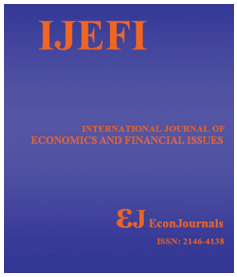

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2025, 15(2), 163-172.

The Effect of Improving Risk Management as a Mediator Variable in the Relationship between the Modern Approach to Internal Auditing and Competitive Advantage: A Study in Yemeni Islamic Banks

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Received: 16 September 2024 **Accepted:** 18 December 2024 **DOI:** https://doi.org/10.32479/ijefi.17678

ABSTRACT

This study explores the effect of the risk-based internal audit (RBIA) approach on enhancing competitive advantage in Yemeni Islamic banks, focusing on the mediating role of improved risk management. Conducted on a sample of eight Islamic banks operating in Aden, data was gathered using a structured questionnaire and analyzed with SPSS. The analysis employed linear regression for direct relationships, ANOVA to confirm model significance, and the Baron and Kenny method alongside the Sobel test to examine mediation effects. Findings revealed that the RBIA approach has a statistically significant direct effect on supporting competitive advantage, accounting for 28.3% of the variation. When incorporating improved risk management as a mediating variable, this influence increased to 75%, confirming a partial mediation effect. The study underscores the necessity for Yemeni Islamic banks to fully implement RBIA and align it with risk management practices, particularly in risk identification, assessment, and mitigation. These strategies are critical for strengthening banks' competitive positioning and resilience in the evolving financial landscape. The study provides actionable insights for Islamic banks in emerging markets, emphasizing the strategic value of integrating advanced auditing approaches with risk management to achieve sustainable growth.

Keywords: Internal Audit, Risk Management, Competitive Advantage, Islamic Banks
JEL Classification: M42, G32, D41, G21

1. INTRODUCTION

The banking system is pivotal in driving economic growth and development, making it the cornerstone of any economy. Among the various banking sectors, Islamic banks stand out due to their adherence to Islamic Sharia principles, which prohibit interest-based transactions and promote risk and profit-sharing models such as Mudarabah and Musharaka (Abbas et al., 2022; Javaria and Masood, 2020; Al Rahahleh et al., 2019). These unique operational characteristics render Islamic banks inherently high-risk institutions (Roziq and Sukarno, 2021). Therefore, robust risk management systems are essential in Islamic banking to mitigate potential losses from risk-related activities and strengthen institutional structures (Priyanti et al., 2022).

In recent years, Islamic banks have gained increasing relevance on the global financial stage, particularly in regions such as the Middle East and North Africa, where the sector has faced substantial challenges due to crises. Many customers have gravitated towards Islamic finance, perceiving it as a more ethical alternative to conventional banking systems (Sahut et al., 2011). This growth of Islamic banks requires them to continue

improving their performance and developing effective strategies to address the internal and external challenges surrounding them to achieve competitive advantage (Yani, 2019). Given the increasing importance of banks, coupled with the rapid advancements in information technology, the need for strong internal control systems has become more pressing. These systems reduce risk and improve the quality of services and profitability, thus contributing to the bank's competitive advantage (AlSharif and Al-Slehat, 2019).

In contrast, effective internal control systems are critical to protecting the rights of shareholders and stakeholders while enhancing confidence in financial results. For instance, the Malaysian Corporate Governance Code highlights the pivotal role internal audit plays in overseeing internal controls and supporting management in evaluating their efficiency (Ismail et al., 2022) by focusing on high-risk areas, improving compliance processes, and increasing management's efficiency in decision-making (Schulien and Bates, 2005; Attaf and Bensbahou, 2023). Moreover, the RBIA in the financial services sector provides management with an objective evaluation of the effectiveness of internal controls and the broader risk management framework. It evaluates operational efficiency (RSM, 2008). In addition, RBIA examines key risk management functions to ensure that banking processes align with regulatory requirements and promote sound practices (BCBS, 2012).

Furthermore, In Islamic banking, internal audit is crucial in ensuring compliance with Sharia standards, identifying and evaluating financial and legal risks, and ensuring operations are aligned with Islamic financial regulations (Attaf and Bensbahou, 2024). Therefore, a systematic approach to internal audit in Islamic banks should be followed, aligning audit practices with Islamic banking principles while addressing technical challenges (Nassar, 2005; Attaf and Bensbahou, 2021).

This study provides new evidence on the relationship between the RBIA and competitive advantage, focusing on Islamic banks. It measures RBIA's direct effect on competitive advantage and examines the mediating role of improved risk management in strengthening this relationship. To the researcher's knowledge, this is the first study to explore this topic within Yemeni Islamic banks, specifically conducting a field study in Aden to ensure reliable and valuable results.

