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What Drivers Internal Control System in Islamic Microfinance Institution?

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Abstract

Baitul Maal wat Tamwil (BMTs) in Indonesia continue to face internal and external challenges that underscore the need for effective internal control systems. Although previous research has examined the effectiveness and contribution of internal control systems, evidence regarding the internal and external factors driving their implementation in BMTs remains limited. Drawing on institutional theory, this study analyzes the effects of management commitment, environmental uncertainty, and external pressure on internal control system implementation. A quantitative explanatory survey was conducted involving 95 managers of BMTs affiliated with PUSKOPSYAH D.I. Yogyakarta. Data were collected using a four-point Likert-scale questionnaire administered through the control self-assessment method and analyzed using partial least squares structural equation modeling (PLS-SEM). The findings demonstrate that management commitment, environmental uncertainty, and external pressure have positive and significant effects on internal control system implementation. Management commitment exerts the strongest effect ($\beta = 0.425$), followed by environmental uncertainty ($\beta = 0.296$) and external pressure ($\beta = 0.224$), while the model explains 41.2% of the variance in internal control

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system implementation. These findings highlight the central role of managerial commitment and demonstrate that BMTs adapt their internal controls in response to environmental uncertainty and external pressures. This study extends the application of institutional theory to Islamic microfinance by providing empirical evidence on the internal and external determinants of internal control system implementation in BMTs. Further research should broaden the geographical scope, employ longitudinal designs, and examine additional determinants, including human resource competence, organizational culture, information technology, and supervisory effectiveness.

Keywords: Baitul Maal Wat Tamwil; Environmental Uncertainty; External Pressure; Institutional Theory; Internal Control System

INTRODUCTION

Baitul Maal wa Tamwiil is a microfinance institution that performs two main functions, namely as Baitul Maal (social intermediary) and Baitul Tamwil (financial intermediary), both of which operate under Sharia principles. The development of BMT in Indonesia shows a significant scale with 4,500 units serving 3.7 million people with assets of around Rp 16 trillion (Josua Adrio Sihombing et al., 2024). The large scale of these sharia microfinance institutions indicates the importance of strengthening governance to maintain operational sustainability as well as the trust of members and the community. The role of financing from BMT directly impacts the increase in consumer business volume, access to health and education, thereby ultimately improving household welfare and reducing poverty levels (Tussa'adah, 2024; Wijaya & Fitria, 2023). The presence of BMT in an area not only impacts the local economy but also contributes to social and environmental aspects, thereby supporting the SDGs (Ma'ruf et al., 2025). In addition, BMT also facilitates consumers in obtaining financing without collateral requirements for the unbankable community by mobilizing social funds through zakat, infaq, and shadaqah.

However, BMTs in Indonesia continue to struggle with a variety of internal and external problems. Internally, several BMTs experience fraud due to insufficient internal controls, inefficient supervisory board duties, and suboptimal Annual Member Meetings as accountability mechanisms (Rahajeng, 2022). These conditions are related to the limited number and competence of human resources, which results in frequent double duties. Externally, BMT faces an asymmetric information problem, which is caused in part by a lack of consumer financing data track record, resulting in a suboptimal screening process. The

condition is related to BMT's regulatory and supervisory features, which have yet to be optimized (Khairunnisa et al., 2024).

On the other hand, the characteristics of BMT financing, which are dominated by profit-and-loss sharing products such as mudharabah and musyarakah, carry relatively high risks because BMT bears the consequences of the financed businesses' failure and requires more intensive screening and monitoring processes, which increases costs. The large supervision costs are not comparable to the relatively small quantity of financing, making BMT operations less efficient. This increases the risk of moral hazard for both managers and finance users (Purnama & Amir, 2024). This condition emphasizes the need of the Internal Control System (ICS) as a method to reduce moral hazard risk by improving control activities, risk assessment, information and communication, and supervision (Hasan et al., 2025; Prakosa & Suandi, 2024).

Internal control is a preventive measure that must always be assessed in order to avoid failures caused by moral hazard. Internal control is defined as the integration of regulations, values, vision and mission, plans, and attitudes that are developed and influenced by all members of the organization to ensure that the organization's goals are fulfilled. According to the Indonesian Institute of Accountants, the internal control system is intended to provide assurance in achieving three organizational goals: (a) the reliability of financial reports, (b) operational effectiveness and efficiency, and (c) compliance with applicable laws and regulations, all through a process carried out by the board of commissioners, management, and other personnel. One of the guidelines for implementing internal controls utilizing the Treadway Commission's Committee of Sponsoring Organizations (COSO) framework consists of five components: control activities, risk management, control environment, information and communication, and monitoring. COSO demonstrates the relationship between the three objectives and the internal control components. COSO describes the direct relationship between the organization's objectives and the internal control components required to achieve those objectives, as well as the organizational structure at which internal control will be applied. Internal control's components are interrelated, so if one fails to work properly, internal control cannot be claimed to be effective, even if the other four are already effective (COSO, 2013).

Essentially, the adoption of the internal control system serves the needs of all stakeholders. According to DiMaggio and Powell's institutional theory (1983), profit-

oriented organizations tend to adjust to external pressures such as the government and regulators, customers, society, and other stakeholder groups that have the ability to influence the organization's decisions and practices (Delmas & Toffel, 2008; Sarkis et al., 2010). An organization that prioritizes legitimacy will attempt to align with external or social expectations in the context in which it operates. To compete, firms constantly adapt by adopting the practices of other organizations facing similar external forces (isomorphism).

