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Research Article

Environmental Accounting and Its Influence on Sustainable Development of a Private Company in Trujillo, 2024

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ABSTRACT

The present study aims to determine the influence of environmental accounting on the sustainable development of a private company in Trujillo, Peru, during 2024. The research is classified as applied and uses a quantitative approach with a causal correlational design. The sample consists of 50 employees selected through non- probabilistic intentional sampling. Validated questionnaires were used to measure the variables of environmental accounting and sustainable development, evaluating dimensions such as environmental management, green accounting, environmental budgeting, financial design, business competitiveness, and operational decisions. The results indicate a significant, positive, and moderate influence of environmental accounting on sustainable development, explaining 25.2% of its variability. Additionally, positive associations were found with the dimensions of financial design, business competitiveness, and operational decisions. Descriptively, environmental accounting predominantly shows a high level (54%), while sustainable development is mostly at a regular level (52%). The general conclusion of the study is that environmental accounting has a moderate, positive, and significant influence on the sustainable development of a private company in Trujillo.

Keywords: environmental accounting, sustainable development, business competitiveness, operational decisions.

I. INTRODUCTION

Bringing an environmental dimension to the accounting perspective of companies is, now more than ever, an urgent need, given the multiple impacts of the various business sectors on the environment. That is why investigating the benefits of integrating their ecological impact into companies' accounting is an important opportunity to raise awareness in organizations and provide them with strategic data to improve their processes in the environmental aspect (Vicuña et al., 2020).

In line with this, the objectives of this research aim to determine the influence of environmental accounting on sustainable development taking into account the most outstanding aspects of this, which will be social welfare, environmental sustainability and economic development in a private company, so that these purposes will contribute to the Sustainable Development Goal No. 12 proposed by the UN (2022a). which communes with the production of goods and services using fewer resources, without affecting the environment, society and without reducing the sustainability of the organization that complies with this responsible approach. Regarding the global outlook, in terms of environmental footprint, the International Energy Agency (IEA, 2023) report that carbon emissions in 2022 reached 36.8 gigatons and, according to the National Aeronautics and Space Administration (NASA, 2023), the global temperature was 2.45° higher than the pre-industrial average of human history until the end of the nineteenth century. Likewise, the scientific journal Nature (2023) stated that up to 5.5 billion people would be vulnerable on a

global scale to polluted water within the next 80 years due to the indolence of many industrial practices.

It is to be expected that, in the face of the imminent global danger, many investors and financial institutions have begun to include the accounting aspect of the medium- and long-term ecological footprint in their value estimates (Halper et al., 2021), as in the research by Serafeim and Zochowski (2020), in which they discovered that environmental impact is moderately included in the commercial valuation multiples of companies. This fact indicates that investors currently consider environmental impacts as significant financial information to make decisions and value it in many industries.

At the Latin American level, air pollution in this region reached an average of 20 micrograms of light particles per cubic meter in 2022, with the world average being 32.8. Among the register of the most polluting nations in Latin America were Chile, Mexico, Guatemala, Peru, Colombia, and El Salvador (IQAir, 2023). However, more and more sectors are becoming aware of the relevance of the issue and its inclusion in accounting reports. This can be evidenced in the work of Ramírez et al. (2022), in which financial institutions and investors charged less to lend capital to companies with complete and transparent environmental reports.

In the case of Peru, a study was found to have five advertising companies located in Tarapoto. According to the report, waste management in terms of the paper used for advertisements, the use and disposal of inks and the consumption of electrical energy in production have a significant environmental footprint, however, 50% of the sample consulted was unaware of the need to quantify, detail and manage the ecological impact of their line of business. even though there is Law No. 27314 regarding waste management (Ruiz, 2020).

As far as the Trujillo area is concerned, the use of specialized accounting in environmental aspects is not a very widespread practice by companies and they do not usually take it seriously to define their sustainable development projections. In general, organizations seek to ensure their own economic development, neglect the social and ecological aspect of their impacts; In some cases, only basic measures are implemented to survive audits and achieve an ecological and friendly corporate image with the communities without really keeping a strong environmental accounting.

