

Sustainable finance and generation of financial information with ESG criteria among public entities

Finanzas sostenibles y generación de información financiera con criterios ASG entre los sujetos públicos

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Abstract:

Title Four of the General Law of Government Accounting (LGCG) regulates the financial information and public accounts that must be submitted by public entities on a periodic basis, while section IV of Article 46 of the same law indicates that the public administration will allow the periodic generation of financial information, particularly related to complementary information to generate national accounts and meet other requirements arising from international organizations of which Mexico is a member. [1]. The objective of the research is to identify the advances presented by public entities in Mexico for the adoption of accounting regulations at the international level for the incorporation of ESG criteria in the development of financial information oriented to sustainability, with a scientific research method, mixed methodology approach, analytical, inductive, deductive design and with documentary synthesis technique. The accounting regulations are contrasted with the information and data contained in the public accounts of the seven states that the Mexican Institute of Competitiveness (IMCO) identifies for the year 2023 with greater advances in the quality of financial information. Among the main findings is the absence of an approved report for the presentation of financial information with ESG criteria, which complicates the comparability of the information, a positive criterion identified is that those subjects that do not comply with the obligations of the LGCG will not be able to register obligations in the national borrowing registry, which contributes to the fulfillment and generation of sustainable finances.

Keywords:

Public administration, environmental accounting, Sustainability

Resumen:

El título cuarto de la Ley General de Contabilidad Gubernamental (LGCG) reglamenta la información financiera y la cuenta pública que deben presentar los sujetos públicos de manera periódica, mientras que la fracción IV del artículo 46 de la misma ley indica que la administración pública permitirán la generación periódica de información financiera, particularmente relativo a la información complementaria para generar las cuentas nacionales y atender otros requerimientos provenientes de organismos internacionales de los que México sea miembro. [1]

La investigación tiene por objetivo identificar los avances que presentan los sujetos públicos en México para la adopción de la normatividad contable a nivel internacional para la incorporación de criterios ASG en el desarrollo de información financiera orientada a la sostenibilidad, con método científico de investigación, enfoque de metodología mixto, diseño analítico, inductivo, deductivo y con técnica de síntesis documental, se contrasta la normatividad contable contra la información y datos contenidos en la cuenta pública de las siete entidades federativas que el Instituto Mexicano de Competitividad (IMCO) idéntica para el año 2023 con mayores avances en la calidad de la información financiera. Entre los principales hallazgos se identifica la usencia de un reporte homologado para la presentación de la información financiera con criterios ASG, lo que complica la comparabilidad de la información, un criterio positivo identificado es que aquellos sujetos que no cumplan con las obligaciones de la LGCG no podrán inscribir obligaciones en el registro nacional de empréstitos, lo que contribuye al cumplimiento y generación de finanzas sostenibles.

Palabras Clave:

Administración pública, contabilidad ambiental, sustentabilidad

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Introduction

One of the most current and far-reaching challenges facing society, government and business is that of sustainability. In other words, to continue with economic development without having a negative impact on global warming, thus gradually mitigating the climate crisis.

Sustainable finance is key to achieving an economy that is more respectful of people and the planet. To achieve this, the collaboration of the public and private sectors, together with the individual and collective responsibility of citizens, is essential. Aware of this, economic sectors have made sustainable finance one of the main keys to building a more prosperous future.

Sustainable finance is defined as investment decisions that consider the environmental, social and governance factors (ESG) of an economic activity or project. As a result, companies integrate ESG (Environmental, Social and Governance) criteria into asset management and business strategy.

This approach responds to the demands of customers, employees, or investors, who are increasingly opting for economic entities that care about the environmental and social impact of their operations.

In this way, it contributes to the transformation of the economy and society towards a more responsible development model and ensures that financial investments support the transition path towards a sustainable global economy.

