
The Impact of External Audit Quality on Mitigating Fair Value Measurement Risks of Assets

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Abstract:

This study investigates the impact of external audit quality procedures on mitigating inherent risks associated with Fair Value measurement, specifically regarding Level 3 assets under IFRS 13. Adopting a descriptive-analytical approach, the research utilized a multiple regression model to test compliance with ISA 540, reliance on experts, and professional skepticism.

The empirical results revealed a significant contrast. Statistical analysis showed no significance for "procedural compliance or reliance on experts in improving quality, indicating the insufficiency of a Checklist Approach. Conversely, Professional Skepticism proved to be the decisive factor in mitigating measurement risks. The study concludes that auditing complex estimates requires shifting from superficial documentary compliance to activating a critical mindset to effectively challenge management assumptions.

Keywords: Fair Value Measurement; Professional Skepticism; ISA 540 (Revised); Audit Quality; Estimation Uncertainty.

Jel Classification Codes : M42, M41.

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1. Introduction :

The global accounting landscape has witnessed a fundamental shift in measurement bases, characterized by a gradual departure from the historical cost model—despite its reliability—in favor of adopting the "**Fair Value Accounting**" model, deemed more capable of providing relevant information for decision-making processes.

This regulatory trajectory was reinforced by the adoption of International Financial Reporting Standard (**IFRS 13**), which established a clear hierarchical framework for asset classification and measurement.

Notwithstanding the informational value added by this trend, it has presented the auditing profession with complex challenges, particularly acute when dealing with "**Level 3**" assets. The valuation of this asset class relies on "**Unobservable Inputs**" and intricate financial models that depend heavily on management's subjective estimates and future forecasts, thereby opening the door wide to discretion and associated risks.

1.1. Research Problem:

The dilemma of this study centers on the extent to which traditional auditing tools can accommodate the complexities associated with fair value models. Consequently, the main research question can be crystallized as follows:

"What is the actual impact of external audit quality procedures (in terms of compliance with ISA 540, the use of experts, and the exercise of professional skepticism) on mitigating risks associated with asset fair value measurement and curbing management's tendency toward earnings management?"

1.2. Sub-questions:

- Does procedural compliance with the requirements of standard (**ISA 540**) affect the assurance of fair value accuracy?
- Does the reliance on valuation experts (according to **ISA 620**) contribute to improving measurement quality?
- What role does **Professional Skepticism** play in detecting manipulation of fair value estimates?

1.3. Research Hypotheses:

Based on the study's theoretical framework, the following set of hypotheses was derived to test the expected relationships:

- **Main Hypothesis (H₁):** There is a fundamental, statistically significant correlation between the efficiency of external audit procedures and the level of reliability in fair value estimates.
 - **First Sub-Hypothesis (H_{1a}):** Strict compliance with the requirements of standard (**ISA 540**) contributes positively to mitigating risks associated with asset measurement.
 - **Second Sub-Hypothesis (H_{1b}):** The auditor's recourse to specialized valuation expertise (implementing **ISA 620**) leads to enhancing the accuracy and objectivity of the measurement process.

- **Third Sub-Hypothesis (H_{1c}):** The auditor's level of professional skepticism is closely positively related to the quality and reliability of fair value, while being inversely related to the tendency toward earnings management practices.

1.4. Significance of the Study:

This study derives its scientific and practical value from two fundamental axes:

- **First:** The urgent need to bolster investor confidence in accounting data, which increasingly relies on personal estimates and professional judgment.
- **Second:** The research aims to enrich the professional library with empirical evidence that motivates audit firms to prioritize the auditor's "behavioral substance" and develop their critical sense, rather than relying on superficial procedural compliance with professional standards.

1.5. Literature Review and Research Gap:

Issues regarding the auditing of accounting estimates have occupied a significant space in academic research. (Bratten et al., 2013, p.07) asserted that the subjective nature of these estimates and their heavy reliance on professional judgment renders them an area fraught with audit risks and potential management bias.

In a related context, while some research, such as the study by (Al-Harbi, 2020,p.03), considered compliance with international standards requirements as a protective shield, other empirical evidence presented by (Griffith et al., 2015,p.388) revealed a contrasting reality; auditors find practical difficulty in effectively challenging management assumptions, even in the presence of strict regulatory frameworks.

Research Gap:

Despite the research momentum, a clear knowledge gap appears. The vast majority of studies—especially in the Arab context—have focused on the formal aspect or the **Checklist approach**. Conversely, there is a scarcity of research analyzing the impact of the updated International Standard on Auditing (**ISA 540 Revised**), which accurately distinguishes between the impact of procedural compliance and the impact of behavioral attributes (specifically Professional Skepticism) in mitigating measurement risks. This study aims to bridge this specific gap.