Regarding the theoretical foundation of environmental accounting, it is crucial to start by contextualizing the issue by mentioning the genesis of tax registration as such. This practice has its beginnings in ancient Mesopotamia, around 3300 B.C., where transactions were recorded on clay tablets. However, the modern accounting system originated with Luca Pacioli in 1494, who documented the double-entry system, fundamental to today's accounting (Mattessich, 2014). This system has evolved into a set of international standards, such as IFRS, that ensure the transparency and comparability of financial statements at a global level (Mantilla & Ediciones, 2013)

As for the formal concept of environmental accounting, it is not new and has been explored from various angles that show its multidimensionality and relevance. From the economic perspective, environmental accounting is conceived as a comprehensive methodology that merges economic and environmental data to quantify the environmental costs and benefits derived from economic activities, providing a basis for assessing their impact and long-term viability (Setioningtyas et al., 2022).

On the other hand, Urquijo et al. (2017) define environmental accounting as an analysis of the interactions between economic systems and ecosystems, focusing on the consequences of anthropogenic everyday life in the balance between financial growth and ecological preservation. Bouten (2013) expands on this vision, highlighting that environmental accounting not only measures impact, but also serves as a strategic tool for companies to communicate their environmental commitment and improve their corporate image to stakeholders.

Finally, Salinas et al. (2021) conceived it as a valuable numerical foundation for the conception of state guidelines that aim at an ideal projection and, simultaneously, generate pressure on private and public organizations to adjust their processes and products with a view to sustainable development that implies benefits for the entity and for the environment or, at least, minimal damage in the latter. Although these perspectives are useful to preliminarily understand the variable and its multidisciplinary potential, for the purposes of this study, it is necessary to expose the fundamental models or approaches that support it, and one of these proposals is the theory of voluntary disclosure.

Healy and Palepu (2001) discuss disclosure theory, which focuses on how organizations share information with their stakeholders, defined as any individual or group interested in the organization's performance. The authors emphasize

the importance of accounting information in this process and how it contributes to the corporate image. In addition, they point out that disclosure reduces information asymmetry between managers and stakeholders, reducing uncertainty and capital costs by providing clarity on the company's performance and risks.

Guidry and Patten (2012) add that disclosure can reduce fluctuations in stock prices, although it can entail risks such as the disclosure of valuable information to competitors. On the other hand, Cotter et al. (2011) examine how disclosure systems vary globally according to the legal, political, and economic context, and how the effectiveness of disclosure regulations depends on the strength of the country's financial and legal institutions.

On the other hand, the theory of corporate social responsibility (CSR) is a theoretical framework initially proposed by Carroll (2015), which addresses how companies manage the economic, social and environmental implications of their activities. This theory holds that organizations should act in ways that benefit society at large, not just their shareholders. Carroll (2015) developed the "corporate social responsibility pyramid", which establishes four degrees of commitment: economic, legal, ethical and philanthropic.

The basis is economic responsibility, which refers to the need to be profitable. On top of this are the legal responsibilities, which require compliance with laws and regulations; ethical practices, which encompass practices beyond what is legal and morally acceptable; and philanthropic activities, related to promoting human well-being or goodwill (Carroll, 2015).

While the previous theoretical approaches alluded to the role of accounting in different aspects of sustainable management and development, the theory of environmental management accounting, according to Chung & Cho (2018), focuses on the integration of environmental aspects into traditional accounting systems, facilitating the evaluation, management and reporting of environmental performance in companies. a key aspect to promote sustainable practices. Bennett (2016) highlight that this theory provides a framework to foster business sustainability, and explain that environmental management accounting uses specific tools to quantify environmental costs and benefits, including direct and indirect costs related to materials, energy, and waste management.

This accounting also plays a strategic role in improving economic and environmental performance by promoting eco-efficiency, which seeks to meet societal requirements and raise the standard of living by reducing environmental consequences. In addition, a common practice is the use of environmental costing systems, such as life cycle costing, which allocates environmental costs through the product's usage trajectory (Burritt & Schaltegger, 2017).

Based on all these perspectives, Nieto (2019) defines environmental accounting as a methodology that integrates ecological aspects into traditional accounting, using an environmental management system to guide policies, an accounting system to quantify environmental impacts, and a budget system to finance sustainable initiatives. Finally, it has been decided to study this variable based on the following dimensions:

With regard to sustainable development, according to Silvestre and Ţîrcă (2019), it clarifies that it is a growth that satisfies the present requirements without resonating unfavorably on the ability of future generations to solve their shortcomings.

On the other hand, Sen (2013) defines sustainable development as an economic and technological advance achieved through the adoption of practices that promote efficiency in the use of resources and innovation. This vision ensures that economic opportunities are not only available to the current population, but also extended to future generations.

Finally, Osorio et al. (2005) conceive sustainable development in a holistic and integrated way, involving economic, social, and environmental objectives through policies and practices that seek to improve the quality of life of all individuals, while ensuring the sustainability of the planet's natural systems for the future.

