



***International Sustainability Standards for Accounting in Algeria:
IFRS-S1 and IFRS-S2 horizons***

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Received: 16/03/2024

Accepted: 08/12/2024

Abstract

This paper aims to study the possibility of international sustainability accounting standards IFRS S1 and IFRS S2 impalement in Algeria. For this research idea, a field study was conducted on a group of accounting professionals members of the National Organization of Certified Accountants preapproved by the Algerian Ministry of Finance. After a random selection of the sample, (98) retrieved questionnaires were analyzed using the Statistical Package Analysis for Social Sciences program "SPSS". The study concluded that the accounting environment in Algeria unfortunately isn't yet ready for the impalement of IFRS S1 and IFRS S2.

Keywords: Accounting, Corporate Finance, Financial Reporting, International Accounting Standard, Sustainability.

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1. INTRODUCTION

A growing need for sustainability reporting was spotted by a number of larger organizations and companies in order to meet with their investor's preoccupations. Contrary for financial data as one of the main issues facing investors nowadays, it is that they lack access to high-quality internationally comparable sustainability information. Therefore, International Sustainability Standards Board (ISSB) came with a challenge hoping for revolutionizing sustainability reporting on a global scale. ISSB was created by the International Financial and Reporting Standards (IFRS) Foundation in 2022, it involves 17 highly-qualified members looking for improving the quality of sustainability reporting at the international level.

The Trustees of the IFRS Foundation and the Monitoring Board supervise the ISSB, which is seated next to the International Accounting Standards Board (IASB). So, the ISSB brings together the Climate Disclosure Standards Board (CDSB) and the Value Reporting Foundation (VRF), the name behind the Integrated Reporting Framework and the Sustainability Accounting Standards Board (SASB) Standards.

Fortunately, ISSB work was favored by the international community “the G7, G20, the IOSCO and the Financial Stability Board, amongst others. On June 26th last year, ISSB released its two first sustainability standards: the IFRS S1 and IFRS S2, which are set to take effect from ***January 1st, 2024*** and forwards. ISSB thought that these standards would help combat the challenges of companies “green washing” so investors will be able to make better decisions.

Algeria's accounting practices alternatively are facing many deficiencies especially when talking about meeting with IFRS, IPSAS, and IAES needs. Nonetheless, it looks like Algeria is trying to adopt these international standards somehow but in a very slow way. (Saidi, 2013) And many other studies presented by the researchers like (Miliani A, Kameli M, 2021) , (Kameli M., Miliani A., 2022), (Miliani, 2022), and (Miliani A. , 2024) cited that numerous mistakes been made when trying to adopt IFRS and IPSAS. Which means that the internationalization road is a little bit longer for Algerian accounting.

1.1 Problem of the study

With all this climate change and environmental challenges, the problem of this research paper is presented as the following:

- Is Algeria's accounting environment ready to comply with IFRS S1 and IFRS S2 international sustainability accounting standards' needs?

Initially from this problem, we arouse the following secondary questions:

- Is there a domestic legal system in place that supports an effective implementation of sustainability accounting standards?
- Are traditional accounting professionals in Algeria able to respond to the requirements of IFRS S1 and IFRS S2 standards?
- Can Algerian companies comply with the international accounting and sustainability standards' rules?

1.2 Hypotheses of the Study

Starting from these questions mentioned before, we spot the following hypotheses as primary answers as the following:

(H₁): Algerian accounting environment is ready to comply with sustainability accounting standards IFRS S1 and IFRS S2.

- (H₁₁): Algerian legal system is favorable to the application of IFRS S1 and IFRS S2.
- (H₂₁): Accounting professionals have an extensive experience that helps them apply these standards smoothly.
- (H₃₁): Algerian companies are ready to comply with the disclosure rules required by these standards.

1.3 Importance of the Study

In order to reach the study's purposes, it aims to clarify some of the points which are:

- Trying to comprehend the reality of accounting practices in Algeria.
- Seeking to find out more about the orientation towards accounting globalization and sustainability projects in place.

