The Role of Financial Management Practices in Risk Management: Evidence from Malaysian Mosques

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ABSTRACT

Managing financial and operational risks is increasingly critical for mosques due to persistent vulnerabilities in internal controls and heavy reliance on public donations. The study investigates the influence of financial management practices, specifically budgeting, asset management, financial reporting, and auditing, on risk management within Malaysian mosques. Using a quantitative survey design, 206 valid responses from mosque committee members across Malaysia were analysed via Partial Least Squares structural equation modelling. The findings indicate that auditing and budgeting exert a statistically significant positive impact on risk management, with auditing emerging as the primary predictor. Conversely, financial reporting and asset management show no significant direct relationship with risk management, suggesting these practices currently operate as retrospective compliance or tactical routines rather than proactive risk mitigation tools. These findings provide critical insights for State Islamic Religious Councils, religious authorities, and mosque administrators, highlighting the necessity of institutionalizing routine audits and proactive budgeting to strengthen overall financial governance, improve accountability, and safeguard public trust.

Keywords: Financial Management, Risk Management, Mosque, Malaysia.

INTRODUCTION

Derived from the Arabic root *sa-ja-da*, meaning a place of prostration (*mauḍiʿu al-sujud*), the mosque is fundamentally interpreted as the center of Islamic worship (Mohd Khalli & Mohd Sharif, 2024). Linguistically and physically, it serves as a space where prostration is performed in devotion to Allah (Imamuddin & Insaniah, 2024). Beyond its material and architectural foundation, the mosque functions as a vital institution for the Muslim community, acting as a multi-dimensional hub for worship, social cohesion (JAWI, 2019), educational programs, and socio-economic enterprise (Ali et al., 2022). Historically, mosques served as centers for governance, the judiciary, education, and social development (Petersen, 2002).

In Malaysia, where Islam is practiced by approximately 60% of the population, thousands of mosques exist across diverse historical and aesthetic contexts, ranging from rural prayer rooms to large urban complexes (Hamdan et al., 2023). Malaysia currently houses over 6,800 mosques, with the number growing annually (Mohd Khalli & Mohd Sharif, 2024). These institutions fulfill both spiritual and social needs, serving as inclusive spaces that foster community building while reinforcing believers' connection to Allah. To execute these multifaceted roles effectively, mosques operate under a centralized governance structure led by the Majlis Agama Islam Negeri (State Islamic Religious Councils, SIRCs) under their respective state Sultans. Working in coordination with the Jabatan Agama Islam Negeri (State Departments of Islamic Affairs) and the Jabatan Kemajuan Islam Malaysia (JAKIM), SIRCs oversee mosque administration to preserve religious sanctity and establish operational policies.

At the grassroots level, local mosque committees execute these state policies within daily operations. They also carry out orders from the state religious authorities and serve as intermediaries to express local wants and needs to the rulers. Malaysian mosques are financed through diverse sources, including restricted and unrestricted domestic and foreign donations, as well as government grants. Therefore, sound mosque management with proper financial controls would be a prerequisite for all these resources to be properly leveraged and carried out in an Islamic way. Accounting for the wide range of sources of funds, systematic financial management is an inevitable function in relation to operations, accountability, and institutional viability (Mohamed et al., 2023). Increased transparency in funds utilisation, improved operational efficiency along with compliance with organisational policies and legal requirements are also other benefits of robust financial management processes (McKinney, 2015). Prior studies provide evidence of financial management and internal control weaknesses since they have largely focused on existing control practices rather than the systematic management of risks underlying such weaknesses. In particular, limited attention has been given to whether mosque administrators proactively identify, assess, and respond to potential risks associated with financial management. This gap highlights the importance of examining risk management as a distinct organisational control practice within Malaysian mosques, particularly in relation to their responsibility to safeguard financial resources, maintain accountability, and ensure that funds are managed effectively and in accordance with their intended purposes.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Risk Management

Risk management is a critical component of organisational control, particularly because organisations operate in environments characterised by uncertainty that may influence the achievement of financial, operational, and strategic objectives (Eyinade et al., 2025). To adequately address these uncertainties within the context of mosque administration, it is essential to distinguish financial risk management from broader operational risk management. Financial risk management specifically focuses on safeguarding monetary resources and financial integrity, mitigating threats such as liquidity shortages, fund mismanagement, internal control breakdowns, and fraud. In contrast, operational risk management addresses non-financial disruptions to day-to-day functions, including physical hazards (e.g., natural disasters, theft, structural degradation), sudden turnover in key personnel, and technological failures. Kong et al. (2018) highlighted the importance of risk management alongside other control-related mechanisms, including ethical values, segregation of duties, review processes, and information and communication. In an organisational context, risk management involves the systematic identification of potential risks, assessment of their likelihood and potential consequences, and implementation of appropriate responses to minimise their adverse effects on organisational activities. Callahan and Soileau (2017) found that organisations with more mature enterprise risk management processes tend to achieve better operating performance, while Leech (2018) emphasised that risk management should be integrated into organisational decision-making processes. These findings suggest that risk management should not be viewed solely as a reactive mechanism for addressing problems after they occur; rather, it is a proactive organisational process that enables institutions to anticipate uncertainty, strengthen decision-making, and align their activities with established objectives.

The relevance of risk management is particularly significant in Islamic fund-management institutions, where financial resources are entrusted to organisations to support religious, social, and community-oriented objectives. Widagdo and Rokhlinasari (2024) identified several risks associated with religious institutions, including risks related to productive fund management, information technology, competition, and criminal activities, thereby highlighting the need for systematic risk identification and mitigation. Similarly, Sobaya et al. (2026) identified operational risks associated with fund management, programme development, and *zakat* (endowment) distribution in Islamic religious institutions. These findings indicate that Islamic institutions responsible for managing public and charitable funds are exposed to diverse financial and operational risks. Consequently, systematic risk management is essential to ensure that financial resources are protected, managed effectively, and utilised in accordance with organisational objectives and the principles of accountability and *amanah* (trust).