Environmental uncertainty caused by external factors such as consumers, the government, competitors, or macroeconomic situations is one of the reasons for the requirement for an internal control system. Because in such circumstances, the organization will have difficulty predicting the success or failure of its decisions. In the case of BMT, the uncertainty arises mostly from members (customers), whether financing or funding clients. This is due to the lack of an information system for members of the financial transaction database, as observed in banking financial institutions. As a result, BMT as an organization tends to create control mechanisms that respond to the environmental uncertainties encountered. Management's control efforts get broader as the level of environmental uncertainty increases (Lazuardi, 2025).

In addition to environmental uncertainty, the external reason driving the need for an internal control system is stakeholder pressure on BMT to improve its procedures. As an intermediate organization, BMT's primary function is to manage member and investor funds in accordance with Sharia laws. In carrying out these operations, the organization's sustainability is intimately linked to the community's trust, both members and investors, in BMT's ability to manage assets for profit. Furthermore, as a financial institution with cooperative legal standing, BMT is expected to apply organizational accountability principles in accordance with Permenkop UMKM No. 08/2023. Under pressure from both members and the government, BMT is forced to adapt its organizational management procedures to fulfill stakeholder demands in order to gain and maintain credibility. According to institutional theory, external pressure can cause coercive pressure, encouraging organizations to adopt specific structures, rules, and processes in order to meet the demands of parties with power over the organization's sustainability. On the other side, the successful implementation of the internal control system necessitates dedication and the active participation of management leadership. This is due to the belief that management leaders with a strong commitment can effectively allocate organizational resources to execute the internal control system. Management is responsible not only for developing control policies,

but also for directly implementing and supervising the internal control system (S. W. Putri & Frianto, 2023; Setyorini et al., 2025).

Implementing effective internal control systems has been shown to benefit firms, including improving the reliability, accuracy, and timeliness of financial reports (Faisal et al., 2023; Yasmin et al., 2021). Furthermore, it promotes strong corporate governance and enhances organizational profitability (Lestari & Giyartiningrum, 2025), secures assets, and keeps asset data records (Prajawati et al., 2026). Previous study has concentrated on SPI's effectiveness and contribution, whereas studies on the internal and external factors driving SPI implementation in BMT remain limited. In the context of BMT, SPI adoption can be considered as the organization's response to both internal and environmental challenges. As a result, this study identified management commitment, environmental uncertainty, and external pressure as potential drivers of internal control system implementation. This study aims to analyze the effects of management commitment, environmental uncertainty, and external pressure on the implementation of internal control systems in BMT's by adopting institutional theory as the theoretical framework.

METHODS

This research is an explanatory study that uses a quantitative technique. The independent variables in this study include management commitment, uncertainty, and external pressure, while the dependent variable is the implementation of the internal control system.

Table 1. Operational Definition of Variable

No	Variabel	Dimension	Indicator
1	Dependent Variabel (Y)	Internal Control System (ICS) (COSO, 2013)	1. Control environment 2. Risk management 3. Control activities 4. Information and communication 5. Monitoring
2	Independent Variable (X1)	Management Commitment (KM) (Amanamah et al., 2025)	1. Management integrity 2. Employee training 3. Continuing education 4. Ethical culture in internal control 5. Need for community participation

3	Independent Variable (X2)	Uncertainty (KL) (Nhon et al., 2020; Rachmawati et al., 2025)	1. Customer preferences 2. Regulatory changes 3. Competitor activities 4. Macroeconomic conditions 5. Technology developments
4	Independent Variable (X3)	External Pressure (TE) (Bhuiyan et al., 2023; Hyndman & Liguori, 2024)	1. Legislation 2. Community Criticism 3. Community Organizations

The primary data for this study was collected by a closed questionnaire with a four-point Likert scale distributed to leaders/directors/managers of BMTs linked with PUSKOPSYAH in the D.I. Yogyakarta Province. The questionnaire is filled out using the control-self assessment method (CSA). Meanwhile, secondary data for this study were gathered from literature, journals, and other sources that support the research.

The acquired data is subsequently processed using the PLS analysis tool, which is a variance-based statistical procedure in the Structural Equation Model (SEM). The steps of data analysis are divided into numerous stages, including: 1) Evaluation of the measurement model (outer model) includes testing construct validity (convergent and discriminant) and instrument reliability testing. 2) Evaluation of the structural model (inner model) by looking at R^2, and 3) Hypothesis testing.

RESULTS

Descriptive analysis

The results of the descriptive analysis of respondents' answers to the research variables can be shown in Table 2 and Table 3.

Table 2. Descriptive Results of Exogenous Variable

Independent Variabel	Minimum	Maximum	Mean	St. Deviasi
Management Commitment	2	4	3.47368421	0.51644078
Uncertainty	1	4	2.74526316	0.64333133
Eksternal pressure	1	4	2.91842105	0.67458783

Source : Data testing output

Table 2 reveals that the management commitment variable has the highest mean among the exogenous variables, with an average value of 3.474.