- Looking for accounting challenges that effects directly the Algerian companies.
- Enhancing and supporting accounting professionals to deal with more complex matters such as Greenhouse Gases, pollution, climate change and teach them how to treat such transactions in light of IFRS S1 and IFRS S2.
- Investigating about if “Post-Covid Algerian authorities” are interested in such matters or not.

2. LITERATURE REVIEW

2.1 An Overview on Sustainability and Sustainable Accounting

Sustainability in resource use includes looking for a balance between fulfilling the demands of the present generation and preserving the requirements of future generations. Long-term protection of the economy, society, and environment are the goals of the concept. Sustainability is attained when present requirements are satisfied without negatively impacting the environment's potential to provide for future needs.

When it comes to Accounting, sustainable accounting describes; *“a collection of accounting procedures necessary to gather data on the environment and society to use it to enhance a business's performance in multiple areas”*. “Sustainable accounting”, or social accounting, environmental accounting, or non-financial accounting are names of the same type of accounting, its roots go back to the 1970s, a time when environmental reporting was highly valued.

The principal problem with sustainable accounting is that there isn't a single rule that takes into consideration every worry that businesses and individuals have. Businesses must, supply certain data in order to evaluate the environmental and social risks they face, but who exactly determines such risks? Who evaluates them? Before answering this question, as researchers we need to take a look about the specificity of this information.

Well, Investors in the business world are most likely attracted to companies that support environmental standards, avoiding shady or unethical behaviors and sectors like cigarette industry or weapon industry in some economies.

Therefore, investors always put more pressure on companies to improve their standards, not forgetting that they always can threat to pull out their money from the corporation and stop funding it. On dissimilar perspective, corporations could resort to falsifying their financial statements, by showing how great they are in promoting and preserving the climate change which is in particularly puts the veracity of data on the environment and society on the line.

False assessments are important issues to measure sustainability as the authors mentioned before, because companies provide their information to environmental organizations or government agencies for evaluation, which means that the company itself is the source of the information and the main controller of it, which allows it to distort or change the data as it wishes. So, the answer is “NO ONE, but the government”.

As an alternative, measuring sustainability can be a very difficult process because it requires assessing a company's impact on the environment and society, and companies provide most of the information used to assess their sustainability. When talking about such information, we talk about chemistry and economics. So, in general, Greenhouse gases (GHGs) which are gases that contribute to increase the Earth's temperature and cause Global Warming and these kinds of gases include a list of carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), hydro fluorocarbons (HFCs), chlorofluorocarbons (CFCs), sulfur hexafluoride (SF₆), nitric oxide (NO_x), and other similar gases that threaten the environment. All these emissions can be calculated by analyzing the consumption of fuel, electricity and heat. After that we need to convert the amounts used into GHG emissions, using conversion factors specific to each type of fuel.

Furthermore, there are other ways to calculate GHG emissions, such as the production method; it focuses on calculating the emissions associated with the GHG emissions calculation process by means of a set of mathematical equations that depend on the calculated quantities and conversion factors adopted. This calculations must be conducted in a specific way according to (Mohammed, S., Gill, & others, 2021).

As a result, this information must be independently audited to ensure its validity, without neglecting the auditing financial information importance as well. Pollution issues are one of the most important challenges faced by companies and humanity as well, but many of these companies rely on adjusting the numbers and ratios of gases to match the permitted environmental impact in order to avoid some consequences related to bankruptcy or losing investors.

Lately, sustainability was considered as one of the most pressing and important issues facing the economic community in 2024. But luckily, there are good initiatives to measure them. And here comes the ISSB project as a genuine, neutral and non-fraudulent path that can provide a solution for sustainability measurement issues in which the IFRS Foundation cheered for.