Within the context of Malaysian mosques, the need for effective risk management is further supported by evidence of weaknesses in financial management and internal control practices. Adil et al. (2013) found that

accurate recording of financial transactions, accountability, and effective internal controls were important for strengthening financial management in Malaysian mosques. Similarly, Sallehhuddin et al. (2017) identified internal supervision and effective control mechanisms as important factors contributing to the successful management of mosque cooperatives. More recently, Wan Ali et al. (2025) reported weaknesses in financial-source documentation and compliance with cash-deposit procedures among Malaysian mosques.

Financial Management and Risk in Mosques

Mosque management, particularly within the management of financial administration, must comply with the high standards of transparency and accountability so as in particular at all times as a matter of financial governance and due control. It is the keystone of public confidence in the financial management of religious institutions in particular, as that requires demanding higher transparency and accountability standards so as to sustain confidence in the use of funds. Chaniago et al. (2024) note that proper supervision of mosque funds is highly dependent on strong human resources, effective internal control systems, and the promotion and coordination of stakeholders, which also contribute to security of governance that protects financial sustainability against financial impropriety and the chance of misuse. Thus, in line with the view of Setiawan (2024), comprehensive mosque financial management includes the elements of financial planning, fundraising, fund usage performance, reporting activities, attention towards fraud prevention and adhering to Islamic ethical standards. Therefore, strategic budgeting, management of assets, organized financial reporting, and auditing are employed in order to enable the mosque management to better meet their social and religious duties in the community, while generating faith in the mosque and increasing the involvement of the people.

Budgeting

Budgets serve as a central instrument supporting organizations with short term planning, operational control, and financial risk mitigation (Bergmann et al., 2020). Budgeting is widely regarded as one of the most critical decisions a financial manager must undertake (Michelon et al., 2020), as sound allocation directly reduces operational uncertainty and exposure to liquidity shocks. At the institutional level, studies on budgeting practices within mosque institutions highlight noticeable variation in how financial planning and risk controls are executed. Zakaria and Ilias (2023) argued that enhancing budgeting practices through clear allocation, long term planning, and continuous monitoring helps mosques manage financial resources effectively while safeguarding against deficit risks. For instance, Wibowo et al. (2024) observed that mosques using a structured two stage procedure, budget preparation followed by ratification, adopt a bottom up, participatory approach that aligns operational needs with available funds, thereby mitigating resource misallocation risks. Similarly, Islamiyah (2019) noted that early budgetary control acts as an essential monitoring mechanism to prevent overspending and ensure financial stability prior to program execution.

However, not all mosques maintain an operationalized budgeting process, leaving them vulnerable to unmitigated financial risks. Shaharuddin and Sulaiman (2015) observed that *qaryah* (community) mosques primarily conducted basic transaction recording, lacking integrated budget forecasting and proactive risk monitoring. Adil et al. (2013) reported similar shortfalls, noting that district mosques lacked the participatory planning seen in state or national mosques, largely because standard budget allocations diminished their incentive to actively model and manage financial risk. Crucially, Omar et al. (2015) highlighted a complete breakdown of formal procedures in certain district mosques, which operated without formal budgets and relied entirely on ad-hoc prayer donations. This total reliance on volatile cash inflows severely limits strategic planning and leaves mosques exposed to severe liquidity shortages and operational disruptions. Because effective budgeting establishes the control structures needed to anticipate financial volatility and prevent resource mismanagement, the following hypothesis is proposed:

H1: Budgeting positively influences risk management in Malaysian mosques.

Financial Reporting

Proper accounting and financial reporting enable stakeholders to monitor how religious institutions manage entrusted funds, thereby fulfilling organizational accountability and mitigating the risk of financial

mismanagement (Sulaiman et al., 2016; Zahirah & Suhaedi, 2025). However, applying commercial accounting standards directly to non-profit entities like mosques can be problematic, as standard commercial metrics fail to reflect the unique financial structures and operational goals of religious organizations (Nahar & Yaacob, 2011). Without tailored reporting frameworks, mosques face heightened reporting errors and governance risks that compromise stakeholder trust.

In Malaysia, many mosques align their reporting with guidelines mandated by State Islamic Religious Councils (SIRCs). For instance, Islamiyah (2019) observed that financial activities in Selangor mosques were conducted under local religious office regulations, requiring full disclosure of income and expenditures during regular administrative meetings. This structured reporting environment establishes continuous recording and review mechanisms, significantly lowering the risk of unrecorded financial leakage. Supporting this, Sarif et al. (2018) noted that strong statutory compliance among mosques, adhering to legal and religious frameworks, exposes financial statements to systematic oversight, thereby strengthening internal controls and audit readiness. Despite existing regulatory frameworks, significant operational challenges persist at the mosque level. Mohammed et al. (2025) emphasized that many mosque management committees lack formal technical competencies, hampering their ability to produce timely, accurate, and transparent financial reports. Compounding this challenge is the widespread reliance on manual record-keeping. Zakaria and Ilias (2023) revealed that nearly 80% of surveyed mosques continue to rely on non-computerized accounting systems. Manual bookkeeping not only delays reporting timelines but also introduces substantial risks of human error, data distortion, and fraud. These deficiencies severely compromise data integrity and erode donor confidence, highlighting the urgent need for standardized, computerized reporting systems to bolster accuracy, credibility, and proactive risk control.

