and sustain them. Therefore, an internal audit can be beneficial not only in the short-term benefits but also in the long run. However, even if the gains of having an internal audit seem to be evident, some companies do not opt to establish their internal audit system. Internal audit has been utilized by businesses for many years to improve their management processes. However, experts have noted that this strategy is often hampered by repetition, bureaucracy, and exorbitant costs. Some found that internal audit may only be cost-effective depending on the size and nature of the firm. This research examines the definitive contribution of the internal audit system to achieving organizational goals leading to business sustainability. This also considered the intervening effect of the company profile on the relationship between internal audit, firm performance, and business sustainability. This may

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serve as a model for employing an internal audit system in the manufacturing industry.

Unlike external auditing, which may be employed for a project or purposeful basis only, internal auditing is a regular and daily function. The critical importance and relevance of internal auditing to business are best expressed in the following statement by one of the IIA's charter members: "Necessity created internal auditing and is transforming it into an integral part of modern business." No huge firm is immune. If they do not have it now, they will have to get it sooner or later, and if current conditions continue, they will have to acquire it sooner" (Arthur E. Hald, 1994, cited in Abbott et al., 2016). Nevertheless, the contribution to the firm's financial performance would not be enough in these competitive and challenging times. A firm's performance should also be seen in social and environmental sustainability; otherwise, its efforts will be useless in times of crisis. The COVID 19 pandemic shows us that profits will not be sustainable if both businesses and the government do not sustain social responsibility and environmental concerns. If firms, especially in the manufacturing industry, will only focus on profits, there will be unintended consequences in which business will not be sustainable. Dewayanto, Suhardjanto, and Setiadi (2017) investigated the effect of ownership structure and the audit committee on the internal control disclosure in different board systems in one cluster of environments, i.e., the French Civil Legal system between Indonesia and the Philippines. Most empirical studies on IA in the Philippines focus on government management and not the private sector (Carlos, Sarmiento, & Dela Merced-Litonjua, 2018).

This study aims to ascertain the effect of having an internal audit system on firm performance. It intends to investigate if such effect is dependent on other moderating factors such as firm size, number of years in operation, net worth, product lines, internal audit cost, and structure. Specifically, the study aims to find answers to the following questions:

- 1. What is the level of Internal Audit implementation in the manufacturing industry?
- 2. What is the level of Firm performance of the manufacturing entities?
- 3. What is the level of corporate social responsibility of the manufacturing firms?
- 4. What is the level of environmental consciousness of the manufacturing firms?
- 5. Is there a significant effect of internal audit implementation on business sustainability in terms of:
 - 5.1. Firm performance,
 - 5.2. Corporate Social Responsibility, and
 - 5.3. Environmental Consciousness?
- 6. Does the profile of the manufacturing entities significantly affect the relationship between internal audit implementation and business sustainability?

The following null hypotheses will be tested with $\alpha = 0.05$ level of significance:

- 1. There is no significant effect of internal audit implementation on business sustainability in terms of:
 - a. Firm performance,
 - b. Corporate social responsibility, and
 - c. Environmental consciousness?
- 2. There is no significant intervening effect of the profile of the manufacturing firms on the relationship between internal audit implementation and business sustainability in terms of:
 - a. Firm size
 - b. Years of operation
 - c. Net worth

The importance of this study is based on the contrasting views of the existing literature on internal audit systems and their effect on business sustainability and may serve as a reference to the following: Management Consultants. Scholarly reference such as this research provides empirical insights for those professionals who provide business solutions and consultancy. Top Management of the Manufacturing Industry. As most managers in the manufacturing industry are more concerned with the improvement of production processes, this endeavor may exhibit how IA can complement such organizational goals. Business Institutions that lack Internal Audit. Businesses today face the challenge of continuous innovation. With such innovation comes the challenge of maintaining certain internal standards that external auditing might not distinguish. Institute of Internal Auditors Philippines (IIAP). IIAP's mission is to advance the internal auditing profession by adding value to organizations and other stakeholders. Internal Audit Clients. IA clients can benefit from this study by using it as a reference in determining the real value that IA can bring to their organization. Audit Firms. Companies engaged in the audit have value propositions based on the three core elements of value delivered by internal auditing to an organization: assurance, insight, and objectivity. Lastly, the Future Researchers. Researchers interested in the topic of Internal audit may use this as a reference for their empirical studies.

