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A Suggested Accounting Model To Treat The Effects Of Natural Disasters On Saudi Companies

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Abstract: The research aimed to identify the most important accounting treatments for business organizations for natural disasters in the Kingdom of Saudi Arabia. The questionnaire was used as a method for collecting data from companies and business organizations in the Kingdom of Saudi Arabia. The research came out with a set of results, perhaps the most important of which is that companies and business organizations in the Kingdom of Saudi Arabia have a framework to help identify the effects caused by natural disasters, and there are systems and processes within the framework that are sufficiently documented. In addition, these organizations have developed the minimum information required for working papers to review the impacts of natural disasters. There is also a weak trend towards the impact of natural disasters on the accounting treatments of the receivables and loans item. While business organizations in the Kingdom have an accounting system that takes into account property, machinery, equipment and intangible assets. The researchers recommended the need to develop a disaster recovery plan that includes a framework for preparing financial reports and accounting treatments for natural disasters.

keywords: Natural disasters - Accounting treatments - Accounting systems - Inventory and inventory - Receivables and loans - Property, plant and equipment - Intangible assets - Insurance contracts and refunds - Saudi companies.

Introduction

Accounting treatments for the effects of natural disasters include identifying the impact of the disaster on the business, and disclosing the impact on the business. These elements are critical to properly calculating losses and ensuring that stakeholders are aware of the financial impact of the disaster on business results. In addition to working with accountants and financial professionals to properly record losses and their impact on business (Khurana,2022). Appropriate accounting treatments for the effects of natural disasters can help companies recover from losses resulting from such events, and ensure that stakeholders are informed of the financial impact of the disaster on the business results of the organization (Cremen,2022). The company may need to disclose these contingencies in the notes to the financial statements. If the company has insurance coverage for losses resulting from natural disasters, accounting treatments for the effects of natural disasters require careful consideration of the specific circumstances and relevant accounting standards (Nasser2012). It is important for companies to work closely with accountants and auditors to ensure that financial statements accurately reflect the impact of a natural disaster on a company's financial position and performance (Meekness,2011).

The first step in accounting for the effects of a natural disaster is to recognize the impact of the disaster on the business. This includes assessing the extent of damage to the business, including physical damage to assets, once the impact of the natural disaster has been identified, and then recording the loss in the financial statements (Laith,2018). The loss resulting from the natural disaster must also be recorded in the financial statements. In addition to evaluating insurance coverage, insurance proceeds must also be recorded separately from disaster-related losses in the financial statements (Safwan,2017). With the need to disclose the impact on the business. The impact of a natural disaster on the business must be disclosed in the financial statements. and any other relevant information that may be useful to stakeholders to understand the impact on the business (Hamdaw,2016).The accounting treatment of the effects of natural disasters in the Kingdom of Saudi Arabia requires careful consideration of the specific circumstances and relevant accounting standards, including International Accounting Standards (IAS) and Saudi Accounting Standards (SAAS) (El Deeb,2020). Companies must also work closely with accountants and auditors to ensure that financial statements accurately reflect the impact of a natural disaster on the company's financial position and performance in accordance with applicable accounting standards. Al-Hazmi (2018) explore the accounting treatment of the effects of natural disasters on the affected Saudi institutions. It was concluded that the accounting treatment for natural disasters in the Kingdom of Saudi Arabia includes the recognition of impairment losses, the recognition of provisions, the disclosure of contingency, and the recognition of insurance recovery.

The study concluded that companies in Saudi Arabia need to work closely with accountants and auditors to ensure that financial statements accurately reflect the impact of natural disasters on their financial position and performance. While Sargiacomo (2018) aimed to review the historical development of accounting practices related to natural disasters. The results of the study indicate that accounting practices related to natural disasters have evolved over time, from a focus on insurance and compensation to a more comprehensive approach that includes impairment losses, provisions and contingencies. Studying the role of accounting in disaster response and recovery, analyzing the impact of natural disasters on the quality of financial reports, and exploring the effectiveness of various accounting treatments for natural disasters.