In order to provide a broader vision, the theory of sustainable capitalism is presented, of which an official founder or founders cannot be cited, but is a construct designed by various contributions over decades. Some of the exponents who contributed to the construction of this approach were Gore and Blood (2012), who commented that this perspective is aimed at modifying business practices, government policies, and consumer behavior with the aim of promoting economic development that is not only efficient, but also environmentally sustainable and socially inclusive.

Success in implementing sustainable capitalism is measured beyond traditional economic indicators such as GDP or net profit. It includes environmental and social impact measures, such as carbon footprint, labor equity, and

contribution to the community (Landeros, 2023). However, it is criticized that the idea of sustainability can be used by some companies in a superficial way, a phenomenon known as "greenwashing", which consists of adopting minimum sustainability measures that only serve to improve the corporate image.

On the other hand, there is also the theoretical approach of resilience and adaptability which, according to Vogus and Sutcliffe (2007), emphasizes the ability of organizations to anticipate and adapt to internal and external changes, seeking to preserve or improve their long-term sustainability in a volatile business environment. Linnenluecke (2017) highlights that adaptability allows companies to modify their strategies and structures to operate within ecological limits and promote social well-being, while maintaining profitability.

McCarthy et al. (2017) point out that companies implement this theory through risk management strategies, sustainable innovation, and sustainable supply chain development, integrating sustainability into supplier selection and highlighting the importance of an organizational culture and leadership committed to sustainability. However, they face challenges such as measuring resilience and adaptability, resistance to internal change, and the perception of sustainability initiatives as costly or less of a priority in times of economic crisis, complicating their effective implementation (McCarthy et al., 2017).

In this sense, although the above theories present allow for a general understanding of sustainable development, the triple bottom line theory is presented as a more focused conceptual framework that expands the traditional approach to corporate profits to include social and environmental impacts (Pereira & Martins, 2021). This model, introduced and popularized by Elkington (2012), is of particular relevance for companies that are committed to sustainable development.

II. METHODOLOGY

This research is classified as applied, since its main objective is to obtain practical knowledge to address a specific situation in the context of a private company in Trujillo. Through the study of the impact of environmental accounting, the aim is to provide relevant and usable information to improve sustainable development (Hernández & Mendoza, 2018). The approach was quantitative because it will be used to collect numerical data on the use and effectiveness of environmental accounting. This may involve the application of surveys or standardized tests to measure the impact on sustainable development of private enterprise. This approach makes it possible to quantify perceptions regarding sustainable development and environmental accounting management, which facilitates statistical analysis and generalization of the findings to a wider population (Arias et al., 2022). The design was causal correlational because it will be used to investigate whether there is a cause-and-effect relationship between the independent variable and the dependent variable in a private company. The aim is to identify whether the implementation of environmental accounting is associated with significant improvements in sustainable development, even if definitive causality cannot be established. This involves analyzing the correlation between environmental accounting and sustainable development, controlling for other possible factors that may influence workers' perception (Sanchez & Reyes, 2015). For this research, the contribution of Nieto (2019) is taken, who defines environmental accounting as a methodology that integrates ecological aspects into traditional accounting, using an environmental management system to guide policies, an accounting system to quantify environmental impacts, and a budget system to finance sustainable initiatives. In its operational definition, this variable is quantified by means of six items distributed in three dimensions. Each statement mentions aspects of management and the participant must choose the frequency with which this statement occurs in the company, this by means of a Likert scale. Regarding organizational resilience, the proposal of Puppo and Quilca (2022) is taken as central, who defined this variable as the business practice that integrates sustainability into the financial design, competitiveness, and operations of a company. This involves managing resources ethically and efficiently, strengthening the market position through responsible practices, and incorporating environmental and social considerations into daily decisions, thus ensuring a positive impact on society and the environment. In its operational definition, this variable is quantified by means of six items distributed in three dimensions. Each statement mentions aspects of management and the participant must choose the frequency with which this statement occurs in the company, this by means of a Likert scale.

Given the focus on Environmental Accounting and its impact on the Sustainable Development of a private company in Trujillo by 2024, the population under study comprises 234 active employees from various areas of the company. Intentional non-probability sampling has been chosen to select a representative sample of 50 employees from this

total population. Inclusion criteria include that employees are currently employed by the company, engaged in activities related to accounting or sustainable development, and willing to volunteer to collaborate on research. Employees who do not meet the criteria mentioned above are excluded. This sampling strategy is based on practical and accessibility considerations to ensure the viability of the study, although it will not allow the statistical generalization of the results to the entire population (Hernández & Mendoza, 2018).