2. Conceptual Foundations of Asset Valuation and Measurement Challenges.

Asset valuation occupies a central position in the core of contemporary financial reporting; however, this process is not devoid of material risks that negatively affect the verifiability and reliability of information.

2.1. Fair Value Concept and Measurement Hierarchy in Light of IFRS 13

International Financial Reporting Standard 13 (IFRS 13) defines Fair Value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" (**European Commission, IFRS 13, 2012, p. 87**). To ensure regulatory consistency, the standard established

a Fair Value

Hierarchy:

- Level 1: Represents the highest degree of reliability as it is based on quoted prices in active markets for identical assets.
- Level 2: Measurement here relies on Observable Inputs other than quoted prices.
- Level 3: This constitutes the core of the fundamental problem, as valuation involves exclusively Unobservable Inputs.
- The "Black Box" Dilemma in Level 3: The inherent risk in Level 3 assets lies in their total reliance on internal financial models (such as Discounted Cash Flow models - DCF). Given the absence of actual market data, management resorts to constructing judgmental assumptions regarding the market pricing of the asset. This exacerbates "Information Asymmetry" and renders the auditing task a highly complex challenge (Christensen et al., 2012, p.127).

2.2. Accounting Estimate Risks and Earnings Management Practices

- Valuation procedures, specifically the Impairment Test according to (IAS 36), are characterized by a high degree of subjectivity:
- Manipulation via Discount Rates: Management may intentionally make a slight reduction in the "Discount Rate" to inflate the asset's present value, thereby avoiding the recognition of impairment losses—a practice termed "Window Dressing".
- Earnings Management: Estimates are employed for "Income Smoothing" purposes by deferring loss recognition, or to adopt a "Big Bath" policy by overstating losses in distressed financial years to maximize profits in subsequent periods (Riedl, 2004, p.823).

3. The Changing Dynamics of the Auditor's Role and Responsibilities

In light of the increasing complexity of valuation models, the auditor's function is no longer confined to mere arithmetical checking; rather, it has evolved to include a deep examination of the methodologies used and the underlying assumptions.

3.1. Responding to the Requirements of ISA 540 (Revised)

Fundamental amendments to the standard have imposed a shift in the audit approach, mandating the auditor to form a deep "Understanding" of models instead of merely testing their final results. Under this framework, the auditor must assess the level of "Estimation Uncertainty" and rigorously investigate any indicators of "Management Bias." The standard also obliges the auditor to adopt a firm stance in "Challenging Assumptions," particularly those related to future cash forecasts (IAASB, ISA 540 Revised, 2018, Paras. 13, 16–17, 23–24, 32).

Concept of Professional Skepticism:

Professional skepticism is not limited to mere caution; it requires the auditor not to accept management's integrity as absolute. In this regard, (Griffith et al., 2015, p.855) emphasize the importance of the auditor actively seeking "Contradictory Evidence" just as diligently as seeking corroborative evidence, to avoid falling into the trap of confirmation bias.

3.2. Substantive Procedures:

- Using Specialized Expertise (ISA 620): In cases requiring technical skills beyond the auditor's capabilities (such as valuing financial derivatives), ISA 620 directs the necessity of engaging an expert to evaluate the work of management's expert, provided there is strict verification of this expert's competence and objectivity (IAASB, ISA 620, 2009, p. 3).
- Re-performance: This mechanism involves the auditor developing an independent and parallel valuation model to determine an "acceptable range" for the value. If management's estimates fall outside this range, it is considered a strong indicator of material misstatement (Cannon & Bedard, 2017, p.81).

4. Analysis of the Relationship and Empirical Impact

Accounting literature confirms an inverse relationship between the rigor of the audit process and management's propensity toward earnings management practices based on fair value estimates.

4.1. Red Flags and Fraud Risks:

Based on the guidance of International Standard (IAASB, ISA 240, 2009, p. 16), the auditor must exercise the highest degree of professional vigilance regarding a set of critical indicators, most notably:

- **Unjustified Change in Methodology:** Resorting to changing adopted valuation methods without a valid economic justification, in an attempt to reach "**target numbers**" that serve management's interests.
- **Excessive Growth Assumptions:** Adopting growth rates characterized by excessive optimism that exceed industry sector indicators, aimed at inflating the "**Terminal Value**" within cash flow models.
- **Fourth-Quarter Adjustments:** Making radical and sudden changes to asset values in the critical periods immediately preceding the financial year-end closing.