2. LITERATURE REVIEW

Internal auditing has evolved from focusing on accounting issues to becoming essential in identifying and addressing organizational risks (Munteanu and Zaharia, 2014). The Institute of Internal Auditors (IIA) defines risk-based internal auditing (RBIA) as an approach that links internal audit activities to the organization's overall risk management framework, ensuring effective management of risks (IIA, 2023). This approach involves identifying and assessing risks, evaluating risk management responses, monitoring the implementation of mitigation procedures, and providing assurance to senior management and the Board of Directors (Anderson and Eubanks, 2015). In banking, RBIA plays a vital role in maintaining operational safety and trust in the financial system by focusing on high-risk areas and continuously improving systems to prevent potential issues (Simpson, 2005).

With the fast-paced changes in the financial industry, the IIA updated its "Three Lines of Defense" model in 2020, shifting to the "Three Lines Model," which promotes internal audit, compliance, and risk management functions as trusted advisors rather (IFC, 2021). Internal auditors improve control systems by identifying risks and offering solutions that enhance operational processes (Susilawati et al., 2023). Their risk assessments provide valuable insights that help develop risk management strategies.

On the other hand, Risk management is crucial to strategic management. According to the Institute of Risk Management (IRM, 2002), risk management helps organizations systematically address risks for sustainable benefits. In banking, effective risk management ensures a balance between risk and return, reducing exposure while maintaining flexibility (Greuning and Bratanovic, 2020). Key aspects include identifying potential risks, evaluating their impact, and setting an appropriate risk appetite (Elahi, 2013). All levels of management should contribute to addressing risks for the organization to remain competitive by providing cost-effective products and services (Angeline and Teng, 2016) and effective risk control can increase productivity and reduce costs, helping organizations achieve strategic goals (ICMAI, 2020).

Internal auditors contribute by reviewing risk management processes, facilitating risk identification, and educating employees on risk control. The COSO framework, introduced in 2004, highlights internal auditors' role in helping management and the Board evaluate risk management systems (Karagiorgos et al., 2019). By providing objective feedback, internal auditors enhance risk management and organizational resilience (Eulerich and Lenz, 2020).

Furthermore, the link between risk management and competitive advantage is especially evident in financial institutions. Internal auditing improves risk management processes, supporting the organization's ability to create value and maintain competitiveness (Faiteh and Aasri, 2022). Competitive advantage is achieved when organizations create value that competitors cannot easily replicate (Barney, 2014; Grant, 2018). Porter (1985) emphasizes that competitive advantage comes from lower costs or differentiation. While core competencies have a significant impact on the competitive advantage of Islamic banks (Soleh et al., 2020). On the other hand, to maintain a sustainable competitive advantage, an organization must seek to secure and develop it continuously by adapting to external changes and employing its internal capabilities, competencies, and resources (David, 2011). Therefore, the ability of organizations to maintain competitive advantage is linked to their ability to provide value to stakeholders (Suroso, 2022).

Internal audit helps sustain this by ensuring effective risk management and reducing potential risks. Effective audit practices help organizations maintain transparency and credibility, critical

for long-term success. Internal auditors also support management through consulting services and guidance on risk management (Maria, 2021). Internal auditors who meet professional competence standards and offer timely solutions to emerging risks significantly enhance organizational competitiveness (Galanis et al., 2023). In conclusion, RBIA plays a critical role in supporting an organization's risk management framework, improving governance, and enhancing competitive advantage. By aligning internal audit activities with risk management and strategic objectives, organizations can achieve long-term success and sustainable growth (Pinga, 2016).

The theoretical framework underscores the strategic role of the RBIA in mitigating risks and optimizing resources to enhance competitive advantage. While RBIA's importance is well-recognized, gaps remain in understanding its specific contributions to competitiveness through improved risk management. This study examines how RBIA enhances the competitive position of Yemeni Islamic banks by identifying and mitigating risks and providing the necessary tools to enhance efficiency, reduce costs, and improve performance. To address these gaps, the following hypotheses are formulated.

H_{01}: There is no statistically significant effect of the modern approach to internal audit in supporting the competitive advantage of Yemeni Islamic banks operating in Aden.

H_{02}: Improving risk management as a mediator variable does not affect the relationship between the modern approach to internal audit and supporting the competitive advantage of Yemeni Islamic banks operating in Aden.

The Figure 1 illustrates the study model used.