The academe widely considers internal audit and the industry as an objective means for an organization to realize the objectives and goals it has set for itself through the usage of appropriate risk management and decision making; and to enhance the firm's operations. (Bubliek, 2017). Moreover, internal audit operates as a determinant of the quality of the company's governance. It can further serve as a public relations instrument because the output of an internal audit is perceived as a justifiable basis to deduce a company's security and reliability. (Coram et al., 2008). Due to this, there are conflicting viewpoints on the role of internal audit. On the other hand, if an internal audit were to be considered a supplementary instrument for top management to make informed decisions, then an internal audit simply acts as an assistance tool. (Daniela & Attila, 2013). Surprisingly, recent pieces of literature analyze that internal audit in contemporary times has not adequately fulfilled their role of ascertaining company reliability. It is argued that the continuing presence of corporate governance scandals may result from an underperforming internal audit department. (Christopher, 2018; Kotb et al., 2020). However, the lackluster internal audits' manifested performance is most likely limited to large organizations. Compared to large companies, the role fulfillment of internal audits is better appreciated in small and medium enterprises. (James & Seipel, 2010). In light of this, pieces of literature profess that one of the most exhaustive and beneficial lenses to adopt for the intention of studying internal audit is agency theory. (Adams, 1994). This is because agency theory proposes the presence of an asymmetric information structure of agents and principals, where agents inherently have the upper hand on principals regarding the possession of information. This agency relationship breeds a conflict of interest which births the necessity of an internal audit. (Colbert & Jahera, 1988).

The modern perspective on the cost of internal audit doesn't stray far from the cost-saving perspective that literature has previously employed. (Glover et al., 2008). In the Philippine context, the Department of Labor and Employment (DOLE) segments the cost of an internal audit into two: compensation afforded to internal auditors and the educational cost to become an internal auditor. The Department examines that the salary of auditors in the Philippines ranges from Php18,000 to Php75,000 per month, with the cost of education (specifically Bachelor of Science in Accountancy) around Php30,000 to Php45,000 in private institutions and around 20% to 40% less in public institutions. Considering the figures for the cost of education were taken from the academic year 2010-2011, it can be said that students aiming to enter the internal audit profession may have higher fees currently.

Turning the attention to firm performance, this topic is rich and diverse in academic discussion. Though, the conceptual discussion on appropriate terminology started to disappear as early as the 1970s, with current literature focusing on aligning the terminology towards the needs and wants of the organization. (Elias, 2007; Jung & Rainey, 2010). However, the spirit of the organizational goal remains the same: it is the objective, aim, purpose, or task that the firm employs for its sustenance, development, industry competitiveness, and survival. Generally, there are four organizational goals: external, internal, financial, and non-financial, separated into the individual, group, and organizational levels. (Kotlar et al., 2018). Adapting these goals to the current industry and cultural environment allows the organization to change accordingly. (Beyer, 1999). Therefore, firm performance is a prerequisite for a firm's operational effectiveness and competitiveness, where both contribute to the organization's survival. Linking internal audit to firm performance, literature is overwhelmingly consistent in asserting that internal audit has a significant effect on firm performance. (Hutchinson & Zain, 2009). However, the discussion on the link between these two variables stays only at the theoretical level.

Despite the absence of literature that assesses the link between internal audit and firm performance via financial standards, there has been abundant research on the conceptual notion of firm size. It is the company's resources, workforce, or revenue scale. Literature dictates that size of an organization is a determinant of innovation, though there has been lacking literature in establishing a link between size and innovation. In recent years, the number of smaller firms and their survival rate has risen. Their sustenance may be attributed to their ability to innovate, flexibility, and adaptability regardless of their size. It may also be attributed to their higher technological proficiency compared to larger organizations. Aside from innovation, size is a determining factor of corporate social responsibility. Larger firms are observed to place more attention on this area due to their larger asset size. Additionally, it is observed that size determines firm profitability.

3. Methodology

This study is a correlational design under the quantitative research design. In this endeavor, the impact of the internal audit system on firm performance will be evaluated. In the modern approach to research, this is also considered a moderation analysis design in which the moderating effect of internal audit cost and firm profile on the relationship between internal audit and firm performance will be considered.

3.1 Population and Sampling Technique

The target population for this study will be the food manufacturing firms situated within NCR, Region 3, and Region 4A. These firms may or may not have an internal audit system. To facilitate the ease of gathering samples from the population, this undertaking will seek the assistance and support of the Philippine Chamber of Food Manufacturers, Inc (PCFMI). Currently, this

chamber has at least 98 member companies which will be the sampling frame of this study. Company documents are usually available online through their website. The study will use stratified random sampling since this is appropriate for getting samples from homogenous conditions, perceptions, or locations. One of the goals of the study is to analyze the relationship of internal audit on business sustainability, considering that respondents can be arranged according to the same measure of net worth, firm size, and years of operation. The number of samples will be a minimum of 75 respondents based on the priori statistical power analysis using G Power with power = .95 $(1 - \beta)$, effect size = .10, and α = .05. There are a total of 302 respondents who participated in this study representing 30 manufacturing companies.