4.2. Statistical Analysis and Hypothesis Testing

Study Sample and Data Collection: To achieve the study objectives, a questionnaire was employed to collect field data. Given that Algerian Auditing Standards (NAA) are inspired by and align with International Standards on Auditing (ISA), applying international requirements to the Algerian context is deemed appropriate. The survey was administered in both electronic and paper formats, resulting in a final sample of (44) valid questionnaires for statistical analysis.

4.2.1. First: Data Quality Assessment and Descriptive Analysis

4.2.1.1. Instrument Reliability Test:

To ensure the accuracy of the results, the measurement instrument underwent an internal consistency test (Cronbach's Alpha). The tabular data below indicates that reliability indices were high for most variables, noting that the variable "Use of Experts" achieved a statistically acceptable level for scientific research purposes.

Table (1): Cronbach's Alpha Results for Instrument Reliability

Variable	Symbol	No. of Items	Cronbach's Alpha	Result
Compliance with ISA 540	\$X_1\$	5	0.787	High Reliability
Use of Experts (ISA 620)	\$X_2\$	5	0.684	Acceptable*
Professional Skepticism	\$X_3\$	5	0.824	Very High Reliability
Fair Value Quality	\$Y\$	3	0.752	High Reliability
*Note: The Alpha value for variable \$X_2\$ is very close to 0.70, rendering it statistically acceptable in social and administrative research.				

Source: Prepared by the authors based on IBM SPSS (V. 24) outputs.

4.2.1.2. Normality Test:

Based on the **Kolmogorov-Smirnov** test, all significance values (\$Sig/P-value\$) were greater than (0.05). This confirms that the data follows a normal distribution, and consequently, **Parametric Tests** can be utilized.

4.2.1.3. Descriptive Statistics:

The following table illustrates the ranking of variables according to their relative importance from the auditors' perspective.

Table (2): Arithmetic Means and Standard Deviations

Rank	Variable	Mean	Standard Deviation (SD)	Importance Level
1	Fair Value Quality (\$Y\$)	4.44	0.498	High
2	Professional Skepticism (\$X_3\$)	4.41	0.512	High
3	Use of Experts (\$X_2\$)	4.33	0.510	High
4	Compliance with ISA 540 (\$X_1\$)	4.26	0.609	High

Source: Prepared by the authors based on IBM SPSS (V. 24) outputs.

4.2.2. Hypothesis Testing and Impact Measurement

4.2.2.1. Pearson Correlation Matrix:

This aims to measure the strength of the bilateral relationship between variables.

Table (3): Pearson Correlation Coefficients Matrix

Variables	X1	X2	X3	Y
\$X_1\$: ISA 540	1	.384	.439	.456*
\$X_2\$: Experts		1	.348	.365
\$X_3\$: Skepticism			1	.780**
\$Y\$: Fair Value Quality				1
* Statistically significant at the 0.05 level, ** Statistically significant at the 0.01 level				

Source: Prepared by the authors based on IBM SPSS (V. 24) outputs.

- **Commentary:** There is a very strong positive correlation between **Professional Skepticism (\$X_3\$)** and Fair Value Quality (\$r=0.78\$), whereas other relationships are of moderate strength.

4.2.3. Multiple Regression Analysis:

A regression model was constructed to measure the explanatory power of the independent variables to test hypotheses \$H_{1a}\$, \$H_{1b}\$, \$H_{1c}\$ and determine the actual impact.

- **Model Efficiency:** The (\$R^2\$) value reached (0.629), meaning the model explains approximately 63% of the variations in Fair Value Quality.
- **Model Validity:** The (ANOVA) test proved the significance of the model as a whole with a value of (\$F=11.30\$, \$Sig=0.000\$).

Table (4): Regression Coefficients

Independent Variable	Coefficient (β)	t-value	Sig. Level	Statistical Decision	VIF
(Constant)	0.707	0.979	0.339	-	-
\$X_1\$: Compliance (ISA 540)	0.097	0.755	0.459	Reject Hypothesis	1.34
\$X_2\$: Experts (ISA 620)	0.073	0.495	0.626	Reject Hypothesis	1.23
\$X_3\$: Professional Skepticism	0.682	4.519	0.000	Accept Hypothesis	1.30

Source: Prepared by the authors based on IBM SPSS (V. 24) outputs.

- **Multicollinearity Test (VIF):** All values are less than 5, confirming the absence of a Multicollinearity.

