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THE EFFECT OF HUMAN RESOURCE QUALITY, INTERNAL CONTROL SYSTEMS, AND ORGANIZATIONAL CULTURE ON TREASURERS' PERFORMANCE WITH MOTIVATION AS A MODERATING VARIABLE AT THE EDUCATION OFFICE OF NORTH SUMATRA PROVINCE

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Abstract

This study examines the influence of Human Resource Quality (HRQ), Internal Control System (ICS), and Organizational Culture (OC) on Treasurer Performance (TP) in the Department of Education, North Sumatra Province, Indonesia, with Motivation (M) as a moderating variable. Grounded in Stewardship Theory, Human Resource Theory, and Herzberg's Two-Factor Theory of Motivation, this quantitative research employed Structural Equation Modeling (SEM) using IBM AMOS 29 on a sample of 188 government treasurers (bendahara) selected through simple random sampling from a population of 376 financial officers in public senior and vocational high schools (SMA/SMK). The novelty of this research lies in the development of an integrative model testing the simultaneous effects of these three organizational predictors with Motivation as a moderator, specifically within the regional education sector a context largely underexplored in the existing Indonesian public financial management literature. Results reveal that HRQ ($\beta = 0.346$; C.R. = 2.807; $p = 0.005$), OC ($\beta = 0.212$; C.R. = 2.376; $p = 0.018$), and Motivation ($\beta = 0.238$; C.R. = 2.086; $p = 0.037$) each exert a positive and significant direct effect on Treasurer Performance, while ICS failed to demonstrate statistical significance ($\beta = 0.200$; C.R. = 1.722; $p = 0.085$). Moderated Regression Analysis (MRA) results indicate that Motivation does not significantly moderate any predictor–performance relationship ($p > 0.05$ for all interaction terms). The model explains 62.9% of the variance in Treasurer Performance ($R^2 = 0.629$). These findings underscore the primacy of human capital investment, accountability culture, and intrinsic motivation in strengthening public financial governance at the local government level in Indonesia.

Keywords: Organizational Culture, Human Resource Quality, Internal Control System, Motivation, Treasurer Performance

INTRODUCTION

Public financial management in Indonesia has undergone a significant paradigm shift following the enactment of Law No. 23 of 2014 on Regional Governance, which granted local governments greater autonomy over their fiscal affairs. Within this regulatory framework, government treasurers (bendahara) constitute the frontline operatives of public financial management—responsible for receiving, storing, disbursing, and accounting for government funds in strict compliance with applicable laws and ministerial regulations, including Permendagri No. 13 of 2006 on Regional Financial Management Guidelines (Hembarwati, 2017; Nur Hikmatul & Fathan, 2024).

A particularly consequential regulatory development concerns the mandatory certification of government treasurers. Presidential Regulation (Perpres) No. 7 of 2016 on Treasurer Certification mandates that all government treasurers must hold a nationally recognized certification (Sertifikat Bendahara) as a prerequisite for appointment and continued service. This requirement has triggered recurring personnel transitions in many government units, including the Department of Education, North Sumatra Province, as non-certified incumbents must be replaced with certified personnel or undergo certification programs. Such transitions can disrupt institutional memory, create competency gaps, and thereby affect the quality of financial reporting (Asnal et al., 2021; Lubis et al., 2022). The most recent regulatory update, Permen Dikdasmen No. 8 of 2025, further prohibits Civil Servant (ASN) teachers from concurrently serving as BOS treasurers, shifting this responsibility to administrative staff (Tenaga Kependidikan) who may lack formal accounting training.

The Department of Education in North Sumatra Province presents a compelling case for empirical scrutiny, as it administers financial resources across a complex network of public senior high schools (SMA) and vocational schools (SMK). Empirical evidence from the Government Performance Report (LKJiP) of the City of Medan Education Office (2024) and audit findings by the Supreme Audit Agency (BPK, 2022) reveals persistent accountability failures: budget reporting delays, dual-role conflicts where ASN teachers simultaneously discharge treasury functions, and misuse of School Operational Assistance Funds (BOS) amounting to IDR 2.3 billion in the 2022 fiscal year. BPK North Sumatra's 2024 findings specifically cited 30 schools where expenditure accountability for School Operational Assistance (BOSP) was non-compliant with regulatory standards. Additionally, behavioral deviations including unauthorized absenteeism during office hours and chronic tardiness indicate a weak culture of professional accountability (Eliyas & Iana, 2024).