3. METHODOLOGY AND DATA

This study investigates eight Islamic banks in Aden, chosen for their representative role in Yemen's Sharia-compliant banking sector and their contributions to financial inclusion and economic stability. The selected banks include Tadhamon Islamic Bank, Saba Islamic Bank, CAC Islamic Bank, Bahrain Islamic Bank, Al-Kuraimi Islamic Bank (KiB), Al-Qutaibi Islamic Bank, Aden Islamic Bank, and Al-Kuraimi Bank for Islamic Microfinance. The selection criteria included accessibility, data reliability, and strategic importance.

The study adopted the descriptive approach that aims to study the nature of the relationship between the risk-based internal audit approach (independent variable), improving risk management (intervening variable), and supporting competitive advantage (dependent variable). To gather data, researchers distributed questionnaires to key personnel within these banks, such as directors, auditors, accountants, and risk management professionals, during a field visit conducted from August 1 to October 31, 2023. Of the 100 questionnaires distributed, 94 were returned, yielding a 94% response rate. As highlighted by Baruch and Holtom (2008), a response rate exceeding 70% is considered excellent in academic and organizational studies, enhancing the reliability of the collected data.

The Statistical Package for the Social Sciences (SPSS) was employed for data analysis, and it was recognized for its effectiveness in handling large datasets and performing advanced statistical tests. Field data were coded using a five-point Likert scale, translating qualitative responses into quantitative scores ranging from 1 (strongly disagree) to 5 (strongly agree). A significance level of 0.05 was applied, ensuring only a 5% probability that results are due to chance. As Creswell (2014) noted, this threshold distinguishes between detecting genuine effects and minimizing false positives, underscoring the study's methodological rigor.

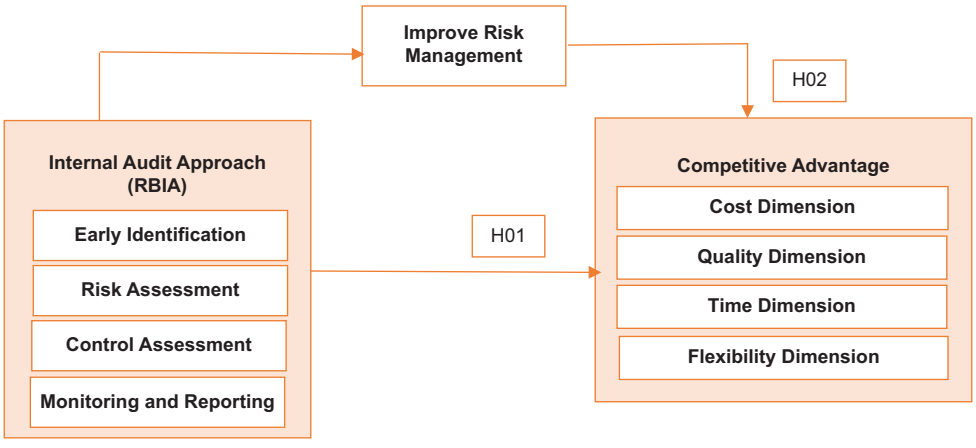
The validity of the questionnaire's constructive statements was determined using Pearson's correlation coefficient, and The reliability of the study tool was assessed using Cronbach's alpha coefficient, To test the hypotheses, the first main hypothesis was examined using a linear regression equation, According to studies such as Field (2018), linear regression is one of the most common methods for determining relationships between variables, especially when the goal is to measure the effect of an independent variable on a dependent variable. According to the regression equation:

$$\hat{Y}_i = \hat{\beta}_0 + \hat{\beta}_1 X1 + \varepsilon$$

Where:

Y: Dependent variable.

Figure 1: Study model



X: Independent variable.

B_0: The intercept or Y-intercept is the value of Y when X = 0.

B_1: Regression coefficient, which represents the change in Y for each unit change in X.

ϵ: Random Error or Residual.

ANOVA test was also used to evaluate the significance of the model as a whole. According to Hair et al. (2019), ANOVA helps compare the variance explained by the statistical model (MSR) with the unexplained variance (MSE), by calculating the F-statistic value:

F = MSR (Mean square regression)/MSE (Mean square error/ residual)

The coefficient of determination R2 was used, which expresses the proportion of variance in the dependent variable that the model explains. According to Cohen et al. (2003), high values of R2 indicate that the model can explain a large portion of the variance in the dependent variable:

$$R2 = 1 - SSR/SST$$

Where:

SSR: the sum of squared residuals (also known as the residual sum of squares, which represents the unexplained variance).