Furthermore, financial reporting serves as a critical mechanism for driving transparency and risk governance in faith-based organizations. Nevertheless, empirical literature reveals that reporting practices remain inconsistent across different mosque tiers. Hussin et al. (2022) observed that while SIRCs maintain formal records for major *waqf* land assets, directly received *waqf* contributions and localized endowment funds are frequently omitted or misclassified due to inconsistent accounting practices. Such reporting omissions create substantial compliance lapses and conceal financial vulnerabilities. Because standardized, transparent financial reporting provides the necessary audit trails and oversight to identify, evaluate, and mitigate organizational risk, the following hypothesis is proposed:

H2: Financial reporting positively influences risk management in Malaysian mosques.

Asset Management

Asset management refers to the systematic, coordinated, and sustainable handling of an organization's physical and financial resources, encompassing planning, operation, maintenance, risk control, and long-term value realization (Muin et al., 2021). Physical resources encompass tangible assets such as land, buildings, furniture, and vehicles, whereas financial resources include monetary holdings, investments, and digital financial records. Effective asset management serves as a primary defensive mechanism, directly safeguarding these resources against physical degradation, financial fraud, and operational failure. Recent studies on Malaysian mosque management report uneven progress, as many institutions struggle to manage their physical and financial assets in a systematic and strategic manner. Muin et al. (2021) observed that only 50% of state mosques in Peninsular Malaysia have adopted core elements of asset management. While these leading institutions demonstrate structured practices, others struggle with facility strategy formulation, service requirement analysis, implementation, and continuous monitoring. Lacking formal asset protocols leaves these mosques vulnerable to physical deterioration and unmonitored operational risks, underscoring the need to enhance asset management quality to ensure organizational resilience (Omar et al., 2015).

This management gap is particularly pronounced in physical asset optimization and internal financial control. Omar et al. (2015) noted that while routine income and expenditure are often tracked, strategic asset management remains weak; many mosques hold low-yield savings accounts or leave tracts of land idle, incurring significant opportunity-cost risks. Furthermore, Zakaria and Ilias (2023) highlighted that some mosques maintain key financial items, such as checkbooks, in unsecured locations and process most transactions in cash. Such informal practices heighten exposure to financial loss, unauthorized usage, and internal control risks. Implementing robust

security measures, integrating banking systems, and establishing formal accountability within asset management frameworks actively mitigate these fraud and liquidity risks. Strategic asset management also extends to physical infrastructure and architectural safety. Sharif et al. (2019) demonstrated that mosques adopting sustainable architectural practices maintain superior asset management policies, effectively balancing social, environmental, and economic factors. Beyond enhancing utility and aesthetics, proactive physical asset management lowers structural safety hazards and mitigates environmental risks, ensuring long-term infrastructural sustainability.

Despite these benefits, critical gaps in safety and risk evaluation persist. Halim et al. (2020) found that mosques had yet to adopt comprehensive safety audit guidelines, leading to inadequate assessments of building structural integrity and hazard prevention. The absence of structured safety audits indicates a clear need for integrated asset management frameworks that proactively identify, evaluate, and reduce physical hazard risks. Incorporating safety audits into routine asset management ensures facilities remain safe, functional, and resilient while extending infrastructural lifespans. Because systematic asset management provides the control structures necessary to identify physical, financial, and operational vulnerabilities, the following hypothesis is proposed

H3: Asset management positively influences risk management in Malaysian mosques.

Auditing

Auditing acts as a vital control mechanism in any organization, systematically evaluating decision making processes and resource allocation to prevent inappropriate financial or operational practices (Grossi et al., 2023). Both internal and external audits perform complementary risk management functions: internal audits assess adherence to internal policies, operating procedures, and control standards, whereas external audits provide independent verification of statutory compliance and financial accuracy, thereby mitigating legal and reputational risks. In nonprofit entities such as mosques, regular auditing is essential to safeguard community entrusted funds, maintain financial transparency, and establish robust operational accountability (Azwar & Usman, 2024).

Empirical evidence demonstrates that while Malaysian mosques utilize various auditing mechanisms, their scope, regularity, and risk mitigation effectiveness vary considerably. State Islamic Religious Councils (SIRCs) oversee mosque governance. However, Ali et al. (2023) observed that SIRC audits are frequently reactive, triggered primarily by public complaints rather than executed as routine risk prevention measures, due to institutional resource constraints. Similarly, Kamaruddin et al. (2024) highlighted that many Islamic nonprofit institutions lack formal internal audit mechanisms to objectively evaluate performance. Deficiencies such as untrained financial personnel, inadequate physical security controls, missing internal auditors, and constrained funding leave these institutions highly exposed to unmonitored financial leakage and operational failure.

Beyond passive monitoring, the auditing process serves an active educational and risk mitigation function. Islamiyah (2019) argued that systematic audit frameworks provide structured direction for mosque administrators, helping them prepare accurate financial statements and activity reports while building essential administrative competencies. In addition, Md Zain et al. (2020) observed that insufficient audit oversight erodes administrative confidence and leaves mosques highly vulnerable to accounting errors, operational inefficiencies, and asset mismanagement, risks that are particularly acute in mosques run by inexperienced personnel. Because systematic auditing establishes the oversight required to detect irregularities and mitigate organizational exposure, the following hypothesis is proposed:

H4: Auditing positively influences risk management in Malaysian mosques.

Research Framework

The research framework was developed to examine the relationship between financial management practices and risk management in Malaysian mosques. Drawing on the relationships identified in the preceding literature review, financial management practices are conceptualised through four dimensions: budgeting, asset management, financial reporting, and auditing. These dimensions represent the independent variables, while risk management serves as the dependent variable. The framework proposes that effective financial management

practices can contribute to the systematic identification, assessment, and mitigation of risks associated with the management of mosque resources. Accordingly, the proposed relationships provide the basis for the four hypotheses developed in this study, as illustrated in Figure 1.