2.2 The ISSB Sustainability Disclosure Content Requirements

ISSB applauds that a company's board of directors and executive management discuss, respond to, and report on the company's climate risks and strategies at least once annually through four main sections:

2.2.1 Governance: The leadership, organization's governance, processes and controls around sustainability-related risks and opportunities;

2.2.2 Strategy: Potential decision-making impacts of climate-related risks and opportunities on the company's business and financial statements, the strategy for addressing, adapting to, or minimizing those risks and any strategic forecasts and how material sustainability issues are integrated into the company's strategic planning and treatment. Under the climate proposal, IFRS also requires information regarding any climate change plans and scenario analysis;

2.2.3 Risk management: The process that a company uses to identify, assess and manage climate-related risks;

2.2.4 Measures and targets: used to assess the company's climate-related risks, opportunities, and performance.

2.3 The Difference between IFRS and ISSB

Traditional financial accounting background accountants are certainly new to sustainability reporting like Algerians accountants. Therefore, we take the chance to present the most three important differences between sustainability and financial disclosure approaches as follows:

2.3.1 Value Chain Boundaries: Unlike traditional financial accounting, climate risk assessment and sustainability accounting require a broader, more forward-looking lens on opportunities and risks. Climate risks may be related to suppliers, customer preferences, or even extreme weather and natural disasters, all examples that occur externally to the same reporting entity in different segments of its value chain.

2.3.2 Management's Judgment on Material Topics risks and opportunities: IFRS sustainability disclosure standards give management more flexibility in assessing disclosure topics and conducting a materiality exercise. Here, IFRS recommends reference to industry-specific Sustainability Accounting Standards Board (SASB) guidance, as well as other relevant third-party standards.

2.3.3 Joint Ventures: There is no current guidance on how a joint venture should report its sustainability disclosures, although the general value chain principle of a carbon accounting amount is still applicable in combined.

2.4 IFRS S1 and IFRS S2 Presentation

When IFRS S1 and IFRS S2 were released, Australia, Japan, and the UK have announced that they'll adopt the standards by the year of 2025 and they started to study the possibility to adjust their accounting practices with these standards immediately, while several other countries, like Canada, New Zealand, Nigeria, Singapore, and Malaysia, have shown interest to do so. Thus, IFRS S1 and IFRS S2 were based on some principles which are shown as the following:

2.4.1 IFRS S1 “General Requirements for Disclosure of Sustainability-related Financial Information”: It includes the necessary details on how a company or organization manages its financial risks and opportunities associated with sustainability (IFRS, 2024). and all these opportunities and same for the risks are associated with activities that have the potential to affect the business. Including cash flows, finance availability, and relationships and resources within the value chain.

This standard make it requirable for the company to provide information about:

- Processes and procedures for monitoring, managing, and overseeing its sustainability-related risks and opportunities;
- Strategy related to managing sustainability risks and opportunities;
- Full identification of sustainability-related risks and opportunities;
- Performance related to laws and regulations in relation to sustainability-related risks and opportunities.

2.4.2 IFRS S2 “Climate-Related Disclosure”:(IFRS, 2024) Relevant data on a company's climate risks (eather physical or transitional) and opportunities that may have an influence on their operations is covered by IFRS S2, including short-, and long-term elements such cash flows, funding availability, and cost of capital.

2.5 Current Accounting Climate in Algeria

Algeria was able to make a qualitative leap in the field of accounting after the promulgation of the Algerian Financial Accounting System “AFAS” Law back in November 25th, 2007 by making an attempt to internationalize accounting practices into the same context as international accounting standards IAS/IFRS.