Sciulli, N. (2018) investigated the effects of accountability on flood relief and recovery efforts from the perspective of local governments. It concluded that accountability is a critical component of flood relief and recovery efforts, and that local governments have a key role in ensuring accountability. The study concluded that effective accountability mechanisms are essential to ensure the success of flood relief and recovery efforts, and that local governments should prioritize accountability in disaster response and recovery planning. As part of the literature review, Fahlevi (2018) reviewed the literature on the role of accountability in disaster recovery and relief efforts. It concludes that accounting is an essential tool to support effective disaster response and recovery efforts, and that accounting professionals must play an active role in disaster recovery and relief efforts to ensure effective financial management and accountability. Lai, A., (2014) investigated the social implications of accountability in flood recovery efforts. He found that accountability plays an important role in shaping social interactions among stakeholders and facilitating collaboration in flood recovery efforts.

Fowles (2019) examined the impact of earthquake risk on municipal bond pricing in

California. The study concluded that accounting for natural disasters is essential in making financial decisions, and that investors and issuers of municipal bonds in earthquake-prone areas should take into account the potential impact of natural disasters on bond pricing. Our study aims to identify the most important accounting treatments for business organizations for natural disasters in the Kingdom of Saudi Arabia, as well as to determine the impact of these natural disasters on each of the accounting systems, inventory and inventory items, receivables and loans, and items of property, machinery and equipment, intangible assets, insurance contracts and refunds in the Kingdom of Saudi Arabia The importance of the research stems from the importance of accounting treatments for the effects of natural disasters on business institutions, especially in the Kingdom of Saudi Arabia, where natural disasters can have a significant impact on business, including damage to assets, inventory and revenues, and can lead to a group of financial losses. Accounting treatments for the effects of natural disasters provide a structured approach for companies to record and report losses incurred as a result of these events. Accounting treatments for the effects of natural disasters on business organizations are critical to ensuring that losses are recorded accurately, comply with accounting principles and standards, facilitate the claims process with insurance providers, and provide Transparency and accountability to stakeholders.

The role of accounting in forecasting and preventive management of natural disasters

Disaster accounting helps management make important decisions, being necessary and making decision-making possible (Walid,2016). The role of accounting in the organization's planning and prevention process against natural disasters is to ensure reliable and appropriate information about natural disasters, and about the amounts of expenditures and their efficiency in managing disasters and failures (Al-Hazmi,2018). A corporate management system for disasters and emergencies can be successfully developed on the basis of the accounting system and its structured information on expenses incurred and losses incurred due to disasters (Almodayan,2018). A natural disaster management system consists of the initial localization and identification of potential risks from natural disasters. Actions are planned to mitigate the consequences of natural disasters (Carleton,2022).

Each DMP indicator is given a cost expression to allow possible expenditures to be captured in budget estimates. The management of the enterprise must assess the impact of natural disasters on potential damage (Fahlevi,2018). The most important goals of accounting treatments for the impacts of natural disasters on business enterprises is to prepare accurate financial reports, and accounting treatments for natural disasters must also comply with relevant accounting standards and regulations (Fowles,2019). These treatments also aim to improve disaster preparedness and risk management, as accounting can help Businesses also report on the financial impact of a natural disaster on improving disaster preparedness and risk management practices (Gaddis,2007). Companies can develop strategies to mitigate future losses and improve their overall resilience to natural disasters (Pludow,2023). Effective accounting treatments for natural disasters can also boost stakeholder trust and confidence in a business. Companies can demonstrate their commitment to accountability and responsible management practices (Lai,2014).

The proposed framework for accounting treatments resulting from natural disasters in business organizations in the Kingdom of Saudi Arabia

Companies may need to assess whether the depreciation of assets occurred as a result of a natural disaster. When assessing impairment, the company must distinguish between assets that have been damaged and those whose value is affected by changes in expected cash flows as a result of the disaster (Matilal,2009). Assets that have been destroyed must be written off to an account. Assets that are affected by changes in cash flows (for example, reduced production due to reduced demand) may need to be tested for impairment (Sargiacomo,2018). The direct or indirect effects of a natural disaster may also be indicators of asset weakness. A manufacturing facility damaged by a hurricane is an example of a direct impact of a natural disaster indicating that an asset may be vulnerable A jump in operating costs at a facility outside the affected area caused by replacing a resource in the area with a more expensive resource is an example of an indirect impact indicating that an asset Its value may be impaired, if the company determines that the direct or indirect effects of a natural disaster are indicators of weakness that requires it to perform impairment tests, the company needs to ensure that it performs those tests in the appropriate order of intangible assets - goodwill and others (Sciulli,2018).