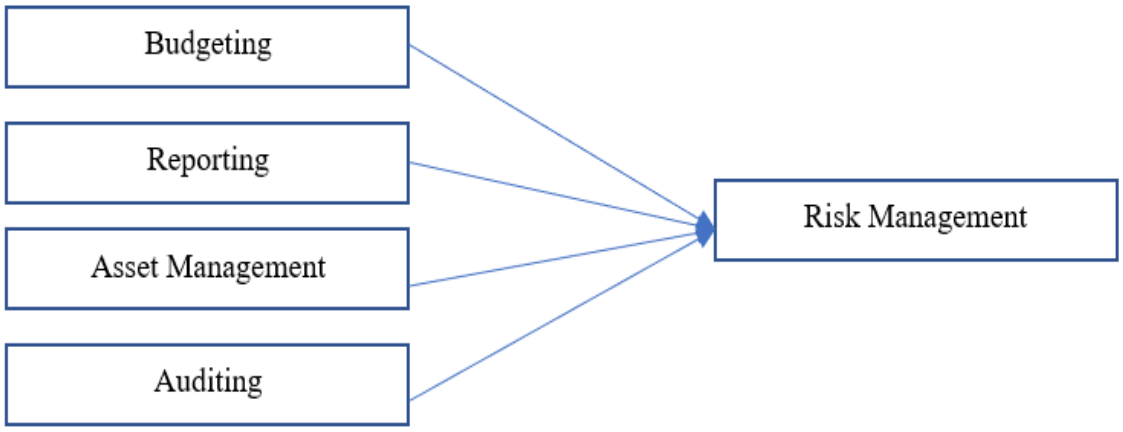

Figure 1: Research framework

METHODOLOGY

Research Design

This study utilizes a quantitative method in the form of a survey. The survey method approach is used to examine the relationship between financial implementation of financial (budgeting, asset management, financial reporting and auditing) and risk management of mosques in Malaysia. The research instrument used for this study is a questionnaire, which is considered to be the preferred research instrument for the survey method approach.

Population, Sample, and Data Collection

The unit of analysis for this study is the individual mosque committee member responsible for overseeing or executing financial management practices within their respective institution. To capture a comprehensive geographical distribution of respondents across all states in Malaysia, a stratified purposive sampling strategy was employed. Mosques were first geographically stratified by state to ensure nationwide representation, after which specific institutions were selected based on their operational status under the jurisdiction of the State Islamic Religious Councils (SIRCs). To prevent institutional bias and ensure a wide representation of different mosques, the data collection protocol restricted responses so that a maximum of one to five key committee members for examples chairman, treasurer, secretary, or general committee member represented the same institution.

A total of 400 sets of questionnaires were distributed to the selected respondents starting from July 2025 until December 2025. Official permission to conduct the research was formally obtained from the respective SIRCs before proceeding with data collection in the selected mosques across the states. Out of the total number distributed, 219 sets of questionnaires were returned to the researchers. However, only 206 sets were selected for analysis, as 13 sets were deemed incomplete. Incomplete responses were strictly excluded and not considered for the final data analysis to maintain data integrity.

Research Instrument, Data Analysis and Model

The questionnaire consists five sections. Section A focuses on demographics profile of the respondents. The questions in Section A include gender, age, post, year of experience, academic background and number of persons in charge in managing financial. Sections B, C, D and E represent the dimensions of financial management, namely budgeting, asset management, financial reporting and auditing respectively which adapted from Kaawaase et al. (2021), Matsoso et al. (2021), Ogbuagu (2023), and Sulaiman et al. (2022). Meanwhile, section F represents risk management items in the survey. To capture the dual nature of organizational threats

discussed in the literature, risk management was operationalized in this study as a comprehensive construct encompassing both operational and financial risk mitigation strategies *(see appendix)*. Section C, D, E and F contain six items respectively, while Sections B, contains 5 items. The total number of items in the questionnaire is 29. Each item is measured using a 5-point Likert scale (Strongly Agree = 5; Agree = 4; Somewhat Agree = 3; Disagree = 2; and Strongly Disagree = 1).

The study applied Partial Least Squares Structural Equation Modeling (PLS-SEM) through SmartPLS 4 to evaluate the directional associations between financial management variables and risk management. Prior to conducting the main analysis using PLS-SEM, a preliminary data screening process was carried out to ensure the accuracy, validity, and reliability of the dataset.

This research utilized a structural model to investigate the influence of financial management elements (Budgeting (B), Asset Management (AM), Financial Reporting (FR) and Auditing (A)) on Risk Management (RM) in Malaysian Mosques. The model was formulated as follows:

$$RM = \beta 0 + \beta 1B + \beta 2AM + \beta 3FR + \beta 4A + \varepsilon$$

Where:

RM is Risk Management (the dependent variable), while B, AM, FR, and A are the independent variables:

β0 is the y-intercept;

β1, β2, β3, and β4 are the coefficients of the independent variables, and ε is the error term.

Figure 2 illustrates the pathways of the relationships between the different dimensions of the independent variables and the dependent variable.