Prior empirical literature on treasurer performance exhibits notable inconsistencies that motivate the present inquiry. With respect to Human Resource Quality (HRQ), Mita et al. (2021) established that HRQ, organizational commitment, and organizational culture collectively exert a significant positive effect on the performance of financial managers in the Mataram City Revenue Department, while Ginung et al. (2024) confirmed a positive and significant HRQ effect on employee performance in the General Elections Supervisory Agency (Bawaslu). In contrast, Ayomi (2023) found that HRQ does not significantly influence employee performance in a hospitality setting, suggesting that the HRQ–performance relationship is context-contingent.

Regarding the Internal Control System (ICS), Andita & Anindita (2025) reported that the Government Internal Control System (SPIP) significantly and positively influences village fund management performance, consistent with findings by Yuni et al. (2023) and Noorsy et al. (2024). However, Mokoginta et al. (2017) found no significant impact of ICS on government performance, reflecting ongoing empirical debate. Similarly, for Organizational Culture (OC), Benedicta & Samuel (2025) demonstrated a significant positive effect of organizational culture on employee performance, corroborated by Mohammad Fajar et al. (2022) and Franky (2024). Yet Jufrizen et al. (2021) found no significant effect of organizational culture on employee performance at a regional treasury office in North Sumatra Province a finding of particular contextual relevance to this study.

With respect to Motivation as a moderating variable, Ferayani et al. (2018) demonstrated that motivation and training strengthen the influence of education on village treasurer performance in Bandung Regency, providing theoretical support for motivation's moderating role. However, Darul & Setyo (2020) found that motivation does not moderate the effect of organizational culture and work quality of life on employee performance, adding further empirical ambiguity. These inconsistencies collectively signal the presence of boundary conditions such as institutional context, sector type, and geographic scope that may moderate the relationships under examination.

Viewing these inconsistencies, this study hypothesizes that Motivation serves as a potential boundary condition that can strengthen or weaken the effects of HRQ, ICS, and OC on Treasurer Performance. By incorporating Motivation as a moderating variable, this research aims to elucidate why structurally sound control systems or competent human resources sometimes fail to produce optimal performance outcomes in the absence of adequate motivational drive (Ferayani et al., 2018; Robbins & Judge, 2008).

This study contributes two specific novelties to the extant literature. First, it develops and empirically tests an integrative model connecting HRQ, ICS, and OC with Treasurer Performance under the moderating influence of Motivation, specifically within the regional education sector (Dinas Pendidikan Provinsi Sumatera Utara)—a context that has received minimal direct empirical attention, as most prior studies focus on village fund management, district-level bureaucracies, or financial institutions rather than provincial education agencies managing large and heterogeneous school networks. Second, this study simultaneously employs SEM-AMOS for direct effect estimation and Moderated Regression Analysis (MRA) for moderation testing within a unified theoretical framework anchored in Stewardship Theory, Human Resource Theory, and Herzberg's Two-Factor Motivation Theory a methodological combination that enhances both the structural precision and the applied relevance of the findings.

LITERATURE REVIEW

A. Stewardship Theory and Its Relevance to Public Financial Management

Stewardship Theory, articulated by Davis, Schoorman, and Donaldson (1997) and further developed by Torfing & Bentzen (2020), provides the primary theoretical lens for this study. Unlike Agency Theory, which assumes self-interested behavior by agents, Stewardship Theory posits that organizational members particularly those in roles entailing fiduciary responsibility identify with organizational goals and are motivated by the intrinsic satisfaction of fulfilling responsibilities effectively. In the public sector context, government treasurers are positioned as stewards accountable not only to their institutional principal (the head of the spending unit) but also to the broader citizenry. The theory implies that treasury officers who possess requisite competencies (HRQ), operate within robust control environments (ICS), share strong organizational values (OC), and are adequately motivated (M) will demonstrate superior performance outcomes. Stewardship theory also cautions, however, that when intrinsic motivation and professional identity are sufficiently strong, extrinsic motivational reinforcements may not necessarily amplify performance thereby providing a theoretical basis for hypothesizing non-significant moderation effects.

B. Human Resource Quality and Treasurer Performance

Human Resource Quality (HRQ) encompasses the knowledge, skills, and attitudes of organizational members that determine their capability to execute assigned tasks effectively (Matutina, 2016). Mita et al. (2021) conceptualize HRQ alongside organizational commitment and culture as joint determinants of financial management performance, confirming that higher HRQ enables more effective governance outcomes. Ginung et al. (2024) corroborate this finding at the Bawaslu, while Siti Maimunah et al. (2021) demonstrate that human resource competence positively and significantly predicts treasurer expenditure performance in a regional government context. Sumaryati et al. (2020) and Natalia et al. (2025) further emphasize the role of human capital augmented by information technology in ensuring financial accountability.