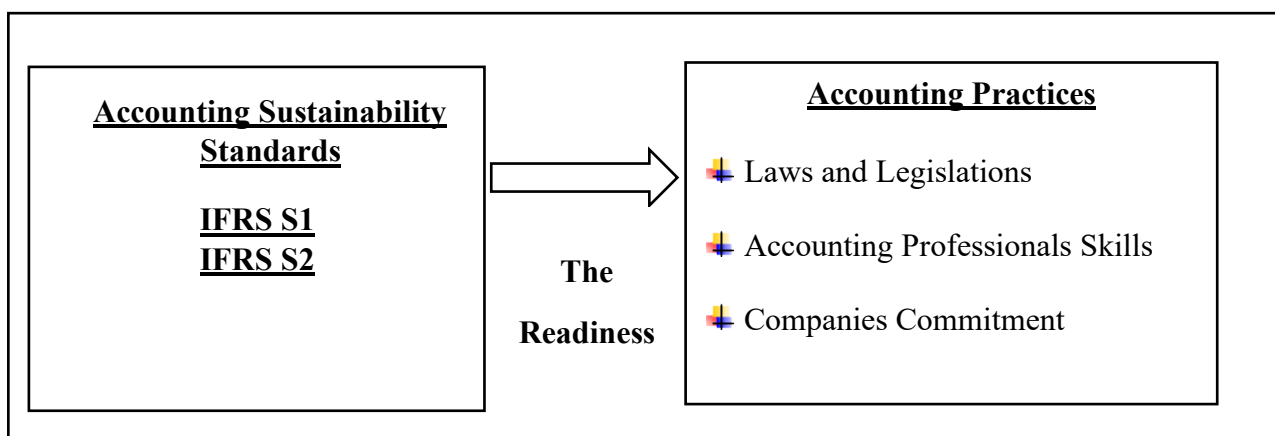
However, the situation didn’t last long after Algerian researchers made numerous recommendations to Algerian authorities, mentioning that many fundamental deficiencies and mistakes were committed when establishing the AFAS such as (Bachonda R, 2019), and (Naceri I, 2021) . Authorities neglected the ideas of their experts, researchers for many years. So, they decided to re-evaluate the AFAS in 2019, which again did not see any developments since. Accordingly, after entering the post-Covid crisis and after being affected by the Russian-Ukrainian war and the food crisis,

Algeria is still far from modern trends related to the field of accounting, despite the fact that its media policies focus on supporting sustainable development in many occasions which made things more questionable. This indicates that either Algeria has no interest in the field of accounting, or that there are more important matters at the moment than sustainable accounting, at least for now. But, Algeria Simultaneously faces many sustainability challenges such as poverty, bio food challenges, climate change and improving rational consumption of energy to avoid gas emissions, waste of materials and improving access to safe drinking water and better water management, not to mention that about 90% of Algerian surface is desert.

3. METHODOLOGY AND DATA COLLECTION

Founded on the theoretical section that dealt with IFRS S1 and IFRS S2 background, we present the study model as follows:

Fig. 1: the Study's Conceptual Model



Source: By the Researchers based on (IFRS, 2024).

To study the readiness of Algerian accounting climate toward “accounting sustainability standards”, we relied on the questionnaire methodology. So, a sample of (98) Certified Accountants were selected randomly to reach the study objectives. Therefore, an electronic questionnaire was submitted to these professionals. After that, statistical tools were used to analyze the recovered data such as Descriptive Statistic Measures, Reliability Tests, and Simple Linear Regression relying on Statistical Package Analysis for Social Sciences program.

4. RESULTS AND DISCUSSION

4.1 Reliability Test

Cronbach Alpha Coefficient is considered as a trustworthy tool that can be employed to measure the reliability of studies like this one. When the Alpha Value is higher than 0.60, it means that the study findings and results are dependable and appropriate for measuring the study's variables; though, Table 01 results are reliable according to (Cronbach, 1951).

Table 1. : Coefficients of the reliability

The Study Axes		Alfa Value
Accounting Sustainability Standards	Clarity	0.781
	Credibility	0.842
	Comparability	0.803
	Expression of Reality	0.712
	Understandability	0.781
Accounting Practices	Laws and Legislations	0.847
	Professionals Skills	0.862
	Companies Commitment	0.907
Total Reliability		0.827

Source: by the researchers based on SPSS results.