3.2 Instrumentation

Documentary analysis is employed in this research. Since the majority within the sampling frame are publicly listed companies, their documents are usually available on their corporate website. The data from the documentary analysis are used to measure the following variables: Financial performance, Sales, Return on Assets, Return on Investment, and Net Profit Margin.

The survey questionnaire was used to measure the following variables: Profile of the company, Level of Internal audit implementation, Level of Corporate social responsibility, and Level of Environmental consciousness. The questionnaire is divided according to the variables of the study. Questionnaire items are designed to determine the perspective of the respondents on each variable of the study. The 4-point Likert scale is used to determine the respondents' outlook. They were requested to score each item from 1 to 4 with a four-degree range of "not necessary, useful but not essential, essential and highly essential," respectively. The output of each expert's rating is the Content validity ratio (CVR) which varies between 1 and 4. The higher score indicates further agreement of panel members on the necessity of an item in an instrument.

The survey instrument's construct validity and reliability were tested by having 20 people complete the survey questionnaire as part of a pilot study. Results of the pilot study will be used for the validity and reliability tests. Based on the results of convergent validity tests, item 3 is removed under the construct of internal audit implementation. For environmental consciousness, items 1, 3, 5, and 6 were removed. For corporate social responsibility, items 3 and 4 were removed. Based on the results of discriminant validity tests, all constructs are compliant and have a higher square root of the average variance than the correlations. Therefore, all the constructs have discriminant validity. Based on the results of Cronbach's a and composite reliability, all constructs have at least a figure of 0.70, therefore, possessing internal consistency. The construct of firm performance is the only variable in this study that is measured through numerical values of sales, return on assets, return on investment, and net profit margin. Financial statements for the year ending 2022 were requested from the retail companies that participated in this study.

3.3 Data Gathering Procedure

The researcher sought assistance from the Philippine Chamber of Food Manufacturers, Inc (PCFMI) by asking for a list of manufacturing firms as the sample frame for this study. The appropriate endorsement was also requested from PCFMI so that the data gathering from their member companies will be accommodated efficiently. Once the list of manufacturing firms and the PCFMI endorsement are secured, the researcher sent informed consent communications to the intended research participants. Documentary analysis and the survey were conducted simultaneously. An online survey questionnaire using Google forms was disseminated to ensure the distribution of the questionnaires to be completed by the selected respondents. Upon completion, the researcher collected the raw data from the Google forms. The use of Google form will be the preferred method to comply with the COVID19 restrictions and give the respondents enough time to fill out the questionnaire. Responses are saved in a spreadsheet file (e.g., Microsoft Excel or Google Sheets), the base document for analysis. Data analysis was performed on the raw data as discussed in the following section. Utmost confidentiality and dedication to data privacy are observed in this process, ensuring that only relevant information was gathered and analyzed.

3.4 Statistical Analysis of Data

The researcher uses both descriptive and inferential statistics. Descriptive statistics are used to summarize the raw data by categorizing it and calculating central tendency and dispersion measurements. Multivariate Analysis - This type of analysis is utilized to determine the relationship between multiple independent variables and the corresponding dependent variable of the study. Statistical analysis was performed using IBM SPSS Statistics (Version 26) predictive analytics software.

Specific Problems	Information	Statistical Analysis
1	Level of Internal Audit implementation	Descriptive table
	Level of Business Sustainability	·
224	Firm performance	Descriptive Table
2,3,4	 Corporate social responsibility 	Descriptive Table
	 Environmental Consciousness 	
Е	Effect of Internal audit implementation on business	Multivariate Analysis
5	sustainability	Multivariate Analysis
6	Intervening effect of company profile	Multilevel modelling

Note: Measure of significance is checked thru their p-value, which should be at least p < .05.

4. Results and Discussion

4.1 Level of Variables

Table 2Descriptive Table of Variables

Variables	Mean	SD	Interpretation
Overall Level of Internal Audit Implementation	3.19	0.27	Good
Overall Level of Firm Performance	3.49	0.262	Good
Overall Level of Corporate Social Responsibility	2.7	0.264	Good
Overall Level of Environmental Consciousness	3.15	0.351	Good

Table 2 shows that manufacturing companies believe their Internal Audit Implementation Level is Good (M = 3.19, SD = 0.27). On the other hand, overall firm performance appears to be good (M = 3.49, SD = 0.262), indicating that most respondents believe their firm is performing well overall. Additionally, the manufacturing companies believe that their Level of Corporate Social Responsibility is Good (M = 2.7, SD = 0.264). Lastly, it shows that manufacturing industry companies believe that their Environmental Consciousness Level is Good (Mean = 3.15, SD = 0.351). This supports the study of Huang and Kung (2011) because it states that if the organization is greatly environmentally conscious, the management and staff are well-trained, educated about environmental issues, have accurate market network data, and have great relations with outsiders firm's performance will improve.