To collect data, a survey technique and instruments on environmental accounting and sustainable development were used, using questionnaires validated by experts and administered to a sample of employees of a private organization in Trujillo who participate in company processes. The Environmental Accounting Questionnaire consists of questions designed to assess the use and effectiveness of different environmental impact accounting indicators. This instrument was validated through the review and evaluation of experts in the field of private business, who confirmed that the questions of the questionnaire adequately measured the variables of interest. In addition, an internal consistency analysis was carried out using Cronbach's alpha coefficient, obtaining a value of 0.791. This result indicates a high internal consistency between the responses, suggesting that the questionnaire questions consistently measure the same variable. On the other hand, the sustainable development questionnaire is made up of questions designed to assess employees' perception of the company's ability to sustain itself consistently without affecting its environment. Like the previous questionnaire, this instrument was validated by experts in the organizational and administrative fields, who confirmed its suitability to measure the dimensions of virtual learning. The analysis of internal consistency using Cronbach's alpha coefficient yielded a value of 0.791, indicating a high internal consistency between the questionnaire responses.

In this analysis, frequency distribution tables were used to describe the levels of the variables as a function of the descriptive levels. Then, the assumption of univariate normality was examined, which implies that each variable individually follows a normal distribution. This assessment was performed using Spearman tests (Croux & Dehon, 2010), which is a statistical test used to determine whether a sample comes from a population with a normal distribution.

The results obtained from these tests indicated that there are statistically significant differences ($p < .05$) between the normal distribution and the scores of the dimensions proposed for some variables. This suggests that some of the variables analyzed do not fit a normal distribution. The multivariate normality assumption, which implies that the linear combination of the variables follows a normal distribution, was evaluated using Mardia's multivariate kurtosis coefficient (Cohen, 1988). This assumption is considered to be true if the value obtained is less than 70.

The research is based on the principles of scientific integrity, which advocate honesty, when presenting the results and conclusions they are not altered or filtered; transparency, by exposing the procedures followed throughout the investigation; impartiality, by not tainting the process with personal biases motivated by some favoritism; and respect for the participants, taking care not to affect them directly or collaterally during the during and after the process. These principles constitute a solid foundation for ensuring the quality and ethics of the study, preventing potential fraud and bias, and protecting the dignity and rights of the participants involved. The procedures of consent and informed assent were relevant and were extended to the volunteers in written form with all the relevant explanations regarding their role, so that their decision was conscious and free and could change at any stage of their participation if they thought it appropriate. These processes must be governed by the ethical standards established in the UCV Code of Research Ethics and will be duly documented in the annexes of the study, preserving the confidentiality of the collaborating entities.

III. RESULTS

Table 1

Environmental Accounting Level of a company in Trujillo

Variable	Loud		Middle		Low		Total	
Dimensions	n	%	n	%	n	%		n
Environmental accounting	27	54	23	46	0	0	50	
Strategic planning	36	72	14	28	0	0	50	

International Accounting Standard 37	33	66	17	34	0	0	50
Level of environmental costs	25	50	25	50	0	0	50

Note: own elaboration

A level of Environmental Accounting in a company in Trujillo reveals that, in terms of Environmental Accounting, 54% of the observations are classified at a high level, while 46% are located at a medium level, with no records at the low level, adding up to a total of 50 observations. In the field of Strategic Planning, 72% reach a high level and 28% a medium level, with no observations at the low level, also with a total of 50 cases. The dimension related to the International Accounting Standard shows a predominance of the medium level with 66%, compared to 34% at the high level and none at the low level, maintaining the total of 50 observations. Finally, the Environmental Cost Level is distributed equally between the high and medium levels, both with 50%

Table 2

Level of Sustainable Development of a company in Trujillo

Variable	Loud		Middle		Low		Total
Dimensions	n	%	n	%	n	%	n
Sustainable development	23	46	26	52	1	2	50
Financial Design	31	62	18	36	1	2	50
Business competitiveness	24	48	23	46	3	6	50
Operational decisions	0	0	43	86	7	14	50

Note: own elaboration

It shows that, in the Sustainable Development dimension, 46% of the observations are at a high level, 52% at a medium level, and 2% at a low level, with a total of 50 cases. In the Financial Design dimension, 62% reach a high level, 36% a medium level and 2% a low level, adding up

50 observations. Regarding Business Competitiveness, 48% of the registrations are at a high level, 46% at a medium level and 6% at a low level, completing the 50 observations. Finally, the dimension of Operational Decisions presents a concentration at the medium level with 86%, while 14% corresponds to the low level and no observations are recorded at the high level.