4.2 Sustainable Accounting Dimensions

According to the study outputs, the accounting sustainability standards effect was average. Table 2 below shows that the arithmetical average equals (3.11). The highest effect is the expression of reality with a high degree and an arithmetical average that equals (3.87) and a standard deviation of (0.58). The second one is comparability. The third is Clarity with also a medium degree, but Understandability is next but Credibility came last with arithmetical average that equals (2.54) and a standard deviation that equals (0.75).

Table 2. Descriptive Statistics of Sustainability Standards

N°	Dimensions of Accounting Sustainability Standards	Averages	Standard deviations	Observation
01	Clarity	3.1286	0.70301	Medium
02	Credibility	2.5490	0.75998	Medium
03	Comparability	3.2007	0.70669	Medium
04	Expression of Reality	3.8714	0.58026	High
05	Understandability	2.8294	0.67183	Medium
Total		3.1158	0.48135	Medium

Source: By the researchers based SPSS.

4.3 Algerian Accounting Practices Dimensions

Based on the simple of the study outputs using SPSS, Algerian accounting practices effect was average. Likewise, table 3 shows an average that equals (3.11), there is also a difference in Algerian accounting practices constituent. The highest is the existence of laws and legislations with a high degree and average that equals (3.30) and a standard deviation of (0.56). The next one is companies' commitment, but professional's skills came last.

Table 3. Descriptive statistics of dimensions of Algerian Accounting Practices

N°	Algerian Accounting Practices Dimensions	Averages	Standard deviations	Observation
01	Laws and Legislations	3.3000	0.56950	High
02	Professionals Skills	2.7857	0.65188	Medium
03	Companies Commitment	3.1204	0.56695	Medium
Total		3.1158	0.48135	Medium

Source: By the researchers based on SPSS.

4.4 Testing the Hypothesis

4.4.1 The Main Hypothesis

To ensure that main hypothesis is true, firstly, we need to verify if the sustainability accounting standards has a statistical significance ($\alpha < 0.05$) on Algerian accounting environment. If not, we would reject the null hypothesis and accept the alternative one that says (H_1): Algerian accounting environment is ready to comply with sustainability accounting standards IFRS S1 and IFRS S2. Table 04 below shows a regression model of testing the impact of the sustainability accounting standards on

Algerian accounting environment. It clearly shows that the R^2 value coefficient is 0.55 which means that sustainability accounting standards explains 55% of the difference occurring in the variable of Algerian accounting environment. But, since the t value equals 26.671 and significance level is 0.067 which is higher than 0.05). Therefore, we have to reject the alternative hypothesis (H_1) and maintain the null hypothesis that claims (H_0) that states; *Algerian accounting environment is not ready to comply with sustainability accounting standards IFRS S1 and IFRS S2.*

Table 4. Simple regression model results of sustainability accounting standards on Algerian accounting environment

Independent variable	beta value	t value	Sig.
IFRS S1 & S2	0.745	10.934	<u>0.057*</u>
R^2 value	0.55		

Source: by the researchers based on SPSS results (*sig $\alpha < 0.05$).

4.4.2 First Minor Hypothesis

Table 5 below shows a regression model of testing the impact of sustainability accounting standards on Algerian legal system. It clearly point out that the value of the coefficient of R^2 equals 0.62 which indicated that sustainability accounting standards explains 62% of the difference occurring in Algerian legal system. According to this model and since the value t equals 12.703 and significance level equals 0.000 which is less than 0.05, we reject the null hypothesis (H_{10}) and accept the alternative one (H_{11}) which means that The Algerian legal system is favorable to the application of IFRS S1 and IFRS S2.

Table 5. Simple regression model of sustainability accounting standards on Algerian legal system

Independent variable	(beta) value	(t) value	Sig.
IFRS S1 & S2	0.792	12.703	0.000
R^2 value	0.627		

Source: by the researchers based on SPSS (*sig $\alpha < 0.05$).