Objective

To identify the progress made by public entities in Mexico for the adoption of accounting standards at the international level for the incorporation of ESG criteria in the development of sustainability-oriented financial information. Identify whether the financial reports submitted by the states identified by IMCO for presenting better financial information are currently presenting information with ESG criteria in their public accounts. Construct a diagnosis of the progress in the adoption of ESG criteria in the presentation of financial information among public entities.

Theoretical Framework

Demographic Changes

The environment is an issue that encompasses us all as inhabitants of this planet, and human beings are one of the most important factors if not the most important for its deterioration, they think that natural resources are inexhaustible, when they certainly are not [2]. The growth of the world's population is one of the main challenges that the world faces, with a growing population that consumes a large number of goods and services in an absurd way,

the average consumer does not present environmental awareness in their consumption behavior.

The exploitation of natural resources by human beings increases in parallel with cultural, technological, and scientific progress. The industrial revolution, which took place in the eighteenth and nineteenth centuries, profoundly transformed industry, agriculture, and transport [3].

The promotion of the care, protection and repair of nature is a necessary fact to continue generating satisfiers with greater added value.

Rationalistic thinking and scarce Resources

Even in the middle of the 20th Century, Nature had been seen as a unlimited font of resources in the western civilization's prevailing conceptions. However, towards the end of the century, this perception gradually began to change as environmental damage became evident, which could no longer be hidden from society [3].

A principle that sustains economic theory is that resources or factors of production are scarce and have an opportunity cost, today it is important to remember throughout the production process of goods and services that resources are scarce, they are exhaustible, and the replacement or renewal of environmental goods and assets must be considered in the costs.

Sustainable development

Sustainable Development is a theoretical and methodological foundation to promote the compatibility of economic and socio-cultural development with the preservation of the environment [4].

The concept of sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet theirs". Within this concept, it is required that decisions that affect the development of the community, environmental and social variables must be accompanied by economic variables, and the consequences and irreversible damage that human action may have on the environment must be considered.

It is known that producing a good has a cost, therefore, the focus of sustainable development is to reflect the true value of the environmental resources used in production processes.

Corporate Social Responsibility

However, companies must look more at the issue of achieving environmental responsibility so that sustainable development is just that, sustainable, because there must be measures that manage to control this. From this perspective, the way organizations can demonstrate

environmental responsibility is by voluntarily complying with environmental legislation. Therefore, business management is intrinsically linked to environmental issues, as environmental issues directly affect business. In other words, it seeks to regulate environmental conduct through business management [3].

The role of organizations is transcendental, it is the institutions who can guide the course of action, today there is a sustainable development agenda as a global strategy to solve global problems, alignment with the strategy and achievement of the objectives is the current route to reduce the problems and generate greater awareness.

Having a good control of environmental legislation could meet several objectives towards the environment, but first companies must fulfill their part, social responsibility arises as a necessity and above all a commitment that companies must be sustainable in order to contribute to the well-being of future generations [2]

In accordance with this, different regulatory mechanisms have emerged, ranging from corporate social recognition, an eco-design label, and ecological taxes, among others.

The ISO 14,000 family was created by the International Organization for Standardization, these are international standards that have gained importance since the 90s, they establish an Environmental Management System (EMS) and provide guidelines for the improvement of production processes to both public and private companies, with the aim of making the most of waste, energy savings, involvement of trained personnel and a good environmental reputation [5].

Challenges and Responsibilities of the Accounting Profession

The accounting profession is responsible for recording the real and reliable financial information of companies, it is also an ally for decision-making and the dissemination of information, through techniques and tools for the proper management of resources.

Environmental accounting standards are regulated by IAS 37, which deals with "Forecasts, Contingent Liabilities and Contingent Assets". It specifically states that, "The objective of this Standard is to ensure that appropriate bases are used for the recognition and mediation of provisions, liabilities and contingent assets."