Table 3. Descriptive Results of Endogen Variable

Internal Control System	Minimum	Maximum	Mean	St. Deviasi
Control Environtment	1	4	3.21052632	0.68467642
Risk Management	1	4	3.19578947	0.50061477
Control Activities	1	4	3.25263158	0.53106892
Information and communication	1	4	3.18315789	0.46175519
Monitoring	2	4	3.30263158	0.51927839

Source : Data testing output

Table 3, the endogenous variable of the internal control system, the monitoring indicator, has the highest mean of 3.3026. Both tables show that all constructs have a lower standard deviation than the mean value. The standard deviation value represents the distribution of respondents' answers. A standard deviation less than the mean value indicates that respondents' answers for each construct are positive, with no extreme values.

Measurement Model Evaluation

The measurement model (outer model) depicts the link between indicator blocks and latent variables. The indicator model is reflective because its measurement indicators reflect or exhibit the underlying construct. The measurement model is evaluated to ensure that it is valid and reliable. Before evaluating the measurement model, a reliability test of the endogenous construct, specifically the Internal Control System at the second-order level, will be performed because the endogenous variable is a reflective multidimensional construct that must be tested at a different level. Endogenous concept testing seeks to determine the causal impacts of each dimension of the Internal Control System construct, specifically Control Environment, Risk Management, Control Activities, Information and Communication, and Monitoring.

Tabel 4. Descriptive Results of Endogen Variable

Internal Control System	Indicator	Cronbach's Alpha	VALIDITY
Control Environment	LP_1	0.703	VALID
	LP_2	0.773	VALID
	LP_3	0.657	VALID
	LP_4	0.577	NOT VALID
	LP_5	0.654	VALID
	LP_6	0.522	NOT VALID
Risk Management	MR_1	0.738	VALID
	MR_2	0.621	VALID
	MR_3	0.673	VALID
	MR_4	0.691	VALID

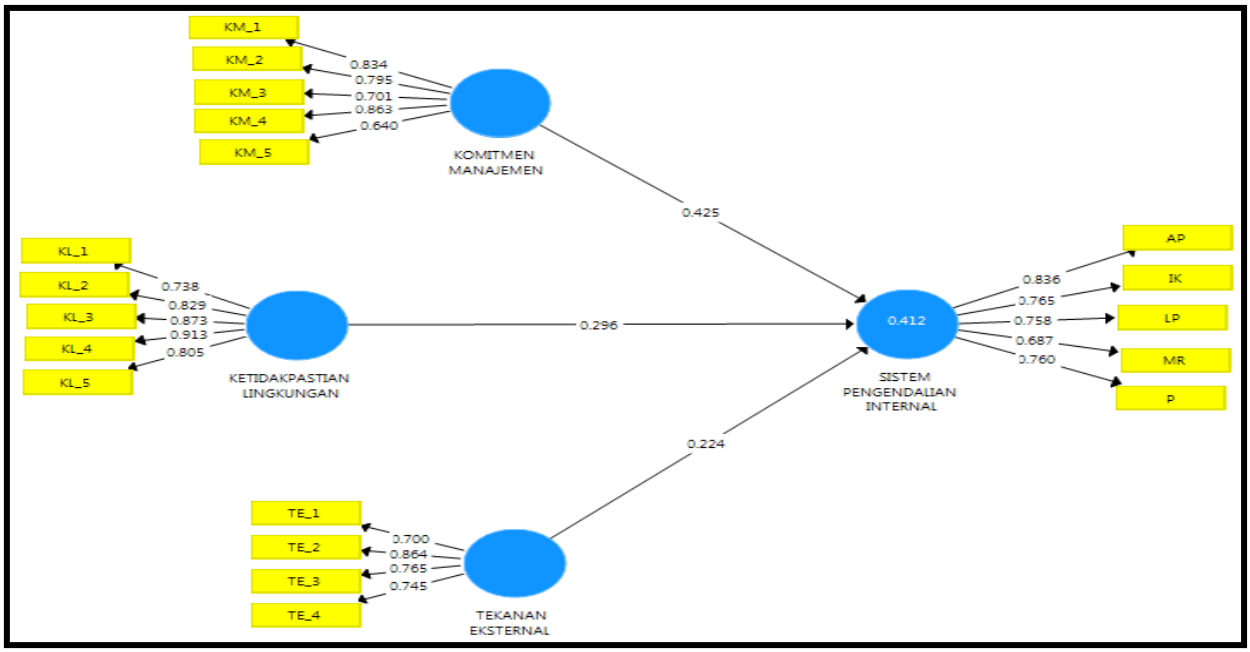
	MR_5	0.71	VALID
Control Activities	AP_1	0.669	VALID
	AP_2	0.686	VALID
	AP_3	0.652	VALID
	AP_4	0.767	VALID
	AP_5	0.732	VALID
Information and Communication	IK_1	0.762	VALID
	IK_2	0.785	VALID
	IK_3	0.837	VALID
	IK_4	0.841	VALID
	IK_5	0.762	VALID
Monitoring	P_1	0.722	VALID
	P_2	0.761	VALID
	P_3	0.656	VALID
	P_4	0.687	VALID

Source : Data testing output

To be considered reliable as a research indicator, Cronbach's Alpha must be above 0.6. Table 4 reveals that two indicators from the Control Environment construct, LP_4 and LP_6, have a Cronbach's Alpha value of less than 0.6. As a result, those two indicators were not included in the later measurement model. As a result, the control environment construct is just represented by four indicators, namely: 1) Establishment of organizational structure and reporting format (LP_1); 2) Management supervision of internal control processes (LP_2). 3) Task and responsibility delegation/LP_3; 4) Integrity in preserving ethical norms and honesty/LP_5. Meanwhile, all indicators in the other constructs show appropriate reliability (Cronbach's Alpha value >0.6), indicating that they are valid assessment methods for each construct. The indicators in each construct with the highest Cronbach's Alpha value are more reliable as measurement tools for the construct.