SST: the total sum of squares (representing the total variance in the dependent variable).

The adjusted coefficient of determination has also been used as a more accurate way to assess the fit of a statistical model, especially when dealing with small samples or multiple variables. According to Tabachnick and Fidell (2019), $\bar{R}^2$ is a more reliable indicator when many independent variables are included compared to the sample size.

$$\bar{R}^2 = 1 - (1 - R\,2)\,(N - 1) / N - k - 1$$

Where:

R: Coefficient of determination

N: number of observations (or sample)

K: number of independent variables in the model.

The second main hypothesis was tested using the method of Baron and Kenny (1986) to assess mediation and its type, following these steps:

- Confirm the effect of the independent variable on the mediating variable. The relationship between the independent variable and the mediator is tested to establish that the independent variable significantly influences the mediator. This step lays the groundwork for the mediation analysis (Baron and Kenny, 1986; Hayes, 2013).
- Confirm the effect of the independent variable on the dependent variable. The direct relationship between the independent and dependent variables is tested to ensure that the independent variable significantly impacts the dependent variable, independent of the mediator (Cohen et al., 2013).
- Confirm the effect of the mediating variable on the dependent variable in the presence of the independent variable. This is done by using the following multiple regression equation:

$$\hat{Y}_i = \hat{\beta}_0 + \hat{\beta}_1 X_1 + X_2 + \varepsilon$$

Where:

Y: The dependent variable that we want to predict

X_1, X_2: The independent variables that affect the variable Y

β_0: The constant or so-called intercept, which represents the expected value of Y, when all independent variables are equal to zero

B_1: β_2: Regression coefficients, which represent the expected change in Y, result from a one-unit change in the corresponding independent variable while holding the rest of the independent variables constant

ϵ: The random error term, accounting for unobserved influences or random differences affecting *Y* (Hayes, 2013).

By evaluating the direct effect:

- If the direct effect is not statistically significant (P > 0.05), this indicates complete mediation (Baron and Kenny, 1986)
- If the direct effect is statistically significant but smaller than the total effect observed in the second equation, this indicates partial mediation (MacKinnon, 2008).

To test the significance of the mediation effect, the Sobel test was used, to examine whether the mediating variable significantly explains the relationship between an independent variable and a dependent variable. The Sobel z value is calculated using the following equation:

$$Sobel_z = a \times b/SQRT\,(b^2 \times S_a^2 + a^2 \times S_b^2)$$

Where:

a: Regression coefficient between the independent variable and the mediating variable

B: Regression coefficient between the mediating and dependent variables in the presence of the independent variable

S_a: Standard error of the coefficient a, which is a measure of the accuracy of the estimate of the regression coefficient a

S_b: Standard error of the coefficient b, which is a measure of the accuracy of the estimate of the regression coefficient b

- The Sobel z-value is compared to the critical value of 1.96 (at a significance level of 0.05). If the Sobel z-value exceeds 1.96, the mediating effect is deemed statistically significant, indicating a robust relationship between the variables through the mediator (Baron and Kenny, 1986; MacKinnon, 2008; Hayes, 2013). Conversely, a value below 1.96 suggests a non-significant mediation effect.

4. RESULTS

4.1. Stability Coefficient

The reliability of the study tool was verified using (Cronbach's Alpha) coefficient, as follows in Table 1.

Table 1: Cronbach's alpha test

Study Axes	Number of statements	Coefficient Cronbach's alpha
The modern internal audit approach	16	0.896
Improve risk management	12	0.962
Competitive advantage	16	0.735

The results presented in Table 1 show that the reliability coefficients measured by Cronbach's alpha were high across all study dimensions. The lowest reliability coefficient was found in the "competitive advantage" axis, at (0.735), which exceeds the commonly accepted threshold of 0.7, as outlined by Nunnally and Bernstein (1994). This indicates excellent internal consistency among the items within this axis. while the highest was in the "improving risk management" axis, at (0.962). This indicates that the study's axes exhibit strong reliability, confirming that the tool is suitable for data collection, and the study's results can be considered dependable. Further validating the reliability of the questionnaire. According to Tavakol and Dennick (2011), such a value signifies adequate consistency, ensuring confidence in the stability and reproducibility of the responses.

4.2. Testing the Validity of the Tool (The pearson correlation coefficient)

The validity of the study tool was verified using Pearson's coefficient, and the results were as follows in Table 2.