General Hypothesis Table 3

Influence of environmental accounting on the sustainable development of a company in Trujillo

	Adjustment criteria	Chi-square		
Model	›garithm model of likelihood -2		Gl	Gis.
Intersection only	20.200			
Final	9.143	11.056	1	0.001
	Pseudo R square			
Cox and Snell	0.198			
Nagelkerke	0.252			
Mcfadden	0.143			

Note: own elaboration

It is shown that the final regression model is significant, with a Chi-square value of 11.056, 1 degree of freedom and a p-value of 0.001, which allows us to reject the null hypothesis and suggests that environmental accounting significantly influences the sustainable development of the Trujillo company. In addition, Nagelkerke's coefficient of 0.252 indicates that 25.2% of the variability in sustainable development can be explained by environmental accounting, while the remaining 74.8% of the variability is attributed to other factors not considered in the model. The coefficients of Cox and Snell (0.198) and McFadden (0.143) reinforce the moderate explanatory capacity of the model, highlighting the relevant, albeit limited, contribution of environmental accounting in the sustainable development of the firm studied.

Specific Hypothesis 1

Table 4

Influence of environmental accounting on the Financial Design of a company in Trujillo

	Adjustment criteria	Chi-square		
Model	›garithm model of likelihood -2		Gl	Gis.
Intersection only	19.139			
Final	9.097	10.042	1	0.002
	Pseudo R square			
Cox and Snell	0.182			
Nagelkerke	0.235			
Mcfadden	0.135			

Note: own elaboration

It is observed that the final regression model is significant, with a Chi-square value of 10.042, 1 degree of freedom and a p-value of 0.002, which allows us to reject the null hypothesis and suggests that environmental accounting significantly influences the financial design of the Trujillo company. The Nagelkerke coefficient of 0.235 indicates that 23.5% of the variability in financial design can be explained by environmental accounting, while the remaining 76.5% of the variability is attributed to other factors not considered in the model. The coefficients of Cox and Snell (0.182) and McFadden (0.135) reinforce the moderate explanatory capacity of the model, highlighting the relevant, although limited, contribution of environmental accounting in the financial design of the firm studied.

Specific Hypothesis 2

Table 5

Influence of environmental accounting on the business competitiveness of a company in Trujillo

	Adjustment criteria	Chi-square		
Model	›garithm model of likelihood -2		Gl	Gis.
Intersection only		18.460		
Final		11.6596.801	1	0.009
	Pseudo R square			
Cox and Snell	0.127			

Nagelkerke	0.154
Mcfadden	0.077

Note: own elaboration

It is observed that the final regression model is significant, with a Chi-square value of 6.801, 1 degree of freedom and a p-value of 0.009, which allows us to reject the null hypothesis and suggests that environmental accounting significantly influences the business competitiveness of the Trujillo company. The Nagelkerke coefficient of 0.154 indicates that 15.4% of the variability in competitiveness can be explained by environmental accounting, while the remaining 84.6% is attributed to other factors not included in the model. The coefficients of Cox and Snell (0.127) and McFadden (0.077) reinforce the low explanatory capacity of the model, highlighting a limited contribution of environmental accounting to the competitiveness of the company analyzed.

Specific Hypothesis 3

Table 6

Influence of environmental accounting on the operational decisions of a company in Trujillo

Model	Adjustment criteria ›garithm model of likelihood -2	Chi-square	Gl	Gis.
Intersection only	10.860			
Final	5.320	5.540	1	0.019
	Pseudo R square			
Cox and Snell	0.105			
Nagelkerke	0.189			
Mcfadden	0.137			

Note: own elaboration

It is observed that the final regression model is significant, with a Chi-square value of 5.540, 1 degree of freedom and a p-value of 0.019, which allows us to reject the null hypothesis and suggests that environmental accounting significantly influences the company's operational decisions. The Nagelkerke coefficient of 0.189 indicates that 18.9% of the variability in operational decisions can be explained by environmental accounting, while the remaining 81.1% is due to other factors not considered in the model. The coefficients of Cox and Snell (0.105) and McFadden (0.137) reinforce the moderate capacity of the model, evidencing a relevant, although limited, contribution of environmental accounting in the operating decisions of the company analyzed.