Convergent Validity Test

The convergent validity test is used to determine the degree of correlation between the measures of a construct. In this study, the convergent validity test for reflective indicators is evaluated using the loading factor, which reveals how effectively each indicator measures a concept. In this study, convergent validity is defined as a loading factor greater than 0.7 and an average variance extracted (AVE) greater than 0.5. The convergent validity test results are shown in Figure 1 and Table 5.



Source : Data testing output

Figure 1. Convergent Validity Test

As seen in Figure 1, each indication is highly valid in representing its construct. However, two indicators with loading values <0.7, namely KM_5 (0.640) and MR (0.687), should be deleted. Nonetheless, indicators with loading scores of 0.5-0.7 are still within the tolerance range if their AVE value is greater than 0.5, and they can be included in the study model.

Table 5. Factor Loading and AVE

Laten Variable	Indicator	Outer Loading	AVE
Management commitment	KM_1	0.708	0,594
	KM_2	0.732	
	KM_3	0.798	
	KM_4	0.648	
	KM_5	0.703	
Uncertainty	KL_1	0,738	0,695
	KL_2	0,829	
	KL_3	0,873	
	KL_4	0,913	
	KL_5	0,805	
External pressure	TE_1	0,700	0,594
	TE_2	0,864	
	TE_3	0,765	
	TE_4	0,745	
Internal Control System	LP	0,758	0,581
	MR	0,687	

	AP	0,836
	IK	0,765
	P	0,760

Source : Data testing output PLS

The table above indicates that the AVE values for each indicator exceed 0.5, hence no indications require elimination. These numbers suggest that the likelihood of these indicators aligning with the specified construct exceeds 50% in comparison to their alignment with alternative constructs. Moreover, the outcomes of the t-test significance assessment indicate that all computed t-values exceed 1.64. Consequently, every indicator inside the research variable is deemed valid.

Discriminant Validity Test

The discriminant validity assessment is performed to verify that the indicators of a construct exhibit a strong connection relative to other constructs. The evaluation of discriminant validity is determined by a cross-loading value exceeding 0.7. Indicators with values ranging from 0.5 to 0.7 are permissible (do not require elimination) provided that the AVE and communality scores of those variables exceed 0.5. The outcomes of the cross-loading in the measurement model are presented in Table 6.

Tabel 6. Cross Loading

Indicator	Management commitment	Uncertainty	External pressure	Internal Control System
KM_1	0,834	0,244	0,071	0,443
KM_2	0,795	0,153	0,131	0,379
KM_3	0,701	0,079	0,103	0,312
KM_4	0,863	0,158	0,159	0,475
KM_5	0,640	0,042	0,076	0,334
KL_1	0,040	0,738	0,170	0,216
KL_2	0,169	0,829	0,233	0,322
KL_3	0,184	0,873	0,036	0,310
KL_4	0,187	0,913	0,112	0,410
KL_5	0,154	0,805	0,097	0,387
TE_1	0,027	0,128	0,700	0,172

TE_2	0,106	0,240	0,864	0,302
TE_3	0,158	0,107	0,765	0,279
TE_4	0,121	-0,042	0,745	0,231
LP	0,453	0,218	0,352	0,758
MR	0,335	0,408	0,211	0,687
AP	0,419	0,312	0,197	0,836
IK	0,383	0,335	0,280	0,765
P	0,348	0,285	0,196	0,760

Source : Data testing output PLS

Table 6 illustrates that the coefficient values for each indicator related to the construct are the most elevated in comparison to other constructs. The environmental uncertainty construct has coefficient values of 0.738, 0.829, 0.873, 0.915, and 0.805, surpassing the coefficient values of other variables, with the peak environmental uncertainty variable at 0.408.

Reliability Tests

The last phase involves performing construct reliability tests to evaluate the internal consistency of the measuring instrument. The dependability of a measurement instrument in PLS can be demonstrated using two approaches: Cronbach's Alpha and Composite Reliability. The general guideline stipulates that Cronbach's Alpha and Composite Reliability values have to exceed 0.7, but a value of 0.6 remains permissible for the measurement instrument to be deemed reliable (Hair et al., 2019). The outcomes of the reliability assessment are documented in Table 7.

Table 7. Reliability Tests

Variable	Cronbach's Alpha	Composite Reliability
Management commitment	0,827	0,879
Uncertainty	0,891	0,919
External pressure	0,775	0,853
Internal Control System	0,819	0,874

Source : Data testing output PLS

Table 7 indicates that the overall constructions are deemed reliable as they exceed the anticipated minimal thresholds for Cronbach's Alpha and Composite Reliability (>0.6). To assess each indicator of every construct, one may examine the t-statistics value of the formative indicators, which should be significant in relation to the construct. The

benchmarks established at a 10% significance threshold require the t-statistics to exceed 1.660, whereas at a 5% significance threshold, the t-statistics must surpass 1.984. Table 8 demonstrates that every signal in this research is statistically significant at both the 10% and 5% thresholds.