This means, for example, that environmental liabilities are those that finance assets or expenses of an environmental nature [6]

Hernández Royett, J. A., & Castillo Osorio, B. [5] propose some components to establish an Accounting Information System in environmentally responsible companies, such as:

- I. The valuation, measurement, and registration of environmental assets.
- II. The valuation, measurement and recording of an accounting liability.
- III. The implementation in Environmental Management Systems of the measurement of environmental benefits and deterioration caused by productive activities.
- IV. The provision of plant dismantling and the liabilities necessary for it.
- V. Profit and losses related to the treatment or disposal of waste.
- VI. Based on the ISO 14,000 standard, the implementation of figures that allow environmental performance to be measured in financial reports.
- VII. Environmental cost-benefit assessments.
- VIII. Cost-benefit analysis of environmental improvement and efficiency.
- IX. Corporate agreements that have direct or indirect effects on the environment.
- X. Tax and environmental legislation in the company's processes.
- XI. Accounting policies.
- XII. The implementation of international financial reporting standards (IFRS) to processes.

Emergence of Environmental Accounting

Accounting is a social discipline that embraces the environmental aspects of the organization in its accounting method and process, in such a way that it manages to capture the positive and negative effects caused by the activities of organizations in society [3]

Traditional accounting must be transformed, and a reformed technique must be developed that can integrate environmental costs and benefits into the finances and assets of organizations, a technique that allows the identification of future risks of environmental degradation, that is capable of quantifying environmental risks and making provisions that regenerates and replace environmental costs and incorporates a careful and respectful production process of natural resources.

Environmental accounting was heard for the first time in the early 1970s, when the consequences of population growth and the use of natural resources were made known [2]

Environmental accounting finds its roots in the corporate social responsibility movement and the growing

awareness of environmental issues in recent decades. It arose as a response to the need to assess and quantify the environmental costs and benefits of business activities. As environmental concerns have increased, environmental accounting has become an essential tool for companies committed to sustainability.

Sustainable finance has been around for more than two decades, but its importance in moving towards a responsible global economy continues to grow. Its evolution and implementation are a priority for companies and today ESG (Environmental, Social and Governance) criteria are key in investment decision-making and corporate strategy.

The financial information generated by economic subjects requires responding to ESG variables to guarantee comprehensive decisions that lead to a sustainable future.

According to Meljem Enríquez de la Rivera and Hernandez Gálvez [7], ESG criteria refer to non-financial information that represents the risks and opportunities that an entity faces to create value in the long term. And they are divided into three categories: Environmental, Social, and Governance.

The E, or environmental, consists of the detection of the environmental risks to which the company is exposed and its capacity to respond to them. It also considers the entity's impact on the environment, including aspects of climate change in the company's activities, as well as its consumption of clean energy.

On the other hand, the S, or social, is focused on the company's relationship with its stakeholders. For example, your workers and your business partners. So, it covers topics such as employment practices, anti-discrimination policies, and data security. It also includes everything related to the supply chain and product quality. Finally, the G, or governance, represents information related to the company's corporate governance, from its structure and diversity to its anti-corruption and fiscal transparency policies.

Regulatory framework

International accounting regulations have developed new instruments for the incorporation of ESG criteria for the development of sustainability-oriented financial reporting. The International Financial Reporting Standards Foundation (IFRS) is an organization established to develop high-quality, understandable, enforceable, and globally accepted accounting and sustainability disclosure standards. [8]

The International Sustainability Standards Board (ISSB) established sustainability standards (IFRS S1) and IFRS S2 for disclosing sustainability related to financial reporting and climate-related disclosures.

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Chart 1 Sustainability accounting standards

NIIFS1	NIIFS2
General Requirements for Sustainability Disclosures Related to Financial Reporting	Climate-Related Disclosures
It involves to regularly disclose what kind of governance structure they have in place to identify, assess, and monitor climate-related or societal risks, as well as how those risks are mitigated, and the commitments they have to combat climate change, the measurements they make in this regard, and the actions with which they intend to meet their goals.	Focused mainly on the issue of climate and the disclosure of companies regarding environmental impacts, such as, for example, greenhouse gases.