Goodwill is finally tested for impairment, and these tests are performed at the reporting unit level. If an indication of impairment exists, an impairment analysis is required. Indicators of weakness due to a natural disaster may include a significant decline in the market price of a long-lived asset, or a significant adverse change in the extent or manner in which the long-lived asset is used or in its physical condition (Yamaguchi,2016). Since revenue can only be recognized when collection of consideration is probable, management must assess the appropriateness of recognizing revenue and bad debt expense in the same period from the same customer, and the effect of granting extended payment terms (Al-Hamoud, 2007) (David, 2006). Companies may also need to request additional financing or modify the terms of existing credit agreements due to loss of revenue, uninsured losses, or losses for which insurance payments have not yet been received. Due to business disruption due to natural disasters and their aftermath, the company may experience a decrease in its ability to borrow but not have a corresponding decrease in its expenses (Abu-Musa, 2001)(Yasuhiro,2010). In this case, the company may seek to modify the terms of its financing arrangement with the lender to increase its ability to borrow temporarily or permanently (FOWLES, 2019). Such a modification should be analyzed to determine whether it should be counted as a modification of the existing borrowing arrangement or the termination of the current arrangement and the completion of a new arrangement (Matilal, 2009) .Impairment of property, plant and equipment IAS 36 Impairment of assets includes physical damage to an asset as an indication of impairment.

Therefore, if there is physical damage to the asset as a result of a natural disaster, impairment testing is required and the assessment of the recoverable amount of the asset will have to be carefully considered. Treatment of compensation from third parties for items of impaired property is also covered by Standard No. (26) of IAS 116/NZ IAS 16 Property, Plant and Equipment, which requires them to be included in profit or loss when compensation becomes due. Goodwill and intangible assets with an indefinite life require annual impairment testing regardless of impairment indicators, but for any other intangible assets, IAS 36 includes as evidence an indication of impairment that the economic performance of the asset is, or will be, worse than expected . In determining the recoverable amount, estimates of future cash flows must reflect the impact on revenue and any production limitations due to damaged property, plant and equipment. Customers may also have been affected by the natural disaster and therefore any receivable balances should be considered for impairment as per the impairment requirements in IAS 9 Financial Instruments. Section 5.5 requires an assessment of whether the credit risk of a financial instrument has increased significantly since initial recognition, and if so, an assessment of the expected credit losses for that instrument by identifying any change in default risk over the life of the instrument (Yasuhiro Shimizu, 2010).

In making this assessment, it is important to consider whether other financing arrangements can be arranged to pay off the debt or if the impact of the natural disaster is so severe that the debt cannot be repaid. Any investments in entities affected by a natural disaster must be assessed to determine its impact on their valuation (Sciulli, 2018). This is particularly important for unlisted and equity investments: Paragraph 9 of AASB 102 / NZ IAS 2 requires inventory to be measured at cost and net realizable value, whichever is the lower, and Paragraph 28 states that when damaged, cost may not be recoverable. In some cases, the entire inventory must be written off, or it may be sold at a discount (Wadaa, 2011). A provision for costs after a natural disaster can only be recognized when all three conditions are met (existence of a present obligation; it is probable that an outflow of resources will be required to settle the obligation; it can be estimated reliably) (Gaddis, 2007). Insurance claims for damage and loss due to natural disaster are accounted for in respect of property, plant and equipment, which requires recognition as a separate asset only when it is virtually certain that payment will be received. Given the uncertainty in determining what can be claimed in such events, evidence is usually required from the insurance company as to what the claim involves before compensation is recognized. Note that any insurance receivables are recognized as a separate asset (Al-Hamoud, 2007) (FOWLES, 2019). Refunds are counted in the form of government grants, which require recognition only when it is almost certain that payment will be received. Disclosure of government assistance should also be considered if the entity is "for-profit". Revenue from non-exchange transactions is relevant (Sciulli, 2018). Leases and supply contracts must be examined to determine whether there is a "force majeure" clause that would exempt the entity from onerous contracts. However, in the absence of this clause, the entity will need to determine whether the expected economic benefits are less than the inevitable costs of the contract. If this is the case, onerous commitment to communication may arise (Yasuhiro Shimizu, 2010).