The results in Table 2 demonstrate that the construct validity of the questionnaire items was high, as indicated by Pearson's correlation coefficient, which ranged from (0.601 to 0.912), with significance at the (0.05) level. These results indicate a high level of correlation between individual questionnaire items and the overarching constructs they are intended to measure. This aligns with the recommendations of Field (2018), who emphasizes that a Pearson correlation coefficient above 0.6 is generally considered strong evidence of validity. Furthermore, Cohen (1988) supports this interpretation, highlighting that such values demonstrate meaningful and statistically significant relationships, thereby confirming the tool's ability to measure the intended constructs.

4.3. Hypothesis Testing

4.3.1. The first main study hypotheses

"There is no statistically significant effect of the modern approach to internal audit in supporting the competitive advantage of Yemeni Islamic banks operating in Aden." were tested using linear regression to measure the relationship between the study variables, and the results were as follows in Table 3.

Table 3: Simple linear regression model parameters

Hypothesis Testing Results	Parameters	Coefficient	Std. Error	T-test	P-value
H01	$\hat{\beta}_0$	1.163	0.559	2.079	0.040
	$\hat{\beta}_1$	0.752	0.125	6.033	0.000

The results of testing the first main hypothesis indicate that the linear regression coefficient "β_1" is statistically significant, as its P = 0.000 is less than the significance level of 0.05 adopted in this study. This demonstrates that the independent variable (RBIA) has a significant effect on the dependent variable (competitive advantage). To test the significance of the linear regression models, ANOVA analysis of variance test was used, and the results are shown in the Table 4.

The analysis of the variance table above shows that the calculated F-test value is (36.400) and, the P = (0.000), which is below the 0.05 threshold set for this study. This indicates that there is a relationship between the dependent variable and the independent variable. Therefore, any changes in the independent variable (RBIA) directly affect the dependent variable (competitive advantage). To judge the explanatory power of the model, a

Table 2: Pearson coefficient test

The first axis: Modern internal audit approach (RBIA)						The second axis: Improve risk management			The third axis: Competitive advantage					
No	Correlation coefficient R	Sig	No	Correlation coefficient R	Sig	No	Correlation coefficient R	Sig	No	Correlation coefficient R	Sig	No	Correlation coefficient R	Sig
Early identification			Evaluation of controls			1	0.732	0.000	Cost dimension			Time dimension		
1	0.675	0.000	9	0.672	0.005	2	0.716	0.000	1	0.716	0.000	9	0.741	0.003
2	0.720	0.003	10	0.641	0.000	3	0.842	0.000	2	0.831	0.000	10	0.639	0.000
3	0.734	0.000	11	0.658	0.000	4	0.780	0.000	3	0.842	0.000	11	0.740	0.000
4	0.699	0.000	12	0.686	0.000	5	0.842	0.005	4	0.912	0.000	12	0.640	0.000
Risk assessment			Monitoring and reporting			6	0.841	0.000	Quality dimension			Flexibility dimension		
5	0.688	0.003	13	0.781	0.000	7	0.754	0.000	5	0.745	0.000	13	0.821	0.000
6	0.701	0.000	14	0.722	0.005	8	0.843	0.000	6	0.660	0.005	14	0.850	0.003
7	0.720	0.000	15	0.684	0.000	9	0.757	0.003	7	0.684	0.000	15	0.801	0.000
8	0.647	0.000	16	0.795	0.000	10	0.601	0.000	8	0.740	0.000	16	0.877	0.003
-	-	-	-	-	-	11	0.811	0.000	-	-	-	-	-	-
-	-	-	-	-	-	12	0.781	0.005	-	-	-	-	-	-

Table 4: One-way ANOVA results for simple linear regression models

Hypothesis testing results	Source of variation	Degree of freedom	Sum of squares	Mean square	F test value	P-value
H01	Regression	K−1 = 1	8.689	8.689	36.400	0.000
	Residual	n−k = 92	21.961	0.239		
	Total	93	30.649			

calculation was made R^2 and adjusted R^2, and the results were as shown in the following Table 5.

Table 5: Coefficients of determination for simple regression models

R^2	$\bar{R}^2$
0.283	0.276

The R^2 value of (0.283) indicates that 28.3% of the variation in the dependent variable (competitive advantage) can be attributed to the independent variable (RBIA). This suggests that while the model does explain a significant portion of the variance, a majority (71.7%), is influenced by other factors not captured by the model. Overall, both R^2 and adjusted R^2 values suggest that the model has a moderate ability to explain the relationship between the RBIA and competitive advantage. However, a significant portion of the variance is still unexplained, pointing to other external factors or variables not included in the analysis.