Source. Own elaboration based on IFRS

On the other hand, the public policy research center of the Mexican Institute for Competitiveness (IMCO) identifies the main states that present the greatest advances in the quality of financial information, from which the 2023 state budget information barometer study identifies the following states with the highest rating in the quality of their budget information. Baja California, Coahuila, Guanajuato, Jalisco, Nuevo León and Yucatán [9]

Title Four of the General Law on Government Accounting (LGCG) regulates the financial information and public accounts that must be submitted by public entities on a regular basis, while section IV of Article 46 of the LGCG indicates that the public administration will allow the periodic generation of financial information, particularly related to complementary information to generate national accounts and meet other requirements from agencies of which Mexico is a member. [1]

The integration of the financial information and public accounts of public entities is contemplated in the fourth title of the General Law of Government Accounting LGCG, which regulates the financial information and public accounts that must be presented by public entities on a periodic basis.

Methodology used.

Scientific research method, mixed methodology approach, analytical, inductive, deductive design and with documentary synthesis technique, the accounting regulations are contrasted against the information and data contained in the public account of the six states that

the Mexican Institute of Competitiveness (IMCO) identified for the year 2023 with greater advances in the quality of financial information and data presented by the National Council for Accounting Harmonization with cut-off to the third quarter of 2023 in the assessment of accounting harmonization.

Results

The objectives of the Financial Statements "derive primarily from the needs of the general user, which in turn depend significantly on the nature of the entity's activities and the relationship that user has with the entity. However, financial statements are not an end in themselves, since they are not intended to try to convince the reader of a certain point of view or the validity of a position; rather, they are a useful means for economic decision-making in the analysis of alternatives to optimize the proper use of the entity's resources" [11].

The ISSB was launched by the IFRS Foundation at COP26 with the aim of improving the consistency and quality of sustainability reporting around the world, aligning the importance of sustainability reporting with current regulations on financial reporting. To reinforce this message, the ISSB aligns with the International Accounting Standards Board (IASB) and is overseen by the IFRS Foundation Leadership and the Supervisory Board.

The ISSB brings together the Climate Disclosure Standards Board (CDSB) and the Value Reporting Foundation (VRF), the name behind the Integrated Reporting Framework and Sustainability Accounting Standards Board (SASB) Standards.

These standards represent a milestone in terms of preparing the accounting information of companies, for two reasons: the first is that it will be possible to have a single comprehensive framework that promotes social responsibility and care for the environment; The second is that this framework will use a structured language that is understandable for the areas that prepare the financial reports of companies.

Today, with the opening of a path to include information in financial statements that was previously considered non-financial, sustainability issues have come to occupy a place of great relevance in the agenda of chief financial officers (CFOs), boards of directors, investors, regulators and among the different participants in the global business ecosystem.

This implies that companies must develop sustainability strategies if they want to generate value over time, which will bring with it some challenges such as transmitting a

new organizational culture or collecting and safeguarding non-financial information to prepare their disclosures.

But, while it is true that compliance with and understanding of the new regulations will cause new challenges for companies, they will also have valuable opportunities that, if addressed in a timely and strategic manner, can generate great benefits.

The following charts (Chart 2) shows the results obtained by the states examined, one can observe that while the Mexican Institute for Competitiveness evaluates the budget information with one hundred percent, the Mexican Council for Accounting Harmonization gives a lower rating, the case of the state of Jalisco and Nuevo León are the ones that show a greater contrast between the evaluations.