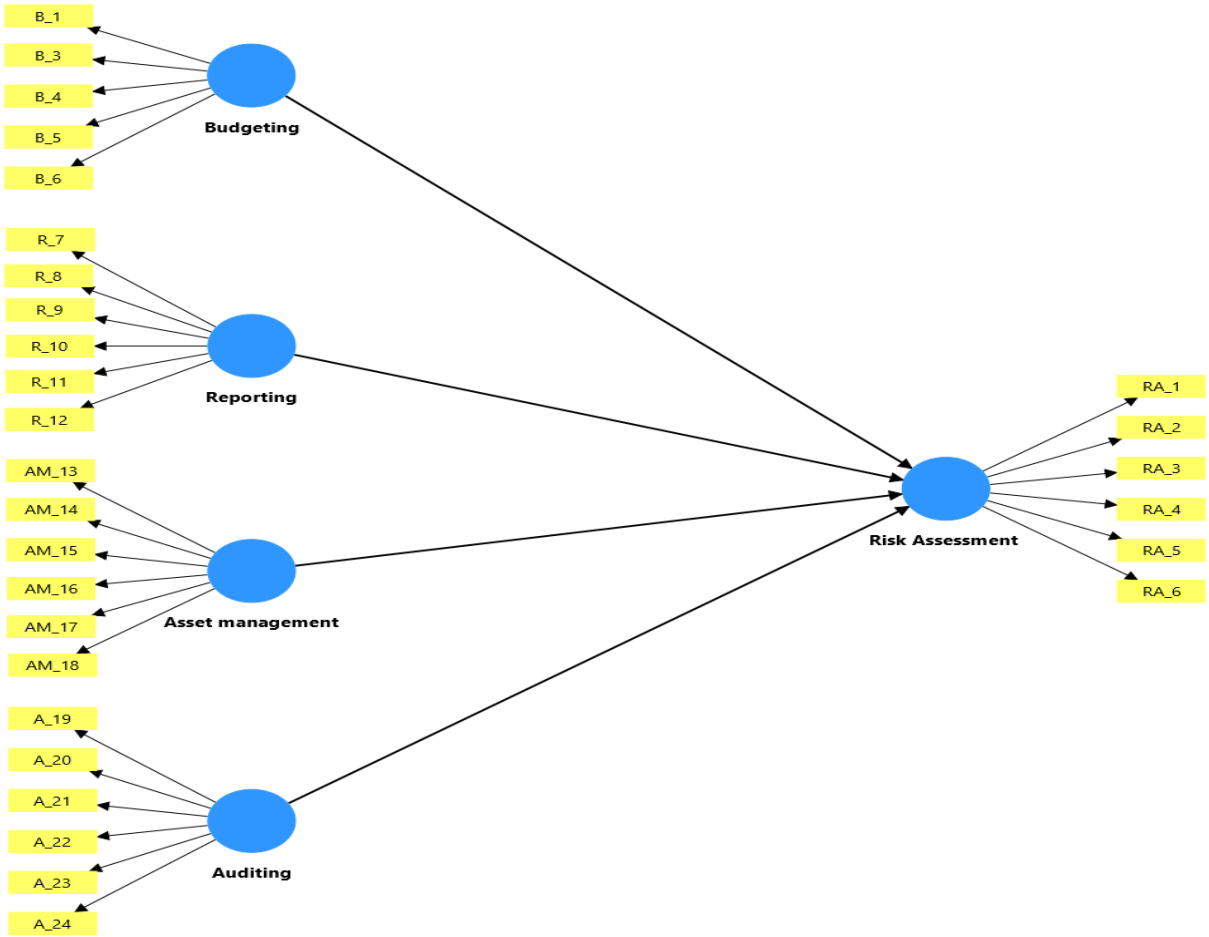

Figure 2: Pathways of the relationships among financial management and risk management

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FINDINGS

Demographic Profile

Table 1 presents the demographic characteristics of the respondents involved in this study.

Table 1: Demographics Profile of Respondents (N = 206)

Demographics	Items	N	Percentage
Gender	Male	175	85%
	Female	31	15%
Age	30 years old and below	33	16%
	31-40 years old	41	19.9%
	41 years old and above	132	64.1%
Position	Mosques Chairman	8	3.9%
	Secretary	35	17%
	Treasurer	37	18%
	Committee Member	60	29.1%
	Others	66	32%
Academic qualifications	Diploma or equivalent	71	34.5%
	Bachelor's degree	61	29.6%
	Master's degree	15	7.3%
	PhD	1	0.5%
	Professional	2	1.0%
	Others	56	27.2%
Experience in the current position	Less than 1 year	18	8.7%
	1 - 5 years	98	47.6%
	6 years and above	90	43.7%
Number of committee members who manage the financial part	1	58	28.2%
	2	66	32%
	3	74	35.9%
	4	4	1.9%
	5	2	1.0%
	6	2	1.0%

Source: Authors' own work

The sample consisted mainly of men (85%) and women (15% of the total sample). This demonstrates the gender distribution of management committees within the mosque, the majority of which are male. In terms of age, the respondents were aged 41 years or over (64.1%) followed by 31 to 40 years (19.9%). The smallest part of the sample was for respondents aged 30 and under, representing 16%. This sample distribution indicates that financial management positions at the mosque are held by participants with a significant life and organisational experience. For a position in the mosque committee, most respondents (29.1%) were members of the committee, with responses on the spectrum of other roles (32%). Treasurers were 18 percent and secretary representatives were 17 percent, with mosque chairmen at 3.9 percent. This means the financial-management responsibilities are shared and held across multiple committees, which is not all a single position.

In the case of educational factor, it should be mentioned that diploma holders (34.5%) made up the largest proportion of sample followed by the respondents who had bachelor's or equivalent qualification (29.6%). Master's degree holders accounted for 7.3%, with few people holding a PhD (0.5%) and professional credentials at 1.0%. In addition, 27.2% of respondents had an academic qualification other than the one described above, showcasing a diverse range of previous academic experience contributing to the diversity among mosque committee members. Relating to experience in the current role, nearly half (47.6%) of respondents had worked one to five years and 43.7% six years or more experience. Only 8.7% of them have been in their position for less than a year, which suggests a governance structure at mosque committees, relatively stable. Finally, the number of committee members responsible for managing financial matters varied across mosques. Most respondents reported having three members managing financial affairs (35.9%), followed by two members (32%) and one member (28.2%). Only a small proportion indicated having four or more members involved in financial management, reflecting relatively lean financial governance structures.