4.2 Structural Path Evaluation

4.2.1 Effect of Internal Audit Implementation on Firm Performance

Table 3

Internal Audit Effect on Firm Performance

Dependent Variable	Estimate (β)	SE	t	p	\mathbb{R}^2	Interpretation
Firm Performance	0.139	0.0553	2.5	0.012	0.017	H₀1a Rejected

This supports the study of Hutchinson & Zain (2009), wherein it shows that internal audit has a significant effect on firm performance, with high growth opportunities being an ideal scenario for a firm to feel the strong effects of internal audit. Their findings also show that "the positive association is weakened by increasing audit committee independence." Moreover, Ondieki (2013) writes that financial performance was positively and significantly affected by internal audit, where the internal audit was assessed using internal audit standards, internal audit independence, internal audit professional competency, and internal control. To answer the statement of problem 5.1., the overall analysis reveals that internal audit has a significant effect on firm performance, t(301) = 2.5, p = 0.012. Therefore, H01a, which states that there is no significant effect of internal audit implementation on firm performance, is rejected.

4.2.2 Effect of Internal Audit Implementation on Corporate Social Responsibility

Table 1

Internal Audit Effect on Corporate Social Responsibility

Dependent Variable	Estimate (β)	SE	t	p	R²	Interpretation
Corporate Social Responsibility	0.127	0.0558	2.27	0.023	0.024	H₀1b Rejected

According to Streimikiene and Ahmed (2021), corporate social responsibility is one of the most significant brand management techniques for achieving long-term sustainability and organizational performance. To answer the statement of problem 5.2., the overall analysis reveals that internal audit has a significant effect on corporate social responsibility, t(301) = 2.27, p = 0.023. As a result, H01b, which states that internal audit implementation has no significant effect, is rejected.

4.2.3 Effect of Internal Audit Implementation on Environmental Consciousness

Table 2

Internal Audit Effect on Environmental Consciousness

Dependent Variable	Estimate (β)	SE	t	р	R²	Interpretation
Environmental Consciousness	0.114	0.0746	1.53	0.127	0.013	H₀1c Accepted

This particular result may seem to be counterintuitive since Al Hanini (2021) states that internal audit, in all of its forms (auditing compliance, auditing environmental management systems, and auditing environmental financial statements), had a statistically significant impact on achieving sustainable development in industrial companies listed on the Amman Stock Exchange. This means that companies should concentrate on building and supporting internal audits. As a result, the researcher advises organizations to implement environmental internal audit methods that equip internal auditors with knowledge of environmental concerns that have a significant impact on financial statements. To answer the statement of problem 5.3., the overall analysis reveals that internal audit has no significant effect on environmental consciousness, t(301) = 1.53, p = 0.127. Thus, the null hypothesis (H01c), which says that there is no significant effect of internal audit implementation on environmental consciousness, is accepted.

4.2.4 Moderation Analysis of Firm Size on the Relationship between Internal Audit Implementation towards Corporate Social Responsibility

Table 3

Moderation Analysis of Firm Size towards the Internal Audit's Effect on Corporate Social Responsibility

Predictor	Estimate	SE	t	p
Intercept	2.1978	0.1799	12.22	< .001
Internal Audit Implementation	0.1299	0.0552	2.35	0.019
Firm Size:				
Medium Sized Enterprise – Micro Enterprise	0.0892	0.0399	2.24	0.026
Large Enterprise – Micro Enterprise	0.128	0.039	3.29	0.001
Large Enterprise – Medium Sized Enterprise	0.0389	0.0338	1.15	0.252

This result supports Fang et al. (2016), who state that the prevalence of SMEs that provide new goods, services, and processes has recently increased. Many small businesses have survived because of their inventiveness. Small businesses may be more inventive because they are more adaptable and flexible. A smaller business size encourages collaboration and cooperation among employees and requires less effort to coordinate their efforts in terms of creativity. In addition, this result also supports the literature of James & Seipel (2010) and Aedah & Sanggenapa (2021) that small and medium-sized businesses value internal audit's role fulfillment more than large corporations. At the same time, it is argued that the continued presence of corporate governance fiascos is due to an underperforming internal audit department which is relevant to large companies, as stated by Christopher (2018) and Kotb et al. (2020). To answer SOP 6.1, the overall model test showed that there is a significant intervening effect of the profile of the manufacturing firms in terms of firm size on the relationship between internal audit implementation and business sustainability concerning corporate social responsibility. Subsequently, the null hypothesis (H02a) is rejected.