5. Conclusion and Recommendations

5.1. Conclusion:

This research paper aimed to investigate the role played by external audit quality in mitigating the risks inherent in fair value measurement. The statistical analyses (\$R^2=0.629\$) yielded fundamental conclusions that reframe prevailing concepts regarding audit mechanisms in complex estimation environments:

- **Non-confirmation of the First Hypothesis (\$H_{1a}\$):**

The results revealed that procedural compliance with the requirements of standard (ISA 540)—despite its positive effect—lacks statistical significance (\$Sig = 0.459\$).

Interpretation: This indicates that the auditor's mere completion of Checklists and theoretically documenting the understanding of models does not constitute a sufficient guarantee for fair value quality. Formal compliance often fails to detect manipulation within hidden "Significant Assumptions."

- **Rejection of the Second Hypothesis (H_{1b}):**

No material impact was observed for the reliance on valuation experts on measurement quality ($\beta = 0.626$).

Interpretation: This may be attributed to auditors' passive reliance on expert reports without subjecting them to critical scrutiny, or the expert's report transforming into a mere document of "formal support" to complete the audit file without having a decisive influence on adjusting financial values.

- **Acceptance of the Third Hypothesis (H_{1c}):**

"Professional Skepticism" emerged as the strongest and most decisive variable ($\beta = 0.682$, $\text{Sig} = 0.000$) in determining fair value quality.

Interpretation: This result confirms that the "Auditor's Mindset" and the ability to effectively "Challenge" management assumptions and discount rates constitute the true and effective line of defense against earnings management practices, surpassing routine procedures.

5.2. General Conclusion:

- The study concludes that fair value auditing is a "cognitive and behavioral" practice par excellence, not merely a "procedural" operation. Dealing with complex valuation models requires the auditor to shift from a mindset of "documentary matching" to a mindset of "examining the economic reasonableness" of forecasts.

5.3. Recommendations:

- Based on the foregoing results, the study proposes the following recommendations:
- Restructuring Professional Training: There is a necessity for audit firms and professional bodies to shift from an exclusive focus on technical training of standard texts toward enhancing skills in "Critical Thinking" and "Behavioral Psychology," to instill a disposition of professional skepticism in auditors.
- Activating the Genuine Role of the Expert: The superficial engagement with the Auditor's Expert must be transcended. The audit team must possess the minimum knowledge required to discuss with the expert and evaluate their outputs effectively.
- Focusing on Scrutinizing Assumptions: It is recommended to direct audit efforts toward examining "Level 3 Unobservable Inputs" and testing the sensitivity of discount rates, rather than exhausting time on traditional documentation procedures.

6. List of references:

6.1. Professional Standards & Books:

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- International Auditing and Assurance Standards Board. (2009). International Standard on Auditing (ISA) 240: The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements. International Federation of Accountants. https://www.ibr-ire.be/docs/default-source/fr/documents/reglementation-et-publications/normes-et-recommandations/isa/isa-english-version/isa-240_en.pdf?sfvrsn=a725e4d9_1.
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6.2. Periodicals & Scientific Journals:

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- Christensen, H. B., Glover, S. M., & Wood, D. A. (2012). Extreme estimation uncertainty in fair value estimates: Implications for audit assurance. *Auditing: A Journal of Practice & Theory*, 31(1), 127-146. <https://doi.org/10.2308/ajpt-10191>
- Griffith, E. E., Hammersley, J. S., & Kadous, K. (2015). Audits of complex estimates as verification of management numbers: How institutional pressures shape practice. *Contemporary Accounting Research*, 32(3), 833-863.

- Martin, R. D., Rich, J. S., & Wilks, T. J. (2006). Auditing fair value measurements: A synthesis of relevant research. *Accounting Horizons*, 20(3), 287-303 .
- Riedl, E. J. (2004). An examination of long-lived asset impairments. *The Accounting Review*, 79(3), 823-852.

6.3. Computer Software:

- IBM Corp. (2016). IBM SPSS Statistics for Windows (Version 24.0) [Computer software]. Armonk, NY: IBM Corp.

7. Appendices:

7.1. The Questionnaire

Section One: Compliance with International Standard on Auditing (ISA 540) Requirements

(Testing Hypothesis H_{1a} regarding understanding models and assumptions)

#	Item (Statement)
1	The audit firm documents its understanding of the nature of models used by management to estimate fair value before commencing the examination.
2	We evaluate the reasonableness of " Significant Assumptions " upon which management based its valuation (e.g., discount rates, cash flows).
3	We verify the accuracy and Data Reliability of the source data used in the valuation models.
4	We perform a Retrospective Review of accounting estimates from prior years to judge the accuracy of management's forecasting.
5	A deep understanding of ISA 540 requirements leads to the detection of Material Misstatements in the valuation of complex assets.