Measurement Model Analysis

Before testing the proposed hypotheses, the measurement model was first assessed to establish whether the research constructs achieved acceptable levels of reliability and validity. In accordance with the recommended PLS-SEM procedure, the assessment considered indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. This evaluation is essential to confirm that the observed indicators appropriately measure their respective latent constructs before proceeding to interpret the structural relationships (Sarstedt et al., 2022).

Figure 3 presents the measurement model estimated using the PLS algorithm. The model consists of four exogenous constructs representing the four financial management components and one endogenous construct representing risk management. The measurement model shown in Figure 2 provides the basis for assessing indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.

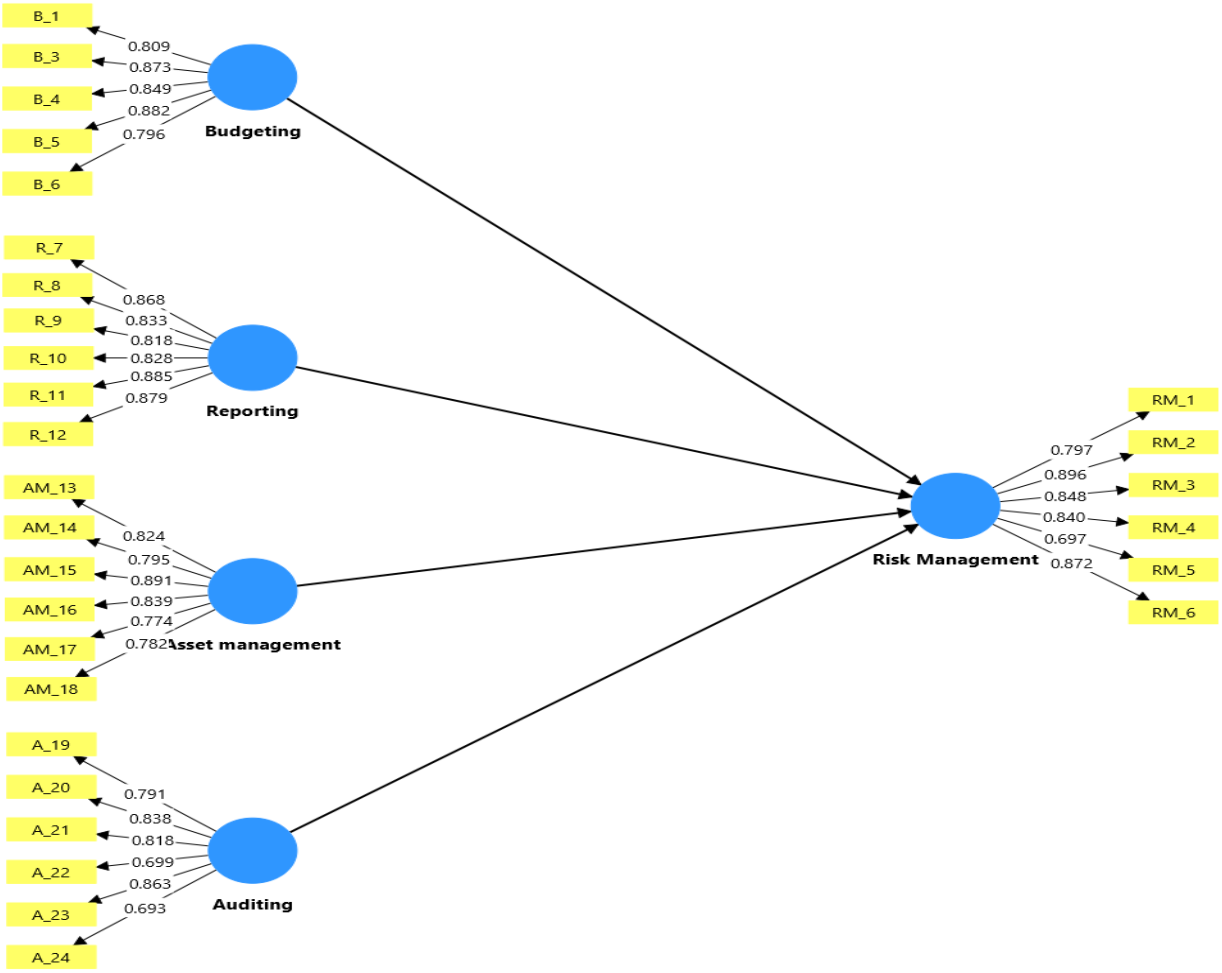

Figure 3: Measurement model estimated using PLS algorithm

Table 2 presents the results of the assessment of indicator reliability, internal consistency reliability, and convergent validity for all constructs in the measurement model. The findings demonstrate that the measurement model satisfied the recommended reliability and validity requirements. The composite reliability values ranged from 0.906 to 0.941, which were above the recommended threshold of 0.70, indicating a high level of internal consistency among the measurement items (Sarstedt et al., 2022). Likewise, the Average Variance Extracted (AVE) values ranged from 0.618 to 0.727, showing that each construct accounted for more than 50% of the variance in its respective indicators and, consequently, demonstrated adequate convergent validity.

Most indicator loadings exceeded the recommended threshold of 0.70, indicating that the observed indicators provided adequate representation of their respective latent constructs. However, auditing value (A24) recorded a loading of 0.693, while risk management value (RM5) had loading 0.697. These indicators were retained because the respective constructs continued to achieve the recommended composite reliability and AVE thresholds. Furthermore, the retained indicators captured conceptually significant dimensions of their respective constructs, thereby supporting the content validity of the overall measurement instrument (Sarstedt et al., 2022).