4.2.5 Moderation Analysis of Net Worth on the Relationship between Internal Audit Implementation towards Corporate Social Responsibility

 Table 7

 Moderation Analysis of Net Worth on the Internal Audit's Effect on Corporate Social Responsibility

Predictor	Estimate	SE	t	p
Intercept	2.1821	0.3112	7.012	< .001
Internal Audit Implementation	0.1293	0.056	2.307	0.022
Net worth:				
PHP 251,000 - PHP 450,000 - PHP 101,000 - PHP 250,000	0.2326	0.2778	0.837	0.403
More than PHP 500,000 – PHP 101,000 - PHP 250,000	0.0995	0.2625	0.379	0.705
More than PHP 500,000 – PHP 251,000 - PHP 450,000	-0.133	0.0939	-1.416	0.158

This contradicts the study of Swandari and Sadikin (2016), which demonstrates the significance of scale, particularly in recognition of socially responsible behavior based on firm size. While Hernández, Yaez-Araque, and Moreno-Garca (2020) find a similar effect in terms of economic investment in CSR, depending on the size of the organization. The last two examples show a linear relationship; the higher the scale, the greater the level of commitment and investment. This result further contradicts the literature of Børing (2019), asserting that the bigger the company, the more involved it is in CSR-related activities. Furthermore, Wu et al. (2015) also claim that larger corporations exhibit more ethical values and conduct. To answer the statement of problem 6.2, the overall model test shows that there is no significant intervening effect of the profile of the manufacturing firms in terms of net worth on the relationship between internal audit implementation and business sustainability in the matter of corporate social responsibility. Hence, the null hypothesis (H02b) is accepted.

4.2.6 Moderation Analysis of Years of Operation on the Relationship between Internal Audit Implementation towards Corporate Social Responsibility

 Table 4

 Moderation Analysis of Years of Operation on the Internal Audit's Effect on Corporate Social Responsibility

Predictor	Estimate	SE	t	p
Intercept ^a	2.2143	0.2181	10.151	< .001
Internal Audit Implementation	0.126	0.0562	2.244	0.026
Years of Operation:				
1 - 3 years – Less than 1 year	0.0654	0.1555	0.42	0.674
4 - 6 years – Less than 1 year	0.1038	0.1345	0.772	0.441
More than 6 years – Less than 1 year	0.0738	0.1328	0.556	0.579

The result from this table counters the study of Tumwebaze et al. (2021), which implies that years of operation together with firm size and IA structure is found that the performance of Audit Committee Effectiveness (ACF) and Internal Audit Functions (IAF) received from forty-eight financial services firms in Uganda as a favorable impact on sustainability reporting practices. To answer the statement of problem 6.3, the overall model test showed that there is no significant intervening effect of the profile of the manufacturing firms in terms of years of operation on the relationship between internal audit implementation and business sustainability considering corporate social responsibility. Therefore, the null hypothesis (H₀2c) is accepted.

4.2.7 Moderation Analysis of Firm Size on the Relationship between Internal Audit Implementation towards Firm Performance

Moderation Analysis of Firm Size on the Internal Audit's Effect on Firm Performance

Predictor	Estimate	SE	t	р
Intercept	3.0584	0.1811	16.887	< .001
Internal Audit Implementation	0.1365	0.0556	2.456	0.015
Firm Size:				
Medium Sized Enterprise – Micro Enterprise	-0.0267	0.0401	-0.666	0.506
Large Enterprise – Micro Enterprise	0.0152	0.0392	0.387	0.699
Large Enterprise – Medium Sized Enterprise	0.0419	0.0341	1.23	0.22

This contradicts the study of Bubliek (2017), which states that internal audit is an important factor in firm performance. In addition, this also emphasizes the literature of Hutchinson and Zain (2009), expressing that rising growth opportunities are an ideal situation for a firm to feel the powerful influence of internal audits. To answer the statement of the problem, the moderation analysis showed that there is a significant intervening effect on the profile of the manufacturing firms in terms of firm size on the relationship between internal audit implementation and business sustainability. Therefore, the null hypothesis (H03a) is accepted.