4.3.2. The second main study hypothesis

"Improving risk management as a mediator variable does not affect the relationship between the modern approach to internal audit and supporting the competitive advantage of Yemeni Islamic banks operating in Aden." To test this hypothesis, we used the Baron and Kenny 1986 method (Table 6).

Table 6: Regression equations according to the Baron and Kenny method

Equations	Parameters	Coefficient	Std. Error	T-test	P-value
The effect of the (RBIA) on improving risk management	$\hat{\beta}_1$	1.027	0.104	9.851	0.000
The effect of the (RBIA) on competitive advantage	$\hat{\beta}_1$	0.752	0.125	6.033	0.000
The effect of improving risk management on competitive advantage with the presence of (RBIA).	$\hat{\beta}_1$	0.64	0.126	3.510	0,012
	$\hat{\beta}_2$	0.818	0,179	4.562	0.000

As shown in Table 6, the results of the analysis indicate the following:

- First equation: The linear regression coefficient for the RBIA in improving risk management is statistically significant, with a P = 0.000, which is below the 0.05 threshold. This confirms that RBIA directly enhances risk management, thus satisfying the first condition.
- Second equation: The regression analysis demonstrates that RBIA also significantly contributes to competitive advantage, with a P = 0.000. This shows that RBIA positively affects competitive advantage even without the mediating variable, fulfilling the second condition.
- Third equation: After introducing the mediating variable (improving risk management), both the coefficients for RBIA (P = 0.012) and improving risk management (P = 0.000) remain statistically significant. This indicates that improving risk management mediates the relationship between RBIA and competitive advantage. However, as RBIA continues to significantly influence competitive advantage, even with the mediating variable, this suggests partial mediation.

Figure 2 illustrates the relationships between these variables based on the Baron and Kenny method, clarifying the mediation effect.

From the previous Figure 2, we find that the value of the indirect effect (the effect of improving risk management on competitive advantage in the presence of the RBIA) is 0.818, which is significant, with a P = 0.000, while the value of the direct effect (the effect of the RBIA on competitive advantage in the presence of improving risk management) is 0.64, It is less than the total effect value of (0.752), which is significant, with a P = 0.012. Accordingly, we can say that the mediation is partial. To examine the importance of the mediation effect in statistical models, the Sobel test was used, as follows in Table 7.

Table 7: The sobel test

Z-value	Std. Error	P-value	95% LL	95% UL
4.1472	0.20256	0.00003	0.4414	1.2388

Table 7 presents the results of the Sobel test, assessing the mediating role of risk management improvement between the RBIA and competitive advantage. The test statistic (4.1472), greater than the critical value of 1.96, shows that risk management plays a significant mediating role. The P = 0.00003, much smaller than the significance level of 0.005, further supports this.

Figure 3 shows the 95% confidence interval for the indirect effect in a Sobel test, which examines the mediation effect of risk management between the (RBIA) and competitive advantage.

Figure 3 shows that the 95% confidence interval (0.4414-1.2388) confirms that the indirect effect is substantial, highlighting the importance of risk management as a mediator in strengthening the relationship between the RBIA and competitive advantage.

To test the significance of the estimated multiple linear regression model in the presence of the mediating variable (improved risk management), the one-way analysis of variance (ANOVA) test is used, and the results are as shown in the following Table 8.

The results in Table 8, with an F-test value of (18.183) and a P = 0.000, indicate that the regression model significantly

Table 8: Results of one-way analysis of variance (ANOVA) for the multiple linear regression model

Hypothesis testing results	Source of variation	Degree of freedom	Sum of squares	Mean square	F test value	P-value
H02	Regression	K−1 = 1	8.751	4.376	18.183	0.000
	Residual	n−k = 92	21.898	0.241		
	Total	93	30.649			

Figure 2: Relationship between study variables according to Baron and Kenny. Source: Prepared by researchers based on the results of Table 6