IV. DISCUSSION

Regarding the general objective of determining the influence of environmental accounting on the sustainable development of a private company, what could be observed was that the estimated influence was of moderate, positive and significant magnitude on the variability of sustainable development, which reveals that environmental accounting not only measures impacts, but also acts as a strategic catalyst in the company. facilitating decisions that integrate economic and environmental value in a practical and scalable way.

From a theoretical perspective, what is assumed is the alignment or expectation that there is a moderate or high association, since, for example, Bouten (2013) broadens the perspective of environmental accounting by pointing out that it not only measures impact, but also serves as a strategic tool for companies to communicate their environmental

commitment and improve their corporate image to stakeholders. The ability of environmental accounting to reinforce corporate image and environmental commitment is crucial for sustainability, as it encourages responsible practices that align with sustainable development principles.

According to Nieto (2019), from a theoretical point of view, environmental accounting has been widely adopted in organizations as a methodology that integrates ecological aspects into traditional accounting, so that finding a high level of use of this would be the most natural and frequent. This integration reflects a high level of employment of environmental accounting practices that, in addition to measuring impact, allow financial planning aligned with sustainability.

From the theoretical conception, researchers such as Chung and Cho (2018) indicate that for a few years sustainable development has been the main concern of many companies, not only because of the fulfillment of a moral agenda but also because business development itself depends on these practices. This approach is key to promoting sustainable practices in organizations, as it provides a framework to promote business sustainability through specific tools to quantify environmental costs and benefits.

From the theoretical perspective of Urquijo et al. (2017), environmental accounting analyzes the interactions between economic systems and ecosystems, focusing on the impact of human activity on the balance between development and conservation of the planet. This analysis reinforces how environmental accounting influences the financial design of companies by incorporating sustainable development principles that align their operations with conservation and responsible resource use objectives

When determining the influence of environmental accounting on the competitiveness of a private company, a weak, positive and significant influence on the variability of business competitiveness was found, which suggests that, although environmental accounting contributes to improving competitiveness, its impact is still limited and does not act as a decisive differentiator in the market. This finding indicates that, to maximize its competitive advantage, the company could complement environmental accounting with integrated strategies that strengthen its sustainable positioning and expand its perceived value by customers and stakeholders.

From a theoretical standpoint, Nieto (2019) strengthens the rational expectation that environmental accounting will have a moderate or strong influence on business competitiveness, since he defines this type of accounting as a comprehensive system that guides policies, quantifies environmental impacts, and finances sustainable initiatives. This approach allows companies to not only adjust their operations towards sustainability, but also to respond to a competitive environment in which environmental policies improve their reputation and efficiency. Companies that implement this system usually stand out from their competitors, as they achieve a more conscious management of resources aligned with sustainable development.

In relation to the fifth specific objective of determining the influence of environmental accounting on the operating decisions of a private company, it was possible to quantify a moderate, positive and significant influence on the variability of operating decisions, which reveals that environmental accounting begins to play a relevant role in operational decision-making. orienting actions towards more sustainable practices. This result indicates that, although their influence is moderate, their integration into operations can strengthen the company's efficiency and alignment with sustainability objectives.

From a theoretical perspective, Chung and Cho (2018) support the moderate or strong influence of environmental accounting on the quality of operational decisions, since they point out that environmental management accounting promotes eco-efficiency, which seeks to meet human needs and improve quality of life while reducing environmental impacts. The implementation of eco-efficiency practices directly impacts operational decisions, since it guides companies towards processes that optimize the use of resources, reduce material costs and reduce energy consumption, thus aligning with sustainable development.

V. CONCLUSIONS

- Environmental accounting showed a moderate, positive and significant influence on sustainable development, explaining 25.2% of its variability (Nagelkerke $R^2 = 0.252$).
- The levels of use of environmental accounting in the company showed a predominance of the high level (54%), followed by the medium level (46%), without a low level in this variable.

- The level of sustainable development was predominantly regular (52%), followed by the high level (46%) and a low level according to 2% of the employees consulted.
- The influence of environmental accounting on financial design was of regular, positive and significant magnitude, explaining 18.2% of its variability (Nagelkerke $R^2 = 0.182$).
- Environmental accounting exerted a weak, positive and significant influence on business competitiveness, explaining 15.4% of its variability (Nagelkerke $R^2 = 0.154$).
- The influence of environmental accounting on operational decisions was of moderate, positive and significant magnitude, explaining 18.9% of its variability (Nagelkerke $R^2=0.189$).

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