4.2.8 Moderation Analysis of Net Worth on the Relationship between Internal Audit Implementation towards Firm Performance

 Table 5

 Moderation Analysis of Net Worth on the Internal Audit's Effect on Firm Performance

Predictor	Estimate	SE	t	p
Intercept	2.844	0.3092	9.196	< .001
Internal Audit Implementation	0.135	0.0557	2.432	0.016
Net worth:	Ì			
PHP 251,000 - PHP 450,000 - PHP 101,000 - PHP 250,000	0.171	0.2761	0.618	0.537
More than PHP 500,000 – PHP 101,000 - PHP 250,000	0.216	0.2609	0.83	0.407
More than PHP 500,000 – PHP 251,000 - PHP 450,000	0.0459	0.0933	0.492	0.623

Based on existing literature, there are studies that confirm the concrete importance and significance of IA, but such effectiveness is dependent on other moderating factors (Sarens, Abdolmohammadi, & Lenz, 2012), such as net worth (Rönkkö, Paananen, & Vakkuri, 2018), These previous studies postulate that IA's impact on organizational effectiveness is dependent on other factors and cannot be directly linked. The overall model test showed that there is a significant intervening effect on the profile of the manufacturing firms in terms of net worth on the relationship between internal audit implementation and business sustainability. Therefore, the null hypothesis (H03b) is rejected.

4.2.9 Moderation Analysis of Years of Operation on the Relationship between Internal Audit Implementation towards Firm Performance

Table 6 Moderation Analysis of Years of Operation on the Internal Audit's Effect on Firm Performance

Predictor Estimate SE	. t	p	
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Intercept ^a	3.186	0.2137	14.91	< .001
Internal Audit Implementation	0.142	0.055	2.57	0.011
Years of Operation:				
1 - 3 years – Less than 1 year	-0.364	0.1524	-2.39	0.017
4 - 6 years – Less than 1 year	-0.141	0.1318	-1.07	0.286
More than 6 years – Less than 1 year	-0.143	0.1301	-1.1	0.274

Table 6 shows the Year of Operation of the companies. Those with 1 - 3 years – Less than 1 year show no significance, p = 0.017. Simultaneously, Those with 4 - 6 years – Less than 1 year show significance, p = 0.286. Finally, companies with more than 6 years – Less than 1 year also show significance, p = 0.274. In contrast, according to the study of Edmund et al. (2020), the years of operation have a big impact on its financial performance, both directly and indirectly. The positive correlation shows that foreign investors prefer established enterprises rather than start-up businesses. One argument is that newer businesses are riskier, have less expertise, and have fewer tangible and intangible resources than established businesses. To answer the statement of problem 6.3, the moderation analysis showed that there is no significant intervening effect on the profile of the manufacturing firms in terms of years of operation on the relationship between internal audit implementation and business sustainability. Therefore, the null hypothesis (H03c) is accepted.

5. Conclusion

The following are the conclusions drawn from the result of the study;

The level of Internal Audit Implementation is Good. This indicates that the internal audit department monitors and implements prior audit plans as planned and works to provide auditing reports to senior management within the internal audit standards. It also concludes that the company has a sufficient budget to carry out its duties and responsibilities as well as perform regular audit functions based on the policies prescribed. Furthermore, this may indicate that the officer or director of the Internal Audit Department has the power to review actions and communicate freely with all departments and sections. The overall level of Firm Performance is interpreted as Good. It may be concluded that the majority of respondents believe their firm is performing well. Most of the respondents have a high ROI, which signifies that the company's investment's profits outweigh its expense. It also shows that the companies have an excellent ROA. These may conclude that the company's balance sheet management is more effective and productive in order to generate profits. A high Net Profit Margin indicates that the company is effectively pricing its goods and keeping costs under control, whereas a high sales volume indicates that the company can manage its operational costs.

In terms of Environmental Consciousness, the overall level is considered to be good. This shows that the company prefers environmentally friendly products, even if they are more expensive, and that environmental audits are conducted on a regular basis. Because of these results, it may be concluded that the organization is involved in environmental programs and places high importance on environmental awareness as a strategy.

The overall level of Corporate Social Responsibility is considered to be good. It concludes that businesses currently encourage their employees to gain valuable skills and participate in activities such as continued support for any charity, providing companyorganized volunteers on a regular basis, and using a cause-related marketing campaign to actively help communities. Furthermore, it may be concluded that the firms currently focus on employee advantages such as counseling, medical checkups, paid leave, work from home arrangements, and personal protective equipment. Similarly, the company may be concluded to prioritize energy conservation, waste recycling, mobility management, sustainable packaging, life cycle assessment methods, environmental system management, and the utilization of renewable resources to reduce their current environmental impact. The overall analysis reveals that internal audit has a significant effect on firm performance. It may be concluded from this finding that an internal audit adds value to the organization through the assurance that risk exposure is adequately managed. Also, internal audit efficiency aids the development of the company's work since financial reports reflect the quality of the internal audit department. Internal audit has a significant impact on corporate social responsibility, according to the overall analysis. This indicates that the company's obligation and commitment to contribute to the well-being of communities and/or society through a variety of environmental and social factors has a substantial impact on the company's social responsibility. This could also conclude that internal audit plans are in line with the organizational objectives, such as corporate social responsibility strategies. Lastly, the overall analysis reveals that internal audit has no significant effect on environmental consciousness. However, the companies still have environment-friendly strategies and activities in their operations which shows that they have an initiative in being involved in environmental matters.