Table 2: Measurement model results

Construct	Indicators	Loading range	Composite reliability	AVE
Budgeting	5	0.796–0.882	0.924	0.71
Reporting	6	0.818–0.885	0.941	0.727
Asset Management	6	0.774–0.891	0.924	0.67
Auditing	6	0.693–0.863	0.906	0.618
Risk Assessment	6	0.697–0.896	0.928	0.685

Discriminant validity was further assessed using the Heterotrait–Monotrait ratio (HTMT). The results presented in Table 3 show that all HTMT values were below the recommended threshold of 0.90, confirming that the constructs were sufficiently distinct from one another and demonstrated satisfactory discriminant validity (Henseler et al., 2015; Sarstedt et al., 2022).

Table 3: Heterotrait-monotrait Ratio (HTMT) Criteria Results

Construct	Budgeting	Reporting	Asset Management	Auditing
Budgeting				
Reporting	0.847			
Asset Management	0.836	0.861		
Auditing	0.604	0.511	0.604	
Risk Management	0.627	0.538	0.63	0.681

Table 4 reports the results of the discriminant validity assessment based on the Fornell–Larcker criterion. The purpose of this assessment is to establish whether each construct represents a distinct concept that can be empirically differentiated from the other constructs in the research model. Under the Fornell–Larcker criterion, discriminant validity is established when the square root of the AVE for each construct is greater than its correlations with all other constructs (Sarstedt et al., 2022).

As shown in Table 4, the diagonal values, which represent the square root of the AVE for each construct, are higher than the corresponding inter-construct correlations. The values for budgeting (0.843), reporting (0.852), asset management (0.818), auditing (0.786), and risk management (0.828) are all greater than their respective correlations with the other constructs. These findings demonstrate that each construct shares greater variance with its own indicators than with other constructs, thereby confirming satisfactory discriminant validity in the measurement model.

Table 4: Fornell-Larcker Criteria Results

Construct	Budgeting	Reporting	Asset Management	Auditing	Risk Management
Budgeting	0.843				
Reporting	0.764	0.852			
Asset Management	0.756	0.792	0.818		
Auditing	0.571	0.493	0.573	0.786	
Risk Management	0.574	0.5	0.578	0.625	0.828

Structural Model Analysis

After establishing the adequacy of the measurement model, the structural model was assessed to examine the hypothesised relationships among the constructs. The assessment included collinearity diagnostics, path coefficients and their statistical significance, the coefficient of determination (R^2), and effect sizes (f^2).

Collinearity Assessment

Table 5 presents the results of the collinearity assessment based on the Variance Inflation Factor (VIF) values. The findings indicate that all VIF values were below the recommended threshold of 5.00, suggesting the absence of serious multicollinearity among the constructs. Therefore, multicollinearity was not considered a concern in the structural model of the study.

Table 5: Collinearity assessment

Predictor Construct	Risk Management
Budgeting	3.338
Reporting	1.596
Asset management	2.999
Auditing	3.244

Path Coefficients and Hypothesis Testing

Based the results shown in Table 6, two out of the four proposed hypotheses were supported. Budgeting had a significant positive relationship with risk management ($\beta = 0.200$, $t = 2.117$, $p < 0.05$), supporting H1. In contrast, reporting did not have a significant relationship with risk management ($\beta = -0.016$, $t = 0.138$, $p = 0.890$); therefore, H2 was not supported. Similarly, asset management did not demonstrate a significant direct relationship with risk management ($\beta = 0.211$, $t = 1.558$, $p = 0.119$), resulting in the rejection of H3. Auditing demonstrated the strongest significant positive relationship with risk management ($\beta = 0.398$, $t = 5.047$, $p < 0.001$), thereby supporting H4.

Table 6: Result of Path coefficient and hypothesis testing

Hypothesis	**Relationship**	**β (Original Sample)**	**t-value**	**p-value**	**Decision**
H1	Budgeting → Risk Management	0.2	2.117	0.034	Supported
H2	Reporting → Risk Management	-0.016	0.138	0.89	Not Supported
H3	Asset Management→ Risk Management	0.211	1.558	0.119	Not Supported
H4	Auditing → Risk Management	0.398	5.047	<0.001	Supported

Coefficient of Determination (R^2) and Effect Size (F^2)

The four predictors explained 47.8% of the variance in risk management (R-squared = 0.478) as shown in Table 7, which indicates substantial explanatory power under the criteria applied in the study. Meanwhile, Table 8 reported effect size was medium for control auditing (f-squared = 0.19) and small for the asset management (f-squared = 0.026) and budgeting (f-squared = 0.026) respectively.

Table 7: Coefficient of Determination (R^2) Results

Endogenous Construct	R-square
Risk Management	0.478

Table 8: Effect Size (F^2) Results

Predictor Construct	Risk Management	Effect Size
Asset management	0.026	Small effect
Auditing	0.19	Medium effect
Budgeting	0.026	Small effect

DISCUSSION

Evaluating the empirical outcomes reveals that the capacity of Malaysian mosques to anticipate and mitigate operational risks depends significantly on the specific financial management practices implemented. Among the four dimensions evaluated, budgeting and auditing demonstrated significant positive effects, whereas financial reporting and asset management did not exhibit direct significant impacts.

The significant positive influence of budgeting on risk management supports H1, reinforcing established literature that identifies budgets as essential proactive mechanisms for organizational control (Bergmann et al., 2020). For Malaysian mosques, structured budgeting enables committees to anticipate revenue volatility and prevent deficit risks. As emphasized by Zakaria and Ilias (2023), systematic allocation and monitoring shield institutions from cash flow shocks. This contrasts sharply with informal setups that rely purely on ad-hoc donations, which leave mosques exposed to severe liquidity shortages (Omar et al., 2015). Contrary to expectations, financial reporting showed no significant direct relationship with risk management resulting in the rejection of H2. While reporting satisfies mandatory SIRC disclosure requirements (Islamiyah, 2019), it currently functions as a retrospective compliance exercise rather than a forward-looking risk mitigation tool. This outcome reflects operational constraints noted in prior studies, including widespread reliance on manual bookkeeping (Zakaria & Ilias, 2023) and limited technical accounting competencies among volunteer committee members (Mohammed et al., 2025). As a result, routine reporting records historical figures without actively identifying strategic vulnerabilities.