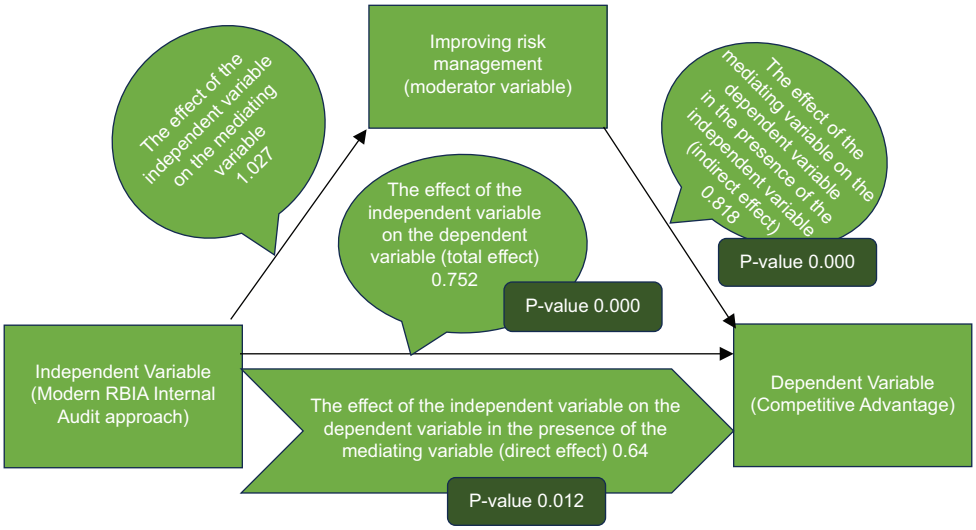
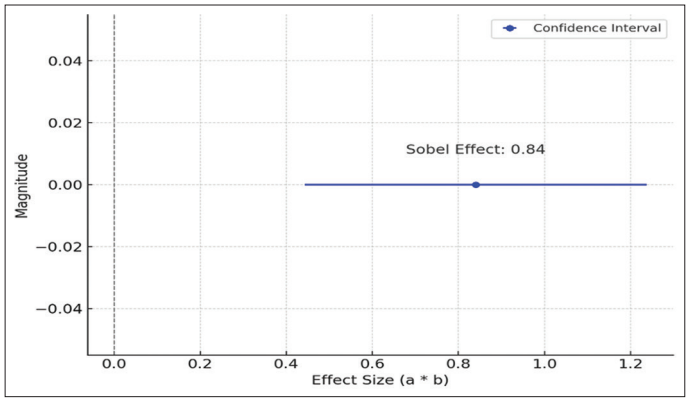


Figure 3: Sobel test confidence interval (95%)



explains the variation in the dependent variable, competitive advantage, when (improved risk management) is included as a mediating variable. This confirms that the overall model is valid and effective in capturing the relationship between the RBIA, improving risk management, and supporting competitive advantage. To judge the explanatory power of the model, a calculation was made R^2 and adjusted R^2, and the results were as shown in the Table 9.

From Table 9, we observe that the coefficient of determination (R^2) reached (0.75), and the adjusted coefficient of determination (adjusted R^2) was (0.747). This indicates a significant improvement in the model's explanatory power with the inclusion of the mediating variable, improving risk management. In other words, the RBIA accounts for 75% of the variance in supporting competitive advantage when considering the presence of the mediating variable. The high adjusted R^2 value further supports the robustness of the model by accounting for the number of predictors, ensuring that the explanatory power is not overestimated. This demonstrates the substantial role of improving risk management

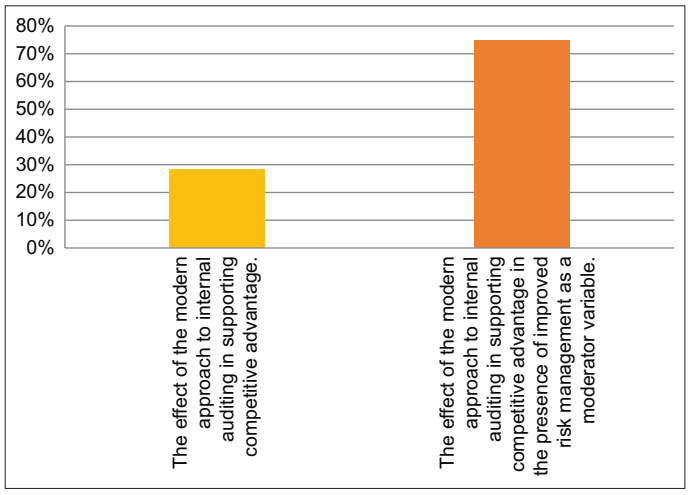
Table 9: Determination coefficients of the multiple linear regression model

R2	$\bar{R}^2$
0.75	0.747

in enhancing the relationship between RBIA and competitive advantage in Yemeni Islamic banks.

Figure 4 shows the effect of the RBIA on directly supporting competitive advantage, as well as its effect when improving risk management is included as an intermediary between them.