H1: Human Resource Quality has a positive and significant effect on Treasurer Performance.

C. Internal Control System and Treasurer Performance

The Internal Control System (ICS), operationalized in accordance with Government Regulation (PP) No. 60 of 2008 on the Government Internal Control System (SPIP), encompasses five components: control environment, risk assessment, information and communication systems, control activities, and monitoring. Andita & Anindita (2025) confirm a significant positive SPIP effect on village fund management performance, while Sarwono & Munari (2022) establish that robust ICS frameworks are critical for financial report quality. Nevertheless, empirical evidence on the ICS performance link remains mixed: Mokoginta et al. (2017) found no significant ICS effect, suggesting that structural and implementation factors moderate this relationship.

H2: Internal Control System has a positive and significant effect on Treasurer Performance.

D. Organizational Culture and Treasurer Performance

Organizational Culture (OC) refers to the constellation of shared values, norms, beliefs, and assumptions governing behavioral patterns of organizational members (Akbar et al., 2021; Robbins & Judge, 2008; Mita et al., 2021). Benedicta & Samuel (2025) demonstrate a significant positive effect of organizational culture on employee performance, while Rifai et al. (2025) confirm a significant link between organizational culture and financial performance. Kesek et al. (2021) show that supportive cultural environments enhance employee performance by reinforcing behavioral norms. However, Jufrizen et al. (2021) found no significant effect of OC on employee performance at a regional treasury directorate in North Sumatra—an inconsistency that further motivates contextual investigation.

H3: Organizational Culture has a positive and significant effect on Treasurer Performance.

E. Motivation: Direct and Moderating Effects

Motivation is defined as the complex of intrinsic and extrinsic forces that energize, direct, and sustain goal-directed behavior in organizational settings (Handoko, 2011). Herzberg's Two-Factor Theory (1959) distinguishes between hygiene factors (extrinsic: salary, working conditions) and motivational factors (intrinsic: achievement, recognition, responsibility), with only intrinsic factors driving sustained performance improvement. In the public financial management context, Driss et al. (2024), Djajengatmodjoa et al. (2024), and Firliyani (2024) report robust positive associations between motivation and financial officer performance.

Ferayani et al. (2018) specifically demonstrate that motivation, acting as a moderating variable, strengthens the influence of educational background on village treasurer performance in Bandung Regency—providing direct empirical precedent for motivation's moderating potential in this study's context. Conversely, Darul & Setyo (2020) found no significant moderating effect of motivation on the organizational culture–performance relationship, highlighting the conditional nature of this effect.

H4: Motivation has a positive and significant direct effect on Treasurer Performance.
H5: Motivation moderates the effect of Human Resource Quality on Treasurer Performance.
H6: Motivation moderates the effect of Internal Control System on Treasurer Performance.
H7: Motivation moderates the effect of Organizational Culture on Treasurer Performance

METHOD

A. Research Design

This study employs a quantitative, explanatory research design with a cross-sectional survey approach. Structural relationships among variables are examined using Structural Equation Modeling (SEM) with IBM AMOS 29, which allows simultaneous estimation of multiple regression relationships while accounting for measurement error in latent constructs (Hair et al., 2019). For moderation testing, Moderated Regression Analysis (MRA) is employed by constructing interaction terms between each independent variable and the moderating variable, Motivation:

$$TP = \alpha + \beta_1(HRQ) + \beta_2(ICS) + \beta_3(OC) + \beta_4(M) + \beta_5(HRQ\times M) + \beta_6(ICS\times M) + \beta_7(OC\times M) + \varepsilon$$

where TP = Treasurer Performance, HRQ = Human Resource Quality, ICS = Internal Control System, OC = Organizational Culture, M = Motivation, and ε = error term. A significant interaction coefficient (β_5, β_6, or β_7) at $p < 0.05$ indicates moderation (Liana, 2009).