In addition, asset management displayed a positive coefficient but did not achieve statistical significance, leading to the rejection of H3. This indicates that asset management practices across Malaysian mosques remain tactical rather than integrated into broader risk frameworks. As Muin et al. (2021) highlighted, asset management adoption remains uneven across states, with many mosques leaving real estate assets underutilized or conducting transactions in cash (Omar et al., 2015; Zakaria & Ilias, 2023). Without comprehensive safety audit standards and long-term asset strategies (Halim et al., 2020), routine asset handling falls short of providing robust risk control. Meanwhile, auditing emerged as the strongest predictor of risk management, strongly supporting H4. This confirms that systematic oversight, including both internal checks and State Islamic Religious Council (SIRC) authority audits, serves as the primary defensive mechanism against financial and operational exposure (Grossi et al., 2023). Specifically, robust auditing effectively bridges both dimensions of risk management; it addresses financial risk by actively detecting fraud and internal control weaknesses, while supporting operational risk management by ensuring structural continuity and compliance amidst personnel or technological disruptions. Also, regular auditing provides necessary diagnostic checks that deter financial impropriety, correct

administrative errors, and enforce strict accountability (Ali et al., 2023; Islamiyah, 2019). Given that mosques rely on public goodwill and donor funds, rigorous audit mechanisms directly safeguard public *amanah* and ensure organizational stability.

CONCLUSION

The study investigates the influence of financial management practices, specifically budgeting, asset management, financial reporting, and auditing, on risk management within Malaysian mosques. Utilizing a quantitative survey design, data were collected from mosque committee members across Malaysia. The structural model explained a substantial proportion of the variance in risk management, revealing distinct direct effects among the financial management dimensions. Specifically, auditing demonstrated the strongest positive relationship with risk management, followed by budgeting, thereby supporting their respective hypotheses. Conversely, financial reporting and asset management showed no statistically significant direct impact on risk management, indicating that routine disclosures and physical asset handling currently operate as retrospective compliance or tactical routines rather than forward-looking risk mitigation tools.

The findings of the study provide essential guidance for SIRCs, religious authorities, and mosque administrators to strengthen overall financial governance, showing that institutionalizing routine audits and proactive budgeting directly safeguards public *amanah* and financial stability. To maximize governance quality, authorities should provide targeted financial training for mosque committee members and encourage institutionalize mandatory periodic internal financial audits and structured supervisory compliance reviews. However, the study is subject to limitations, including its cross-sectional survey design, reliance on self-reported perceptual data, and exclusive focus on Malaysian mosques. Future research should adopt longitudinal or qualitative case-study approaches to explore the underlying operational barriers preventing asset management and financial reporting from contributing directly to risk mitigation, while also extending the model to other religious based institutional contexts.

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APPENDIX

Financial Management Practices

Questions
1. Our mosque frequently updates and reviews budgetary controls.
2. Our mosque has outsourced its budgeting system to external parties.
3. Our mosque uses the annual budget to control mosque operations.
4. Our mosque relies on the annual budget to ensure effective financial management.
5. Our mosque prepares the annual budget by integrating objectives, performance plans, and resource requirements into a single comprehensive document.
Questions
1. Our mosque's financial statements are prepared in accordance with established guidelines.
2. The format of our mosque's source documents is consistent with standards used by other non-profit religious institutions.
3. The figures in our mosque's financial reports can be reconciled with the assets or activities carried out.
4. Our mosque's financial reports are easy to understand and interpret.
5. Our mosque ensures that financial statements are prepared without errors or inaccuracies.
6. Our mosque's financial statements reflect accurate and reliable information.
Questions
1. Our mosque maintains an up-to-date inventory of all assets owned.
2. Our mosque's assets are used solely for operational purposes.
3. Our mosque consistently follows up on the maintenance of all owned assets to ensure they remain in good condition.
4. Our mosque frequently conducts inspections to assess how assets are managed.
5. Our mosque involves certified professionals in asset management governance to ensure integrity and efficiency.
6. Our mosque ensures that all assets are used efficiently from a financial perspective
. **Questions**
1. Our mosque's internal audit committee possesses professional qualifications in accounting and auditing recognized nationally and internationally
2. Our independent internal audit committee conducts assessments without any pressure from management to alter their reports.
3. Our mosque's internal audit committee has prior accounting experience in other organizations before joining this institution.
4. Our mosque committee possesses the necessary experience to understand how the mosque organization operates.
5. Our mosque's audit reports are used as a primary reference by management to support decision-making and strengthen the efficiency of the internal control system.
6.Our mosque evaluates whether the internal accounting and operational control systems function effectively.

Risk Management

Questions
1. Our mosque practices risk management processes for issues such as theft, flooding, asset damage, and others.
2. Our mosque develops and implements alternative strategies to prevent sudden changes in committee members or technology that could threaten the achievement of mosque objectives.
3. Our mosque committee sets clear objectives to enable the process of identifying and assessing risks related to achieving those objectives.
4. Our mosque committee identifies risks to objective achievement and analyses them as a basis for determining how the risks should be managed.
5. Our mosque committee considers the possibility of fraud when assessing risks to achieving objectives.
6. Our mosque committee identifies and evaluates changes that may have a significant impact on the internal control system.