Figure 4: The effect of the modern internal audit approach on competitive advantage



5. DISCUSSION

The field study results rejected the first main hypothesis: "There is no statistically significant effect of the modern internal audit approach

in supporting the competitive advantage in Yemeni Islamic banks operating in Aden." Instead, the alternative hypothesis was accepted, affirming a statistically significant effect between these variables. The study demonstrated that the modern approach to internal auditing (RBIA) supports competitive advantage by 28.3%. This result aligns with the findings of Attaf and Bensbahou (2022), who reported a 29.8% relationship between internal audit governance and competitive advantage in Yemeni cement companies. Similarly, Fadlallah and Al-Aribi (2024) found a 33.2% link between modern internal audit trends and competitive advantage in Libyan commercial banks, a result that Ali (2019) found in his study of Sudanese Islamic banks.

In the same context, the importance of internal auditing is highlighted in enhancing competitiveness by ensuring the efficiency and independence of auditing processes, enhancing comprehensive disclosure when preparing financial statements, and adhering to the rules of professional conduct (Muhammad and Al-Karim, 2019). Moreover, Yazid (2016) confirms that internal auditing enhances competitiveness by providing basic information to management and evaluating risk management, internal controls, and adherence to governance principles. This view was supported by Ali (2018), whose study indicated that internal audit governance plays an important role in raising institutional competitiveness through consulting and assurance services.

The second main hypothesis, which proposed that improved risk management has no effect as a mediating variable between the modern approach to internal auditing (RBIA) and supporting competitive advantage, was also rejected. The alternative hypothesis was accepted, showing that improved risk management does have a mediating effect, increasing the impact of the modern internal audit approach on supporting competitive advantage to 75%.

According to the IIA and the study by Drogalas and Siopi (2017), internal audit adds value by improving risk management, a finding echoed by Tamimi (2021), who noted that the effectiveness of risk management is strongly linked to the efficiency of the risk manager and the internal audit's focus on evaluating risk management practices. Moreover, Odoyo et al. (2014) highlighted the importance of organizational commitment to supporting internal audit's role in risk management, while Beasley et al. (2006) stressed the need for senior management's backing to integrate internal audit into risk management effectively. In the same context, Radhakrishnan (2019) advocated for banks to adopt RBIA, not only for mitigating risks but also for anticipating them, giving internal auditors a more strategic role.

The evolving role of internal auditors in risk management was further emphasized by Sarens and De Beelde (2005), who argued that a shift towards risk-based auditing is necessary for auditors to play a more significant role in this area. Ayagre (2014) confirmed this by finding that organizations increasingly adopted RBIA due to its ability to prioritize high-risk areas. Yang et al. (2018) also demonstrated that effective risk management practices significantly impact competitive advantage and performance in small and medium enterprises. Finally, the study of Falih et al. (2020) in the Iraqi banking sector showed that, identified a positive impact of operational risk management on competitive advantage, suggesting that addressing operational risks enhances the competitiveness of banks and strengthens the industry's overall performance.

In conclusion, the results of this study, along with the corroborating literature, underscore the critical role of modern internal audit approaches and risk management in bolstering competitive advantage across various sectors.

6. CONCLUSION

Given the increasing complexity of financial markets and the distinct risk-sharing principles in Islamic finance, effective risk management is crucial for the stability and success of Islamic banks. These banks face higher risks due to products like Mudaraba and Musharaka. They need to focus on managing these risks rather than avoiding them to maintain profitability and competitiveness. The modern approach to internal auditing (RBIA) plays a pivotal role in improving risk management processes and enhancing the competitiveness of these banks.

This study aimed to explore the role of improved risk management as a mediating variable between the modern approach RBIA and supporting competitive advantage in Yemeni Islamic banks. The data was collected from 8 Islamic banks in Aden, representing a significant part of the Yemeni banking sector. Although these results may not be generalizable to other banking environments, Yemeni Islamic banks play a vital role in the nation's financial structure.

The study confirmed the crucial role of improving risk management in strengthening the relationship between the modern approach RBIA and competitive advantage. When risk management was introduced as a mediating factor, the effect of RBIA on competitive advantage increased significantly, from 28.3% to 75%. This indicates that improved risk management is a transformative element that substantially enhances the benefits of applying the RBIA. Islamic banks can thus achieve measurable improvements in competitive performance by integrating RBIA with robust risk management practices. This highlights the need for continuous monitoring and resource optimization to bolster competitiveness.

Moreover, these findings suggest that Islamic banks should invest in developing integrated risk management and internal audit systems to maximize their benefits. This integration should be supported by senior management and foster cooperation between the internal audit department, risk management, and other control functions to enhance the overall effectiveness of internal audit activities in risk management. Finally, future research should broaden the scope to include all Yemeni Islamic banks under the supervision of the Central Bank of Yemen. It should also explore the effect of The RBIA approach in supporting competitive advantage through other mediating variables.

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