Table 7. t value indicator

Path	T Statistics (|O/STDEV|)	VALIDITY
KM_1 <- MANAGEMENT COMITMENT	20,760	VALID
KM_2 <- MANAGEMENT COMITMENT	19,077	VALID
KM_3 <- MANAGEMENT COMITMENT	13,225	VALID
KM_4 <- MANAGEMENT COMITMENT	28,700	VALID
KM_5 <- MANAGEMENT COMITMENT	8,619	VALID
KL_1 <- UNCERTAINTY	4,556	VALID
KL_2 <- UNCERTAINTY	6,678	VALID
KL_3 <- UNCERTAINTY	7,979	VALID
KL_4 <- UNCERTAINTY	9,116	VALID
KL_5 <- UNCERTAINTY	10,005	VALID
TE_1 <- EXTERNAL PRESSURE	3,308	VALID
TE_2 <- EXTERNAL PRESSURE	6,172	VALID
TE_3 <- EXTERNAL PRESSURE	5,062	VALID
TE_4 <- EXTERNAL PRESSURE	4,623	VALID
LP <- INTERNAL CONTROL SYSTEM	15,335	VALID
MR <- INTERNAL CONTROL SYSTEM	4,310	VALID
AP <- INTERNAL CONTROL SYSTEM	16,971	VALID
IK <- INTERNAL CONTROL SYSTEM	11,206	VALID
P <- INTERNAL CONTROL SYSTEM	15,178	VALID

Source : Data testing output PLS

To confirm the absence of multicollinearity in the measuring instruments inside PLS, one can examine the VIF values associated with each indicator. The research tool is shown to exhibit no association with others if its VIF value is less than 5. Table 8 demonstrates the absence of multicollinearity within the research instrument, allowing for the conclusion that each construct is represented by the suitable indicators.

Table 8. Collinearity Statisctic (VIF)

VariablE	Indicator	VIF	CONCLUSION
MANAGEMENT COMITMENT	KM_1	2,305	There is no multicollinearity.
	KM_2	1,877	There is no multicollinearity.
	KM_3	1,519	There is no multicollinearity.
	KM_4	2,328	There is no multicollinearity.
	KM_5	1,329	There is no multicollinearity.

UNCERTAINTY	KL_1	2,216	There is no multicollinearity.
	KL_2	2,666	There is no multicollinearity.
	KL_3	3,472	There is no multicollinearity.
	KL_4	4,173	There is no multicollinearity.
	KL_5	1,884	There is no multicollinearity.
EXTERNAL PRESSURE	TE_1	1,536	There is no multicollinearity.
	TE_2	1,893	There is no multicollinearity.
	TE_3	1,463	There is no multicollinearity.
	TE_4	1,517	There is no multicollinearity.
INTERNAL CONTROL SYSTEM	LP	1,537	There is no multicollinearity.
	MR	1,380	There is no multicollinearity.
	AP	2,131	There is no multicollinearity.
	IK	1,721	There is no multicollinearity.
	P	1,702	There is no multicollinearity.

Source : Data testing output PLS

Structural Model Evaluating

The structural model is corroborated by the R2 statistic to assess the extent of variance in the independent factors' influence on the dependent variable. The R^2 value is deemed weak if it falls below 0.19, moderate if it ranges from 0.2 to 0.33, considerable if it lies between 0.34 and 0.67, and high if it exceeds 0.7. The R^2 outcomes are displayed in table 9.

Table 9. R^2 Variable Dependen

Dependent Variable	R Square	R Square Adjusted
Internal Control System	0,412	0,393

Source : Data testing output PLS

The PLS path modeling estimation produced an R^2 value of 0.412, indicating that management commitment, environmental uncertainty, and external pressure significantly account for 41.2% of the Internal Control System construct, with the remainder attributed to variables not included in the research model.

Hypothesis Testing

This hypothesis testing is performed by analyzing the path coefficient values or T statistics for each pathway to assess the importance among constructs in the structural model. Utilizing the statistical analysis via PLS, the initial sample estimate (path coefficient) is generated, representing the coefficient that elucidates the correlation between the

independent and dependent variables. The coefficient outcomes are validated by juxtaposing the T statistic with the T table (1.64) to evaluate the hypothesis; coefficients are deemed significant if the T statistic exceeds the T table (1.64) at a 5% alpha level. The outcomes of the hypothesis examination are presented in Table 10

Tabel 10. Path Coefficient and T statistic

Relationship between Variables	Original Sample (O)	Sample Mean (M)	T Statistics (|O/STDEV|)	P Values
MANAGEMENT COMITMENT -> INTERNAL CONTROL SYSTEM	0,425	0,413	5,283	0,000
UNCERTAINTY -> INTERNAL CONTROL SYSTEM	0,296	0,292	3,993	0,000
EXTERNAL PRESSURE-> INTERNAL CONTROL SYSTEM	0,224	0,254	1,846	0,033

Source : Data testing output PLS

The findings of the initial hypothesis examination are reflected in the path coefficient of the management commitment variable, recorded as 0.425 with a T statistic of 5.283. The coefficient of 5.283 signifies that a 1% rise in management commitment will improve the execution of the internal control system by 42.5%. This finding indicates that the variable of management commitment has a positive impact on the internal control system by 42.5%, with a p-value (0.000) lower than 5%. The uncertainty variable yielded a route coefficient of 0.296 and a T statistic exceeding 1.64, precisely 3.993. This finding suggests that the variable of uncertainty has a positive influence on the internal control system by 29.6%. The p-value (0.000), which is below 5%, suggests that the uncertainty variable has a considerable impact on the internal control system. The third variable test revealed a path coefficient of 0.224 for external pressure. This coefficient signifies that the external pressure variable exerts a positive influence on the internal control system by 22.4%, and the p-value under 5% demonstrates a substantial causal link between the two variables with a T statistic over 1.64.