B. Population and Sample

The study population comprises all active government treasurers (bendahara pengeluaran and bendahara pembantu) affiliated with the Department of Education, North Sumatra Province, encompassing both the provincial office headquarters and public SMA/SMK schools under its jurisdiction: 20 treasurers at the provincial office and 356 school-level treasurers, totaling 376 respondents. Applying simple random sampling (Kothari, 2004) consistent with Hair et al.'s (2019) SEM minimum of 100 respondents, a final sample of 188 respondents was obtained—a response rate of approximately 50%, well above the threshold for reliable SEM estimation.

C. Operational Definitions and Measurement

Table 1. Operational Definition and Measurement of Variables

Variable	Operational Definition	Indicators	Scale	Items	Reference
Human Resource Quality (HRQ)	The extent to which treasury staff possess the knowledge, skills, and attitudes necessary to effectively fulfill financial management duties in the public sector.	1. Knowledge 2. Skills 3. Attitude	5-pt Likert	8	Matutina (2016)
Internal Control System (ICS)	An integrated process embedded in organizational activities, conducted continuously to provide reasonable assurance of effective, efficient, and accountable governance.	1. Control Environment 2. Risk Assessment 3. Information & Communication 4. Control Activities 5. Monitoring	5-pt Likert	10	PP No. 60/2008; Haura et al. (2019)
Organizational Culture (OC)	The shared values, norms, and assumptions that shape employee behaviors within the organization, guiding how individuals execute their financial responsibilities.	1. Integrity values 2. Collaboration norms 3. Innovation assumptions	5-pt Likert	3	Akbar et al. (2021); Mita et al. (2021)
Motivation (M) Moderating Variable	The intrinsic and extrinsic forces that drive treasury employees to exert effort toward achieving financial management goals, influencing the strength or direction of predictor–performance relationships.	1. Intrinsic motivation 2. Extrinsic motivation 3. Career drive	5-pt Likert	5	Lestari et al. (2023); Ferayani et al. (2018)
Treasurer Performance (TP) Dependent Variable	The level of effectiveness and efficiency demonstrated by government treasurers in managing public financial resources, including timely and accurate	1. Capability 2. Initiative 3. Promptness 4. Quality of Work 5. Communication	5-pt Likert	10	Ni Made Wasasih et al. (2016)

	reporting, procedural compliance, and accountability.	

Source: Synthesized from Matutina (2016), PP No. 60/2008, Akbar et al. (2021), Mita et al. (2021), Lestari et al. (2023), Ferayani et al. (2018), and Ni Made Wasasih et al. (2016).

D. Data Collection and Analysis

Data were collected through a structured questionnaire employing a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), comprising 36 indicator items across five variable sections. Analysis proceeded in three sequential stages: (1) preliminary descriptive and assumption tests; (2) measurement model validity via Confirmatory Factor Analysis (CFA), using Standardized Loading Factors (SLF) ≥ 0.50, Critical Ratio (C.R.) ≥ 1.96, Average Variance Extracted (AVE) ≥ 0.50, and Construct Reliability (CR) > 0.70; and (3) structural model testing and hypothesis evaluation via Goodness-of-Fit indices and AMOS critical ratios, supplemented by MRA interaction term testing at $\alpha = 0.05$.

RESULTS AND DISCUSSION

A. Respondent Profile

Table 2. Demographic Profile of Respondents (n = 188)

Characteristic / Category	Frequency (n)	Percentage (%)
Gender		
Male	75	39.89
Female	113	60.11
Age Group		
< 25 years	11	5.85
25–35 years	51	27.13
36–45 years	65	34.57
> 46 years	61	32.45
Educational Background		
Diploma (D1/D2/D3)	28	14.89
Bachelor's Degree (S1)	149	79.26
Master's Degree (S2)	11	5.85
Work Tenure		
< 5 years	21	11.17
5–10 years	97	51.60
> 10 years	70	37.23
Total	**188**	**100.00**

Source: Primary data processed (2026).

The sample is predominantly female (60.11%), reflecting the broader gender composition of administrative staff in Indonesian public schools. The majority of respondents fall within the 36-45 age bracket (34.57%), followed by those over 46 (32.45%), suggesting an experienced workforce. The vast majority hold a bachelor's degree (79.26%), indicating relatively strong academic foundations. In terms of tenure, 51.60% of respondents have 5–10 years of experience, while 37.23% have over 10 years scollectively suggesting a mature, established workforce profile.