Only one of the three moderating variables, the firm size, has a significant impact on corporate social responsibility, whereas net worth and years of operation have no effect. It may conclude that the bigger the firm, the more involved it is in CSR-related activities as well as exhibiting more ethical conduct. This could conclude that the manufacturing industries consider firm size to be a crucial and fundamental firm factor that influences empirical outcomes. This also indicates that bigger organizations have the ability and resources to engage in research and development (R&D) and innovation, while small and medium-sized enterprises (SMEs) sometimes struggle to make such expenditures. Only years of operation, on the other hand, have a significant impact on firm performance, while the firm size and net worth have no effect. This may also mean that the larger the net worth, the higher the level of commitment and investment, which may help boost financial performance. It also shows that firm performance and firm age are moving in the same manner. It may be concluded that, as the company grows older, profits are poised to grow. The data in this research showed that the longer a company has been in operation, the more likely it is to have a better financial performance. It further concludes that, regardless of the size and the net worth of the company, it does not affect its financial situation.

5.1 Direction for Future Study

Since this study was only done over a period of seven months, it is advised that future researchers increase the number of respondents to clarify the findings and collect more reliable data from a larger sample size. For a more accurate analysis, it is advised that future researchers also investigate different statistical approaches. It is strongly encouraged that future researchers include additional variables and sub-variables since the variables under study are only limited to internal audit implementation, business sustainability based on firm performance, corporate social responsibility, and environmental consciousness. These variables include considering IA competence, IA size, IA structure, and IA support as measures of Internal Audit and considering other types of firms for a solid study result. Hence, Exploring other qualitative and quantitative measurements will ultimately answer more insightful questions for Angel Investors. Lastly, it is recommended that future researchers focus the study on applying to educational institutions and contribute to the progression of the body of knowledge by which students can fully understand the audit system through the lens of business sustainability.

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References

- [1] Abbott, L. J., Daughtery, B., Parker, S., & Peters, G. F. (2015). Internal audit quality and financial reporting quality: The joint importance of independence and competence. *Journal of Accounting Research*, 54(1), 3–40. https://doi.org/10.1111/1475-679x.12099
- [2] Aedah, N., & Sanggenapa, I. (2021). Evaluation of internal audit implementation: A case study at the Papua province inspectorate Office. *Technium Social Sciences Journal, 24*(1), 1–5. https://techniumscience.com/index.php/socialsciences/article/view/4561
- [3] Al Hanini, E. A. (2021). Does the Environmental Internal Audit Impact the Achieving of Sustainable Development in Industrial Companies Listed on the Amman Stock Exchange? *International Journal of Financial Research*, 12(3), 220-229.
- [4] Beyer, J. M. (1999). Taming and promoting charisma to change organizations. The Leadership Quarterly, 10(2), 307–330. https://doi.org/10.1016/s1048-9843(99)00019-3
- [5] Børing, P. (2019). The relationship between firm productivity, firm size, and CSR objectives for innovations. *Eurasian Business Review*, *9*(3), 269–297. https://doi.org/10.1007/s40821-019-00123-y
- [6] Bubilek, O. (2017). Importance of internal audit and internal control in an organization case study (Undergraduate Thesis). https://www.theseus.fi/bitstream/handle/10024/129916/Bubilek_Olga.pdf
- [7] Carlos, R. P., Sarmiento, S., & Dela Merced-Litonjua, L. (2018). Internal audit in the philippine provincial government office (PGO). In A. Tan, A. Aziz, A. Silor, A. Zainal, B. Schoenfeld, B. Tominez, C. Wongrak, D. Javier, D. Flores, D. McEwen Harris, E. Mishieva, G. Misiaszek, H. M. Llenaresas, I. Madeyeva, J. Lannu, L. Misiaszek, M. Organiza, N. Delos Santos, R. Saranza, . . . T. Ille (Eds.), Surviving and Thriving: Education in Times of Change. https://papers.iafor.org/wp-content/uploads/papers/aceid2018/ACEID2018_39770.pdf
- [8] Christopher, J. (2018). The failure of internal audit: Monitoring gaps and a case for a new focus. *Journal of Management Inquiry, 28*(4), 472–483. https://doi.org/10.1177/1056492618774852
- [9] Colbert, J. L., & Jahera, Jr., J. S. (1988). The role of the audit and agency theory. *Journal of Applied Business Research (JABR)*, 4(2), 7. https://doi.org/10.19030/jabr.v4i2.6427
- [10] Coram, P., Ferguson, C., & Moroney, R. (2008). Internal audit, alternative internal audit structures, and the level of misappropriation of assets fraud. *Accounting & Finance*, *0*(0), 080318002557372-??? https://doi.org/10.1111/j.1467-629x.2007.00247.x
- [11] Daniela, P., & Attila, T. (2013). Internal audit versus internal control and coaching. Procedia Economics and Finance, 6, 694–702. https://doi.org/10.1016/s2212-5671(13)00191-3