DISCUSSION

Impact of management commitment on Internal Control System

The findings from the hypothesis testing indicate a statistically significant positive relationship between management commitment and the execution of the internal control system. The impact of management dedication is the most significant in the execution of the internal control system relative to the other two factors. This suggests that a greater dedication from management leads to a wider use of systems that facilitate the attainment of

organizational performance, encompassing the internal control system. The findings align with the assertions of Amanamah et al. (2025) and Waromi et al. (2024) that the probability of effectively executing changes is enhanced by robust dedication from upper management within a company. Management dedication is essential for all elements of internal control pertaining to the COSO framework. In establishing a control environment, the involvement of management is essential to foster a supportive atmosphere for all organizational personnel to fulfilll their duties within the internal control framework. Conversely, the management's function is essential to guaranty that assignments are allocated to competent personnel and to confirm that the individuals engaged in internal control have executed their duties in accordance with regulations. This aligns with the assertion made by Karatepe et al. (2024) that managerial dedication affects employee conduct in adhering to regulations, thus influencing performance. One indication of this is management's endorsement of enhancing staff skills and competences via training and ongoing education. Moreover, management must demonstrate a dedication to executing control operations.

Control measures are implemented across all divisions/functions of BMT and at several phases to avert failures in risk management. BMT is a microfinance entity that faces heightened risks relative to other financial organizations, particularly in terms of credit risk and the potential for employee fraud. At this juncture, managerial participation is essential not only for formulating a strategy plan but also for guaranteeing that information is communicated and comprehended by all organizational members and executed through suitable measures. Control activities are linked to the Information Communication and Monitoring system. In the oversight process, management verifies that all elements of internal control have been executed, assessed, and subsequently conveyed to stakeholders. The dedication of management in this endeavor is evident via the establishment of suitable information and communication platforms for both internal and external use. This is essential for communicating guidelines and operational benchmarks that allow organizational members to execute their responsibilities efficiently (COSO, 2013). Consequently, the dedication of management influences every element of the internal control framework.

Impact of Uncertainty on Internal Control System

The findings from the hypothesis testing revealed a notable positive correlation between environmental uncertainty and the establishment of internal control mechanisms. It can be understood that increased uncertainty encountered by the organization prompts a

strengthening and broadening of its internal controls. This initiative by management aims to safeguard the organization against potential dangers stemming from environmental unpredictability. The correlation between environmental unpredictability and the execution of internal control frameworks in this research corroborates earlier studies by (Ludji, 2025). He asserts that an increase in perceived environmental uncertainty (PEU) encountered by the organization correlates with a heightened reliance on diagnostic control systems and interactive control systems. The state of ambiguity prompts companies to enhance their implementation of control systems in reaction to unforeseen environmental fluctuations. By enhancing the internal control framework, the business has implemented proactive strategies to avert the collapse of any decision or policy enacted. Conversely, the existence of uncertainty prompts an organization to emulate another entity deemed successful in addressing the same issue, regarding both ideals and implemented systems. In ambiguous circumstances, when a definitive action plan is lacking, organizational leaders could opt to emulate entities they perceive as effective. In the realm of institutional theory, this conduct is referred to as mimetic isomorphism.

Impact of External Pressure on Internal Control System

The findings from the hypothesis testing indicated that external pressure exerts a markedly beneficial influence on the execution of the internal control system. Despite its impact being the least significant in relation to the other two variables. The theoretical outcomes of the hypothesis test corroborate earlier studies indicating that external pressures might compel firms to adopt systems including organizational structure regulation, technological advancements, sustainability initiatives, quality management, and human resource practices (Kauppi & Luzzini, 2022). In the research conducted by N. T. Putri et al. (2025), external governmental pressures compel firms to modify their practices and systems to adhere to relevant legislation. As a financial entity, BMT is required to uphold the confidence of its members in its ability to protect assets, specifically savings or investments entrusted for management, while also attaining a degree of efficiency that yields profit. Conversely, as an organization that oversees ZISWAF funds, BMT is tasked with regulating the social funds that are gathered and allocated. Consequently, community pressure markedly affects the execution of the internal control system at BMT as indicated by the statistical analysis.

CONCLUSION

The findings indicate that management commitment, environmental uncertainty, and external pressures significantly influence the implementation of internal control systems in Baitul Maal wat Tamwil (BMT). Among these factors, management commitment plays an important role in ensuring that internal control mechanisms are effectively implemented and consistently maintained. Strong managerial commitment can encourage the development of effective control practices, strengthen employee compliance, and support the achievement of organizational objectives. At the same time, environmental uncertainty and external pressures require BMTs to continuously adapt their internal control systems to changes in the business environment, regulatory requirements, stakeholder expectations, and market conditions. These findings confirm that the implementation of internal control in sharia microfinance institutions is not solely determined by internal organizational factors but is also shaped by external environmental dynamics.