As a result of impairment expenses, non-payment or a decrease in the book value of assets as a result of a natural disaster may cause the entity to fail to fulfill its debt covenants. Therefore the entity will either need to renegotiate the terms prior to the reporting date or it will likely need to classify the debt as current (David, 2006). The timing of a natural disaster, compared to the balance sheet date of the entity whose financial statements are being prepared, can present some specific problems. A reference must be made to the requirements of AASB 110/NZ IAS 10 Events after the reporting period with respect to their treatment as a modifiable or non-modifiable event. Modifiable events are those that provide evidence of conditions that existed at the end of the reporting period, and therefore the standard requires recognition of their effect in the financial statements by adjusting the relevant items in the financial records. Non-modifying events are those events that are indicative of conditions that arose after the reporting period and therefore should not be modified - but disclosure may be required (Sargiacomo, 2018). If a natural disaster occurs after the reporting period but before the financial statements are approved for issuance (Wada'a, 2011), this would be a non-adjustable event because it does not represent a condition that was present at the end of the reporting period (Meresa,2022). If the impact is substantial, this requires disclosure in the financial statements of the nature of the event and an estimate of the financial impact (Abu Mousa, 2004), or a statement that such an estimate cannot be made.

When revealing the nature and effect, care must be taken when stating insurance coverage in relation to a loss, especially if the extent of coverage has not been confirmed by the insurance company in writing after a claim has been submitted. If the impact of a natural disaster is so severe that the entity is no longer considered a going concern, then paragraphs 14 to 16 require the financial statements to be prepared on a discontinued basis, with certain required disclosures (Fahlevi, 2018). If a natural disaster occurs and there is uncertainty about the potential impact on the company, the company may need to disclose these contingent possibilities in the notes to the financial statements in accordance with

IAS 37 or IAS 32. If the company has insurance coverage for losses due to natural disasters, Insurance amounts should be recognized when they are almost certain (David, 2006) (FOWLES, 2019). This is usually done as a separate item on the income statement to distinguish it from related expenses in accordance with IAS 8, “Accounting Policies, Changes in Accounting Estimates and Errors” or SAAS 1, “Presentation of Financial Statements” (Sciulli, 2018). In general, the accounting treatment of the effects of natural disasters in the Kingdom of Saudi Arabia requires careful consideration of the specific circumstances and relevant accounting standards. It is important for companies to work closely with accountants and auditors to ensure that financial statements accurately reflect the impact of a natural disaster on the company's financial position and performance in accordance with applicable accounting standards (Abu-Musa, 2001) (Yasuhiro Shimizu, 2010).

Analysis and discussion

The study relies on the questionnaire as a tool for data collection. The questionnaire consists of two parts. The first part reflects the demographic variables of the study sample, which includes variables (sex, age, and employer). While the second part includes the basic variables of the study, which reflect five axes, each of which reflects the different hypotheses of the research, which determine the impact of natural disasters on each of the accounting systems, inventory items, inventory, receivables and loans, and items of property, machinery and equipment, intangible assets, insurance contracts and refunds in the Kingdom of Saudi Arabia Saudi Arabia. A total of 212 questionnaires were distributed and 14 questionnaires were excluded as a result of the non-significance of their results. 198 individuals from the sample were subjected to analysis, and the SPSS statistical analysis program was relied upon. Table (1) shows the demographic characteristics of the study sample.