- [12] Dewayanto, T., Paananen, M., & Vakkuri, J. (2017). Ownership structure, audit committee, and internal control disclosure: Indonesia and Philippines. Review of Integrative Business and Economics Research, 6(4), 353–363. http://buscompress.com/uploads/3/4/9/8/34980536/riber 6-4 27b17-139 353-363.pdf
- [13] Elias, S. M. (2007). Employee commitment in times of change: Assessing the importance of attitudes toward organizational change †. *Journal of Management*, 35(1), 37–55. https://doi.org/10.1177/0149206307308910
- [14] Fang, H. C., Randolph, R. V., Memili, E., & Chrisman, J. J. (2016). Does size matter? The moderating effects of firm size on the employment of nonfamily managers in privately held family SMEs. *Entrepreneurship Theory and Practice*, 40(5), 1017-1039.
- [15] Glover, S. M., Prawitt, D. F., & Wood, D. A. (2008). Internal audit sourcing arrangement and the external auditor's reliance decision. *Contemporary Accounting Research*, 25(1), 193–213. https://doi.org/10.1506/car.25.1.7
- [16] Huang, C. L., & Kung, F. H. (2011). Environmental consciousness and intellectual capital management: Evidence from Taiwan's manufacturing industry. Management decision.
- [17] Hutchinson, M., & Zain, M. M. (2009). Internal audit quality, audit committee independence, growth opportunities, and firm performance. *Corporate Ownership and Control*, 7(2), 50–65. https://doi.org/10.22495/cocv7i2p4
- [18] James, K., & Seipel, S. (2010). The effects of decreased user confidence on perceived internal audit fraud protection. *Journal of Forensic & Investigative Accounting, 2*(1). http://web.nacva.com/JFIA/Issues/JFIA-2010-1_7.pdf
- [19] Jung, C. S., & Rainey, H. (2011). Organizational goal characteristics and public duty motivation in U.S. federal agencies. *Review of Public Personnel Administration*, 31(1), 28–47. https://doi.org/10.1177/0734371X1039440
- [20] Kotb, A., Elbardan, H., & Halabi, H. (2020). Mapping of internal audit research: A post-Enron structured literature review. *Accounting, Auditing & Accountability Journal*, 33(8), 1969–1996. https://doi.org/10.1108/aaaj-07-2018-3581
- [21] Kotlar, J., de Massis, A., Wright, M., & Frattini, F. (2018). Organizational goals: Antecedents, formation processes, and implications for firm behavior and performance. *International Journal of Management Reviews, 20*, S3–S18. https://doi.org/10.1111/ijmr.12170
- [22] Ondieki, N. M. (2013). Effect of internal audit on the financial performance of commercial banks in Kenya (Doctoral dissertation, University of Nairobi).
- [23] Sarens, G., Abdolmohammadi, M. J., & Lenz, R. (2012). Factors associated with the internal audit function's role in corporate governance. *Journal of Applied Accounting Research*.
- [24] Štreimikienė, D., & Ahmed, R. R. (2021). Corporate social responsibility and brand management: evidence from Carroll's pyramid and triple bottom line approach. *Technological and Economic Development of Economy, 27*(4), 852-875.
- [25] Swandari, F., & Sadikin, A. (2016). The effect of ownership structure, profitability, leverage, and firm size on corporate social responsibility (CSR). *Binus Business Review, 7*(3), 315-320.
- [26] Tumwebaze, Z., Bananuka, J., Orobia, L. A., & Kinatta, M. M. (2022). Board role performance and sustainability reporting practices: managerial perception-based evidence from Uganda. *Journal of Global Responsibility*, (ahead-of-print).