This study contributes empirical evidence regarding the internal and external determinants of internal control system implementation in sharia microfinance institutions, particularly BMTs in the Special Region of Yogyakarta (D.I. Yogyakarta). The findings extend the understanding of internal control implementation by demonstrating that managerial commitment, environmental uncertainty, and external pressures should be considered simultaneously when evaluating the effectiveness of control systems. The study also highlights the importance of managerial responsiveness and organizational adaptability in maintaining effective internal control amid changing environmental conditions. From a practical perspective, the findings may assist BMT managers in strengthening managerial commitment, improving organizational preparedness, and developing internal control mechanisms that are more responsive to environmental and stakeholder demands.

Future research is recommended to expand the geographical scope and number of BMTs examined so that the findings can be compared across regions with different institutional and environmental characteristics. Researchers are also encouraged to employ longitudinal or panel-data designs to examine how management commitment, environmental uncertainty, and external pressures influence internal control implementation over time. Furthermore, future studies could incorporate additional variables, such as employee competence, organizational culture, leadership style, information technology adoption, risk management practices, regulatory compliance, and supervisory effectiveness. Comparative

studies between BMTs and other sharia financial institutions may also provide broader insights into the determinants of internal control implementation within the Islamic finance sector.

REFERENCES

Amanamah, R. B., Anaman, P. D., Ahmed, I. A., Quayson, J. A., Akyen, B., & Donkor, C. (2025). Internal controls and financial reporting accuracy in hotels: The role of management commitment and employee training. *SEISENSE Business Review, 5*(1), 29–49. https://doi.org/10.33215/65wnpf71

Bhuiyan, F., Rana, T., Baird, K., & Munir, R. (2023). Strategic outcome of competitive advantage from corporate sustainability practices: Institutional theory perspective from an emerging economy. *Business Strategy and the Environment, 32*(7), 4217–4243. https://doi.org/10.1002/bse.3362

Delmas, M. A., & Toffel, M. W. (2008). Organizational responses to environmental demands: Opening the black box. *Strategic Management Journal, 29*(10), 1027–1055. https://doi.org/10.1002/smj.701

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160. https://doi.org/10.2307/2095101

Faisal, Y., Yulivianti, A. R., & Rindiani, S. D. (2023). The effect of internal control systems and accounting information systems on the quality of financial statements PT. Gudang Garam, Tbk and PT. Wilmar Group. *Jurnal Ilmiah Akuntansi dan Finansial Indonesia, 6*(2), 35–50. https://doi.org/10.31629/jiafi.v6i2.5565

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hasan, F., Santoso, H., & Farida, A. (2025). Pengendalian Internal Guna Mencegah Resiko Kecurangan (Fraud) pada KSPPS BMT Assyafi'iyah Kantor Cabang Metro. *Jurnal Tana Mana, 6*(1), 124–136. https://ojs.staialfurqan.ac.id/jtm/article/view/818

Hyndman, N., & Liguori, M. (2024). Rationalising externally driven change: Charities and the exploitation of new-practice requirements. *Nonprofit and Voluntary Sector Quarterly, 53*(5), 1101–1128. https://doi.org/10.1177/08997640231204297

Karatepe, T., Rescalvo-Martin, E., Kim, T. T., Uner, M. M., Ozturen, A., & Karatepe, O. M. (2024). Test of a moderated serial mediation model of management commitment to the ecological environment. *International Journal of Hospitality Management, 120*, Article 103785. https://doi.org/10.1016/j.ijhm.2024.103785

Kauppi, K., & Luzzini, D. (2022). Measuring institutional pressures in a supply chain context: Scale development and testing. *Supply Chain Management: An International Journal, 27*(7), 79–107. https://doi.org/10.1108/SCM-04-2021-0169

Khairunnisa, I., Mukhsin, M., & Roni, A. (2024). Strategi Keberlanjutan Baitul Maal Wat Tamwil di Kota Yogyakarta dengan Metode Analytical Network Process. *Al-Intaj: Jurnal Ekonomi dan Perbankan Syariah, 8*(1), 99. https://doi.org/10.29300/aij.v8i1.2904

Lazuardi, I. (2025). Pengaruh Ketidakpastian Lingkungan, Sistem Informasi Akuntansi Manajemen dan Strategi Bisnis terhadap Kinerja Manajerial. *Dinasti Accounting Review, 1*(4), 164–171. https://doi.org/10.38035/dar.v1i4.1808

Lestari, E. M., & Giyartiningrum, E. (2025). The influence of internal control system, internal audit, and GCG on banking financial performance. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE), 8*(3), 12636–12649. https://e-journal.uac.ac.id/index.php/iijse/article/view/7283

Ludji, T. R. (2025). Contingency relationship between perceived environmental uncertainty and management control systems: Implications for innovation and performance. *Journal of Accounting & Organizational Change*, 1–24. https://doi.org/10.1108/JAOC-10-2024-0322

Ma'ruf, A., Sellani, T. I., Hakim, L., & Alam, S. (2025). Social and environmental contribution of Indonesian Baitul Maal wat Tamwil (BMT) to the SDGs implementation. *Profetika: Jurnal Studi Islam, 26*(1), 81–92. https://doi.org/10.23917/profetika.v26i01.8863

Nhon, H. T., Thong, B. Q., & Trung, N. Q. (2020). The effects of intellectual capital on information communication technology firm performance: A moderated mediation analysis of environmental uncertainty. *Cogent Business & Management, 7*(1), Article 1823584. https://doi.org/10.1080/23311975.2020.1823584