Table (1): shows the frequency and relative distribution of the sample components according to the variables of sex and age group

	gender	Male		Female		Total
		Count	**%**	**Count**	**%**	
Age Group	less than 30	21	14.58%	12	22.22%	33
	31-40	63	43.75%	24	44.44%	87
	41-50	36	25.00%	9	16.67%	45
	51-60	18	12.50%	6	11.11%	24
	اكثر من 60	6	4.17%	3	5.56%	9
	Total	**144**	100.00%	**54**	100.00%	**198**

Table (2) shows that the value of Cronbach's alpha stability coefficient is very high for the total questionnaire and the axes. Which reflects the significance of the results that can be reached by analyzing the paragraphs of the questionnaire, and that the study tool is characterized by high stability. These results also indicate that the study tool has great stability, which makes us fully confident in the validity of the questionnaire and its validity for analyzing and interpreting the results.

Table (2) shows the values of the reliability and validity coefficients for the questionnaire axes

Item		Total Questionnaire	First Axis	Second Axis	Third Axis	Fourth Axis	Fifth Axis
N of Items		26	6	6	5	5	4
reliability	Cronbach's Alpha	0.865	0.722	0.84	0.769	0.861	0.766
	validity	0.930	0.850	0.917	0.877	0.928	0.875

Table (3) shows that the study sample had a tendency that the company has a framework to help identify the effects of natural disasters by 78%, and there are systems of operations within the framework that are sufficiently documented by 87.4%. The study sample also agreed that there is evidence of the practice of the company's financial management at a rate of 91.5%. The study sample also indicated that the company had developed the minimum information required for working papers to review the effects of natural disasters, at a rate of 84.8%. With regard to the existence of specific accounting procedures for evaluating the impacts on the company as a result of a natural disaster, it amounted to 83.6%. While the percentage of the Audit and Risk Committee reviewing and examining the work framework as a result of natural disasters reached 81.2%. It is also clear that the value of the coefficient of the independent variables represented in the paragraphs of the axis, which indicates that there is a significant impact of natural disasters on the accounting systems, shows that the value of beta is positive, which indicates the existence of a direct relationship. Through the values in the table, it is clear that the calculated t-value for the two variables is greater than its tabular value at a significant level of 5%, and the P-value was less than 5% for each of the different items.

Table (3): The relative importance of the paragraphs of the first axis, the impact of accounting systems

Questions	Weighted Average	%Ratio	Standard Deviation	Beta	T-Test	P-Value (Prob)	Direction
The company has a framework to help identify impacts from natural disasters.	3.900	78.00%	1.430	0.783	2.847	0.022	agree
Systems The processes within the framework are adequately documented	4.370	87.40%	1.150	0.924	2.426	0.020	Strongly Agree
There is a guide to the practice of financial management of the company.	4.590	91.80%	1.550	0.901	2.733	0.023	Strongly Agree
The company has developed the minimum information required for working papers to review the impacts of natural disasters	4.240	84.80%	1.480	0.823	1.893	0.015	Strongly Agree
There are specific accounting procedures to assess the	4.180	83.60%	1.270	0.865	3.119	0.016	agree

impacts on the company as a result of a natural disaster.							
The Audit and Risk Committee reviews and examines the framework as a result of natural disasters.	4.060	81.20%	0.690	0.681	2.613	0.011	agree

Table (4) shows that the study sample had a tendency that business organizations in the Kingdom have an accounting system that takes into account the expected effects of natural disasters on the inventory. The Company is writing off inventory that is no longer salable or of distributable quality at 74%. The percentage of the company identifying any inventory that was partially damaged but still salable, or distributed at a discount, was 80%. There is a 66% that inventory requires that inventory held for distribution be measured at cost, adjusting where appropriate for any potential loss of service. In addition, inventory requires held-for-sale to be measured at the lower of cost or net realizable value, with any reduction recognized as an expense of 84%. There is an 80% chance that the cost of inventory may not be recoverable if that inventory is damaged as a result of a natural disaster. The value of the coefficient of the independent variables represented in the paragraphs of the axis, which indicates that there is a significant impact of natural disasters on inventory and inventory items, shows that the value of beta is positive.