Section Two: Using the Work of an Auditor's Expert (ISA 620)

(Testing Hypothesis H_{1b} regarding Level 3 inputs and the expert's role)

#	Item (Statement)
1	The audit team encounters technical difficulties when reviewing assets valued under " Level 3 " due to the unavailability of observable market data.
2	We resort to appointing an independent Auditor's Expert when the valuation models used by the client are highly complex.
3	The independent expert's reports contribute to reducing the " Uncertainty " surrounding fair value figures.
4	We evaluate the competence and independence of the expert before relying on their work as audit evidence, in accordance with ISA 620.
5	Utilizing a specialized expert increases the reliability of the financial report and reduces the risk of issuing an inappropriate opinion regarding fair value.

Section Three: Professional Skepticism and Detecting Earnings Management

(Testing Hypothesis H_{1c} regarding subjectivity and manipulation)

#	Item (Statement)
1	Fair value estimates are considered a primary gateway for "Earnings Management" practices by corporate management.
2	The audit team exercises a high level of Professional Skepticism when reviewing asset "Impairment Tests."
3	We Challenge management's point of view when there are indicators of bias in the selection of valuation methods.
4	The auditor performing Re-performance and constructing an independent estimate reveals discrepancies in management's estimates.
5	There is an inverse relationship between the auditor's level of professional skepticism and management's ability to manipulate asset valuation.

Section Four (Dependent Variable): Quality and Reliability of Fair Value

#	Item (Statement)
1	Financial statements that have undergone high-quality auditing reliably reflect the true (or fair) value of assets.
2	Strict audit procedures limit the measurement risks associated with intangible assets and goodwill.
3	External auditing contributes to enhancing investor confidence in accounting information based on estimates.

.7.2 IBM SPSS Statistics (V. 24) output.

Reliability (Cronbach's Alpha):

{'X1_ISA540': 0.7870279788691059, 'X2_Experts': 0.6843497632971317, 'X3_Skepticism': 0.8239028429478332, 'Y_FairValue': 0.7524350649350648}

Normality (KS Test):

{'X1_ISA540': {'Statistic': 0.1337023374156498, 'p-value': 0.7352272528005954}, 'X2_Experts': {'Statistic': 0.14177744551467159, 'p-value': 0.6686300680560977}, 'X3_Skepticism': {'Statistic': 0.20923393360136, 'p-value': 0.21205669718698994}, 'Y_FairValue': {'Statistic': 0.2139563641866033, 'p-value': 0.19187860545020663}}

Descriptive Statistics:

	mean	stud	Rank
X1_ISA540	4.258333	0.608574	High
X2_Experts	4.325000	0.510115	High
X3_Skepticism	4.408333	0.512383	High
Y_FairValue	4.444444	0.497983	High

Correlation Matrix:

	X1_ISA540	X2_Experts	X3_Skepticism	Y_FairValue
X1_ISA540	1.000000	0.384444	0.438980	0.455898
X2_Experts	0.384444	1.000000	0.348492	0.365131
X3_Skepticism	0.438980	0.348492	1.000000	0.780041
Y_FairValue	0.455898	0.365131	0.780041	1.000000

Regression Summary:

OLS Regression Results

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==
Dep. Variable:      Y_FairValue  R-squared:      0.629
Model:              OLS  Adj. R-squared:    0.573
Method:             Least Squares  F-statistic:    11.30
Date:               Mon, 26 Jan 2026  Probe (F-statistic): 0.000149
Time:               08:38:34  Log-Likelihood:    -4.9139
No. Observations:   24  AIC:                17.83
Df Residuals:       20  BIC:                22.54
Df Model:           3
Covariance Type:    nonrobust
=====
=====
=====
coef    std err      t    P>|t|    [0.025    0.975]
-----
const      0.7072    0.722    0.979    0.339    -0.799    2.214
X1_ISA540   0.0975    0.129    0.755    0.459    -0.172    0.367
X2_Experts  0.0730    0.148    0.495    0.626    -0.235    0.381
X3_Skepticism 0.6820    0.151    4.519    0.000    0.367    0.997
=====
=====
Omnibus:          1.154  Durbin-Watson:      1.547
Prob(Omnibus):    0.562  Jarque-Bera (JB):    0.356
Skew:             0.270  Prob(JB):            0.837
Kurtosis:         3.253  Cond. No.            83.5
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Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

VIF:

	Variable	VIF
0	const	118.323617
1	X1_ISA540	1.339916
2	X2_Experts	1.231240
3	X3_Skepticism	1.299728