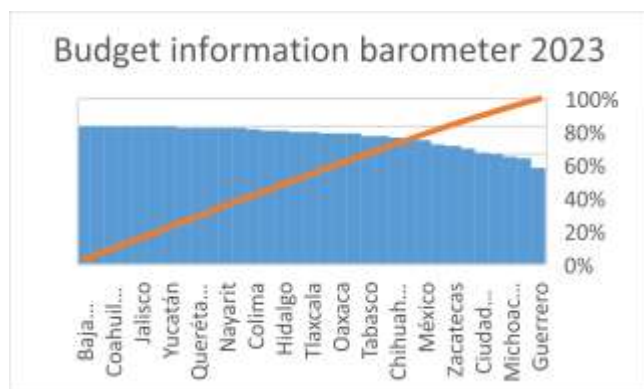
It should be noted that, in both evaluations, they review accounting, programmatic and budgetary information, without examining a sustainability variable or information with ESG criteria

Chart 2. Comparison of financial information contained in public accounts by state.

Federal entity	IMCO Budget Information Barometer Evaluation 2023	SEVAC Assessment IIIT2023
Baja California	100%	98.68%
Coahuila	100%	97.08%
Guanajuato	100%	93.18%
Jalisco	100%	78.88%
Nuevo León	100%	83.43%
Quintana roo	100%	92.25%
Yucatán	100%	88.76%

Source: Own elaboration based on the results of the barometer, the public account for the fiscal year 2023 carried out by the IMCO, contrasting the results of progress in the accounting harmonization of the third quarter of 2023 by the National Council for Accounting Harmonization.

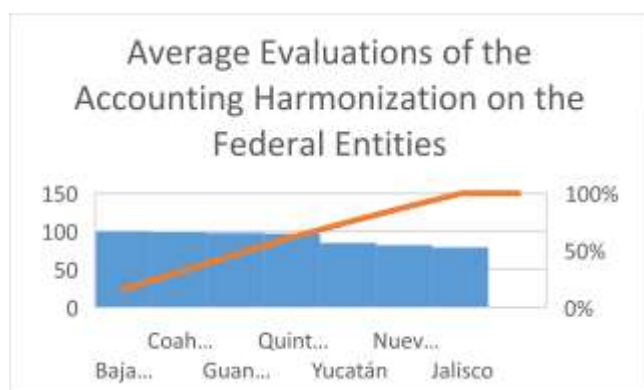
Chart 3. General results of the budget information barometer by state according to IMCO Mexican Institute of Competitiveness



Source. [9]

Regarding the general results of the budget information barometer (Chart 3), the states of Baja California, Coahuila, Guanajuato and Quintana Roo are the ones that are most evaluated with reference to budget information, while the states of Sonora and Guerrero present greater challenges in the quality of their budget information.

Graph 1. Average Evaluations of the Accounting Harmonization of the Federal Entities (includes State and Municipal Public Entities)



Source.[10]

The above graph (Graph 1) refers to the results of accounting harmonization for the third quarter of 2023, the State of Baja California is identified as presenting greater progress in the implementation of accounting harmonization in accounting and budget records in its transactions and quantification of equity, however, it does not quantify in its accounting the environmental costs or benefits of its economic or social operations, and does not generate ESG financial information. For the year 2023, Baja California as the most advanced entity in terms of quality of budget information and best evaluated, it is estimated that it could be the entity that shows leadership in starting to report with ESG criteria and generate environmental accounting, which could begin to be evaluated from the 2024 public account.

Conclusions

ESG criteria have become essential information for decisions to be made that support a sustainable future. Environmental, social and governance ESG-ESG issues have become more important for governments, companies, investors, regulators, customers and suppliers, which has driven the need to know what organizations are doing in this area, in a consistent, complete, comparable and verifiable way.

Challenges.

1. Raising awareness of the environment
2. Internal training in generating information with a focus on sustainability
3. Incorporation of regulations
4. Integration of a comparable and verifiable global report
5. Differentiation between subjects that are obliged but do not comply with the regulations, avoiding greenwashing practices or the purchase of badges.

On the other hand, the results of the IMCO identify and measure the states that present budgetary information, verify compliance with government accounting, financial discipline and transparency, promote good practices of budget information and contribute to eliminating opacity.

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