Table (4): The relative importance of the paragraphs of the second axis, the expected effects of natural disasters on the inventory item

Questions	Weighted Average	Ratio%	Standard Deviation	Beta	T-Test	P-Value (Prob)	Direction
The company determines the damage to the stock as a result of natural disasters	4.000	80.00%	1.290	0.901	1.809	0.022	Agree
The accounting treatment entails writing off inventory that is no longer salable or of distributable quality.	3.700	74.00%	1.620	0.709	2.757	0.012	Agree
The company identifies any inventory that is partially damaged but is still salable, or has been distributed at a discount	4.000	80.00%	1.800	0.916	2.626	0.018	Agree
Inventory requires that inventory held for distribution be measured at cost, adjusted where appropriate for any potential loss of service.	3.300	66.00%	1.200	0.731	2.594	0.022	Agree

Inventories held for sale are required to be measured at the lower of cost or net realizable value, with any write-down recognized as an expense.	4.200	84.00%	2.040	0.824	2.595	0.019	Strongly Agree
That the cost of inventory may not be recoverable if that inventory is damaged as a result of a natural disaster.	4.000	80.00%	1.700	0.900	2.181	0.014	Agree

Table (5) shows that there is an impact of natural disasters on the accounting treatments for receivables and loans, where we find that the value of the weighted average for the paragraph the company evaluates whether any of its main customers or customer bases were directly affected by a natural disaster reached 3.1. While the weighted average value of the second paragraph, the agency debtors may not be able to pay the amounts due when due and therefore the terms may need to be renegotiated 2.8. As for the paragraph "Natural disasters lead to an increase in the evaluation of expected credit losses for those trade receivables," the value of the weighted average for them reached 3. While the value of the weighted average for the paragraph "the company has receivables or loan assets secured by assets damaged during the natural disaster" is 3.1, while the paragraph may be credit losses the expected loss (especially loss in case of default) increased as its weighted average value reached 3.2. They are low values, all less than 80%. The value of the coefficient of the independent variables represented in the paragraphs of the axis, which indicates that there is a significant impact of natural disasters on the accounting treatments of receivables and loans, shows that the value of beta is positive, which indicates the existence of a direct but not significant relationship.

Table (5): The relative importance of the paragraphs of the third axis, receivables and loans

Questions	Weighted Average	%Ratio	Standard Deviation	Beta	T-Test	P-Value (Prob)	Direction
The Company is evaluating whether any of its major customers or customer bases have been directly affected by a natural disaster.	3.100	62.00%	2.060	0.878	3.018	0.129	Moderate
Agency debtors may not be able to pay the amounts due when due and therefore the terms may need to be renegotiated.	2.800	56.00%	1.470	0.758	1.767	0.131	Moderate
Natural disasters increase the ECL assessment of those trade receivables.	3.000	60.00%	2.000	0.964	2.946	0.101	Moderate

The company has receivables or loan assets that are secured by assets damaged during a natural disaster	3.100	62.00%	1.280	0.854	3.033	0.115	Moderate
Expected credit losses (particularly loss in default) may be increased	3.200	64.00%	1.800	0.903	2.876	0.225	Moderate

Table (6) shows that the study sample had a tendency that business organizations in the Kingdom have an accounting system that takes into account property, machinery, equipment and intangible assets, as the sample responses came with high weighted averages, as the company identifies any assets that were damaged as a result of the natural disaster with an average of 3.9. If the assets are no longer usable, they will need to be reduced to their recoverable amount or derecognized at a weighted average of 3.3. Whereas the company has identified any assets that are only partially damaged but can be repaired or can continue for use in the future with an average of 4. Recoverable value, impairment policies and non-current asset policies are also needed to be assessed with an average of 4.1. Whereas if part of the asset is damaged, the company may need to consider recognition of the damaged part in the carrying amount of the asset if it can be practicable to separate it at a mean of 3.3. The value of the coefficient of the independent variables represented in the paragraphs of the axis, which indicates that there is a significant impact of natural disasters on the items of property, machinery and equipment and intangible assets, shows that the value of beta is positive.