4.4.2 Second Minor Hypothesis

Table 06 below reveals a regression model of sustainability accounting standards impact on the accounting professional's experience which clearly indicates that the value of the determination R^2 equals 0.70. It means that sustainability accounting standards explains about 70% of the difference occurring on accounting professional's experience. But since the value t is estimated in 20.812, and significance level equals 0.000 (less than 0.05), the null hypothesis (H_{20}) is rejected and the alternative hypothesis is accepted which means that Accounting professionals have an extensive experience that helps them apply these standards smoothly.

Table 6. Regression model of sustainability accounting standards impact on accounting professional's experience.

Independent variable	beta value	t value	Sig.
IFRS S1 & S2	0.841	15.201	0.000
R^2 value	0.706		

Source: by the researchers based on SPSS (*sig $\alpha < 0.05$).

4.4.2 Third Minor Hypothesis

As for the third minor hypothesis, Table 7 shows a regression model of testing the impact of sustainability accounting standards on Algerian companies' commitment. It shows that the R^2 value is 0.54. It means that the accounting standards explains 54% of the difference occurring on Algerian companies' commitment. However, the t value equals 20.812, and the significance level equals 0.000 which is higher than 0.05. So, we reject the alternative hypothesis and accept the null hypothesis (H_{30}) that states according to the sample of the study; *Algerian companies aren't ready to comply with the disclosure rules required by these standards.*

Table 7. Regression model of sustainability accounting standards impact on Algerian companies' commitment.

Independent variable	Beta value	t value	Sig.
IFRS S1 & S2	0.831	11.053	0.067
R² value	0.547		

Source: By the researchers based on SPSS results (*sig $\alpha < 0.05$).

4. CONCLUSION

As a matter of fact, sustainability is crucial subject in modern world's challenges because sustainability can offer a comprehensive strategy for tackling the interrelated problems of social injustice, economic instability, and environmental deterioration. Adopting a sustainable mindset can guarantee the welfare of present era and future generations.

Reducing climate change, protecting our ecosystems, and preserving biodiversity must all come together in order to preserve the balance of our planet earth. It comes to light now that sustainable practices can lower the danger of economic instability, innovation, and long-term prosperity. Societies now can generate a healthy balance between human activities and the natural environment by place in order sustainable practices resulting the creation of a resilient and prosperous communities for many years to come.

The power of decision makers, several international organizations, agencies, and governments infiltrated in this debate so they can do everything in their power to find a solution for climate change. These organizations such as IFRS foundation or ISSB have the best qualities and professionals in the world as they can propose future solutions for the global economy. But the only problem is when governments have their own agendas and plans than listening to these challenges in front.

Algeria on the other half, is still suffering from long listed environmental, economic, and social problems, making sustainability a major task. Unsustainable use

of natural resources, environmental contamination, inequality and poverty are made things worse.

Thus, this study revealed many results which can be presented as the following:

- The accounting environment in Algeria isn't ready for the implement of IFRS S1 and IFRS S2.
- Algerian companies aren't ready to comply with the disclosure rules required by IFRS S1 and IFRS S2.
- Accounting Professionals have an extensive experience that helps them apply these standards smoothly according to sample of the study but there are some questions about training to work with IFRS S1 & IFRS S2 principles.
- Authorities still facing many challenges related to modernizing accounting practices in the country.
- A road map is importantly needed to promote both accounting field and profession in Algeria.

On the other hand, this present paper recommends:

- Establishing a national party responsible for following the updates of accounting standards and similar subjects like sustainability challenges on accounting.
- Immediately launching Professional Educational Programs with the collaboration of our universities about accounting sustainability standards.
- Looking for the necessary conditions in order to prepare the accounting environment to respond positively to IFRS S1 and IFRS S2 impalement.

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