Prajawati, S., Susetyo, D., Saftiana, Y., & Yusrianti, H. (2026). The influence of the government internal control system on asset inventory and asset security. In S. Muhamad, F. Jie, D. Susetyo, V. Asero, K. Haldorai, A. Bashir, & M. E. Fitrianto (Eds.), *Proceedings of the 24th Malaysia-Indonesia International Conference on Economics, Management, and Accounting (The 24th MIICEMA) in conjunction with the 9th Sriwijaya Economics, Accounting, and Business Conference (The 9th SEABC) (MIICEMA-SEABC 2025)* (Vol. 362, pp. 468–480). Atlantis Press International B.V. https://doi.org/10.2991/978-94-6463-994-0_32

Prakosa, K. Y., & Suandi, A. B. (2024). Eksplorasi Sistem Pengendalian Internal Baitul Maal Wat Tamwil di Daerah Istimewa Yogyakarta. *AKTSAR: Jurnal Akuntansi Syariah, 7*(1), 83–99. https://doi.org/10.21043/aktsar.v7i1.26846

Purnama, A. E., & Amir, F. (2024). Mengungkap Potensi Fraud Lembaga Keuangan Syariah Ditinjau dari Teori Fraud Diamond dan Model Pencegahan Fraud. *Jurnal Tabarru': Islamic Banking and Finance, 7*(1), 176–191. https://doi.org/10.25299/jtb.2024.vol7(1).16534

Putri, N. T., Meuthia, M., Saputra, I. R., Rahmahdian S, R., Vanany, I., & Zakuan, N. (2025). Internal initiative vs external pressure: Evidence from halal standard adoption in Indonesian food small and medium industries (SMIs). *Indonesian Journal of Halal Research, 7*(1), 30–46. https://doi.org/10.15575/ijhar.v7i1.38173

Putri, S. W., & Frianto, A. (2023). Pengaruh Work-Life Balance terhadap Kinerja Karyawan melalui Komitmen Organisasi. *Jurnal Ilmu Manajemen, 11*(2), 293–305. https://journal.unesa.ac.id/index.php/jim/article/view/22945

Rachmawati, D., Gani, L., & Jermias, J. (2025). Investigating the effects of environmental uncertainty, business strategy and management control systems on organisational learning and performance. *Accounting & Finance*. Advance online publication. https://doi.org/10.1111/acfi.70012

Rahajeng, D. K. (2022). The ethical paradox in Islamic cooperatives: A lesson learned from scandalous fraud cases in Indonesia's Baitul Maal Wat Tamwil. *Cogent Business & Management, 9*(1), Article 2090208. https://doi.org/10.1080/23311975.2022.2090208

Sarkis, J., Gonzalez-Torre, P., & Adenso-Diaz, B. (2010). Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of Operations Management, 28*(2), 163–176. https://doi.org/10.1016/j.jom.2009.10.001

Setyorini, R., Suyono, J., Rosyid, A., Arizona, A., & Elisabeth, D. R. (2025). Pengaruh Komitmen Organisasi, Dukungan Manajemen Puncak dan Kepuasan Kerja terhadap Kinerja Pegawai Dinas Kesehatan Surabaya, Bidang Sumber Daya Kesehatan. *Jurnal Kompetensi Ilmu Sosial, 3*(2), 147–163. https://doi.org/10.29138/jkis.v3i2.60

Sihombing, J. A., Tarigan, J. E., Margaret, N. T., Lubis, P. A. U., Nabillah, R., Manalu, R. H. R., & Kuntuy, J. (2024). Perkembangan Baitul Maal Wat Tamwil (BMT) pada Periode 2014–2019 di Indonesia. *Jurnal Ilmiah Ekonomi, Akuntansi, dan Pajak, 1*(4), 153–159. https://doi.org/10.61132/jieap.v1i4.652

Tussa'adah, F. (2024). Peran Baitul Maal Wat Tamwil (BMT) dalam Mendorong Pertumbuhan Ekonomi Indonesia melalui UMKM. *Paraduta: Jurnal Ekonomi dan Ilmu-Ilmu Sosial, 2*(2), 58–63. https://doi.org/10.56630/paraduta.v2i2.669

Waromi, J., Kambuaya, M. K. P., & Wonar, K. (2024). Evaluation of the effectiveness of internal control systems in reducing accounting fraud in financial sector companies. *The Eastasouth Management and Business, 2*(3), 228–232. https://esj.eastasouth-institute.com/index.php/esmb/article/view/250

Wijaya, M. Y., & Fitria, R. D. (2023). Peran Baitul Maal Wat Tamwil dalam Meningkatkan Kesejahteraan Anggota dan Masyarakat: Studi pada BMT Al-Hijrah KAN Jabung Syariah Jatim. *Al-Iqtishod: Jurnal Ekonomi Syariah, 5*(2), 303–315. https://ejournal.iaiskjmalang.ac.id/index.php/iqtis/article/view/1660

Yasmin, Y., Winarningsih, S., & Mulyanti, S. (2021). The effect of the internal control system effectiveness and the quality of financial reporting and its impact on fraud prevention of Bandung Regency. *Jurnal Manajemen Pelayanan Publik, 5*(1), 13. https://doi.org/10.24198/jmpp.v5i1.25785