Table (6): The relative importance of the paragraphs of the fourth axis, property, machinery, equipment and intangible assets

Questions	**Weighted Average**	**Ratio%**	**Standard Deviation**	**Beta**	**T-Test**	**P-Value (Prob)**	**Direction**
The company identifies any assets that were damaged as a result of the natural disaster	3.9	78.00%	1.49	0.864	2.838	0.012	Agree
If the assets are no longer usable, they will need to be reduced to the recoverable amount or derecognized	3.3	66.00%	2.2	0.986	1.926	0.015	Agree
The company has identified any assets that are only partially damaged but that can be repaired or can continue to be used in the future	4	80.00%	2.15	0.639	1.831	0.025	Agree
Recoverable value assessment, impairment policies and non-current asset policies are needed	4.1	82.00%	1.58	0.693	2.793	0.012	Agree

If part of the asset is damaged, the company may need to consider derecognizing the damaged part in the carrying amount of the asset if it is practicable to separate it.	3.3	66.00%	1.63	1.033	2.727	0.014	Moderate

Table (7) shows that the study sample had a tendency to agree with the expected effects of natural disasters on the item of insurance contracts and refunds in business organizations in the Kingdom of Saudi Arabia. The company's weighted average expectation of any insurance payouts as a result of a natural disaster was 4.1. While the value of the weighted average for its recognition as a separate asset (insurance receivables) and revenue (revenue) was 4.15. As for the weighted average value of recognizing compensation funds received as a result of damage or loss of an asset or assets as income when they are “receivable”, it was 3.3. The weighted average recognition of costs to be incurred when they are almost certain to be received was 4.1. The value of the coefficient of the independent variables represented in the paragraphs of the axis, which indicates that there is a significant impact of natural disasters on insurance contracts and refunds, shows that the value of beta is positive, which indicates the existence of a direct relationship. Thus, business organizations in the Kingdom of Saudi Arabia tend to have accounting systems that take into account accounting treatments for insurance contracts and refunds. Through the values in the table, it is clear that the calculated t-value for the two variables is greater than its tabular value at a significant level of 5%, and the P-value was less than 5% for each of the different items.

Table (7): The relative importance of the paragraphs of the fifth axis, insurance contracts and refunds

Questions	Weighted Average	Ratio%	Standard Deviation	Beta	T-Test	P-Value (Prob)	Direction
The company anticipates any insurance payouts as a result of a natural disaster	4.100	82.00%	1.850	0.956	1.961	0.010	4.100
They are recognized as a separate asset (insurance receivables) and revenue (revenue).	4.150	83.00%	2.060	1.084	2.034	0.020	4.150
Compensation money received as a result of damage or loss of asset(s) is recognized as revenue when it is 'receivable'.	3.300	66.00%	2.140	0.881	3.071	0.023	3.300
Compensation for costs to be incurred is recognized when it is almost certain that they will be received	4.100	82.00%	2.030	0.751	2.580	0.017	4.100

Table (8) shows that there are no significant differences between each of the respondents, according to gender, for all the paragraphs of the first and second axis, as they were all higher than the value of the significance level used 5%, while there are differences between both males and females for the items of the third axis. Referring to the average values of the third axis, we find that the sample average for females is higher than for males, reaching 1.842, while it reached 1.222 for males.

Table (8): T-test to test the significance of differences according to gender

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
The expected effects of natural disasters on the item of property, machinery, equipment and intangible assets	Equal variances assumed	21.728	.000	-2.495-	196	.016	-.3958-	.1592	-.7112-	-.0819-
	Equal variances not assumed			-2.240-	52.747	.029	-.3958-	.1785	-.7557-	-.0371-
The expected effects of natural disasters on the insurance contracts and refunds	Equal variances assumed	.482	.282	-.392-	196	.862	-.2175-	.2489	-.4126-	.3782
	Equal variances not assumed			-.342-	64.469	.632	-.0262-	.2589	-.4261-	.3659
The impact of natural disasters on accounting systems	Equal variances assumed	5.214	.019	-1.132-	196	.254	-.0592-	.0518	-.1618-	.0418
	Equal variances not assumed			-1.102-	57.851	.298	-.0592-	.0566	-.1731-	.0562

The expected effects of natural disasters on the inventory item	Equal variances assumed	.201	.638	-.115-	196	.899	-.0159-	.1489	-.3131-	.2788
	Equal variances not assumed			-.113-	78.757	.895	-.0159-	.1478	-.3118-	.2789

Table (9) shows the results of the ANOVA test to find the difference between the sample responses according to age. Through the following table and depending on the value of the Sig test statistic, we find that there are no significant differences between each of the respondents in each of the different age groups, as they all came higher than the value of the level of significance used 5%, which confirms that there are no significant differences in the responses according to the age variable.

Table (9): T-test to test the significance of differences according to age

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
The expected effects of natural disasters on the item of property, machinery, equipment and intangible assets	Between Groups	6.482	8	1.080	1.798	.124
	Within Groups	57.096	188	.601		
	Total	63.578	196			
The expected effects of natural disasters on the insurance contracts and refunds	Between Groups	5.160	8	.793	2.983	.168
	Within Groups	34.860	188	.414		
	Total	76.020	196			
The impact of natural disasters on accounting systems	Between Groups	.727	8	.121	1.987	.081
	Within Groups	5.793	188	.061		
	Total	6.520	196			
The expected effects of natural disasters on the inventory item	Between Groups	4.160	8	.693	1.348	.314
	Within Groups	48.860	188	.514		
	Total	53.020	196			

Table (10) shows the results of the ANOVA test to find the difference between the sample responses according to the educational qualification, depending on the value of the Sig test statistic. The value of the morale level used is 5%, which confirms that there are no significant differences in the responses according to the employer variable for the first and second axis.

While it was found that there is a difference between the responses of the sample according to the point of work towards the third axis. Where we find that the value of the Sig test statistic is less than the 5% level of significance, which is equal to 0.009.

Table (10): ANOVA test to test the significance of differences according to the employer

		Sum of Squares	df	Mean Square	F	Sig.
The expected effects of natural disasters on the item of property, machinery, equipment and intangible assets	Between Groups	8.158	8	2.039	3.569	.009
	Within Groups	55.421	188	.571		
	Total	63.578	196			
The impact of natural disasters on accounting systems	Between Groups	.721	8	.180	3.017	.022
	Within Groups	5.798	188	.060		
	Total	6.520	196			
The expected effects of natural disasters on the inventory item	Between Groups	4.631	8	1.158	2.321	.062
	Within Groups	48.389	188	.499		
	Total	53.020	196			

Conclusion

Accounting treatments have an important role in dealing with the effects of natural disasters, and ensuring that the financial statements accurately reflect their effects. The objectives of accounting treatments include identifying and measuring the costs and losses resulting from natural disasters, determining the appropriate accounting treatment for those costs and losses, and providing relevant information to stakeholders. Recent studies have highlighted the importance of timely and accurate reporting, the use of insurance and risk management strategies, and the need for companies to incorporate natural disaster risks into their financial planning and decision-making. Effective accounting treatments can help companies recover from the effects of natural disasters and continue to operate in a sustainable manner. It was concluded that companies and business organizations in the Kingdom of Saudi Arabia have a framework to help identify the effects of natural disasters, and there are systems of operations within the framework that are sufficiently documented. She also developed the minimum information required for working papers to review the impacts of natural disasters. And that the business organizations in the Kingdom have an accounting system that takes into account the expected effects of natural disasters on the inventory. There is a weak trend towards the impact of natural disasters on the accounting treatments of the item receivables and loans. Accounting treatments for the effects of natural disasters must be consistent with basic accounting principles and must provide relevant and reliable information to users of financial statements. The use of fair value accounting can provide more relevant information to users of financial statements about the impact of natural disasters on a business, but it can also lead to volatility and subjectivity in financial statements. Disclosure of the impact of natural disasters on businesses is important for users of financial statements to assess the potential risks and uncertainties associated with this business. We recommend developing a disaster recovery plan that includes a framework for financial reporting and accounting treatments for natural disasters. and implementing risk management strategies to mitigate the impact of natural disasters on the financial statements. Ensure that the financial statements provide adequate disclosure of the impact of natural disasters on business operations, financial position and cash flows. And conducting periodic reviews of accounting transactions for the effects of natural disasters to ensure that they comply with accounting standards and regulations.

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