B. Validity Testing (Convergent Validity)

Table 3. Convergent Validity Results (CFA — SLF, C.R., AVE)

Construct	Indicator	SLF	C.R.	p-value	AVE	Status
Human Resource Quality (HRQ)	X1.1	0.623	(Fixed)	<0.001	0.639	Valid
	X1.2	0.645	7.283	<0.001		Valid
	X1.3	0.531	6.227	<0.001		Valid
	X1.4	0.672	7.514	<0.001		Valid
	X1.5	0.552	6.426	<0.001		Valid
	X1.6	0.718	7.898	<0.001		Valid
	X1.7	0.540	6.312	<0.001		Valid
	X1.8	0.684	7.620	<0.001		Valid
Internal Control System (ICS)	X2.1	0.636	(Fixed)	<0.001	0.672	Valid
	X2.2	0.664	7.736	<0.001		Valid
	X2.3	0.603	7.141	<0.001		Valid
	X2.4	0.661	7.705	<0.001		Valid
	X2.5	0.652	7.623	<0.001		Valid
	X2.6	0.709	8.144	<0.001		Valid
	X2.7	0.681	7.894	<0.001		Valid
	X2.8	0.540	6.504	<0.001		Valid
	X2.9	0.663	7.726	<0.001		Valid
	X2.10	0.649	7.593	<0.001		Valid
Organizational Culture (OC)	X3.1	0.704	(Fixed)	<0.001	0.693	Valid
	X3.2	0.686	7.459	<0.001		Valid
	X3.3	0.694	7.509	<0.001		Valid
Treasurer Performance (TP)	Y.1	0.606	(Fixed)	<0.001	0.658	Valid
	Y.2	0.551	6.388	<0.001		Valid
	Y.3	0.542	6.303	<0.001		Valid
	Y.4	0.611	6.924	<0.001		Valid
	Y.5	0.706	7.711	<0.001		Valid
	Y.6	0.585	6.699	<0.001		Valid
	Y.7	0.698	7.647	<0.001		Valid
	Y.8	0.646	7.225	<0.001		Valid
	Y.9	0.634	7.127	<0.001		Valid
	Y.10	0.676	7.473	<0.001		Valid
Motivation (M)	Z.1	0.595	(Fixed)	<0.001	0.638	Valid
	Z.2	0.662	6.668	<0.001		Valid
	Z.3	0.669	6.713	<0.001		Valid
	Z.4	0.586	6.141	<0.001		Valid
	Z.5	0.635	6.488	<0.001		Valid

Note: (Fixed) = reference indicator, C.R. not estimated. All non-fixed loadings significant at p < 0.001. Source: IBM AMOS 29 output, processed (2026).

All indicators satisfy required thresholds: SLF ≥ 0.50, C.R. ≥ 1.96, and AVE ≥ 0.50 for all five constructs (ranging from 0.638 to 0.693), confirming adequate convergent validity.

C. Reliability Testing (Construct Reliability)

Table 4. Construct Reliability Results

Construct	ΣSLF	ΣSLF²	ΣError	AVE	CR
Human Resource Quality (HRQ)	4.965	1.761	3.117	0.639	0.933
Internal Control System (ICS)	6.458	2.042	4.190	0.672	0.953
Organizational Culture (OC)	2.084	0.642	1.448	0.693	0.871
Treasurer Performance (TP)	6.255	2.050	3.942	0.658	0.950
Motivation (M)	3.147	1.128	1.986	0.638	0.898

Source: IBM AMOS 29 output, processed (2026).

All constructs yield CR values well above 0.70, ranging from 0.871 (OC) to 0.953 (ICS), confirming high internal consistency and instrument reliability.

D. Normality and Multicollinearity

Multivariate normality was assessed via AMOS kurtosis-based critical ratio, yielding a multivariate kurtosis value of -1.483 (C.R. = -0.194), well within the acceptable range of ±2.58. Inter-construct correlations all fall below the 0.90 multicollinearity threshold (maximum: 0.774 between HRQ and ICS), validating the independence of predictor constructs.

Table 5. Inter-Construct Correlation Estimates (Multicollinearity Check)

Variable Pair	Correlation Estimate
HRQ ↔ OC	0.166
M ↔ ICS	0.203
M ↔ OC	0.688
M ↔ HRQ	0.218
HRQ ↔ ICS	0.774
ICS ↔ OC	0.064

Source: IBM AMOS 29 output, processed (2026).

E. Model Fit Evaluation (Goodness-of-Fit)

Table 6. Goodness-of-Fit Indices

Fit Index	Cut-off Value	Obtained Value	Result	Verdict
CFI	≥ 0.90	0.926	Fit	✓
TLI	≥ 0.90	0.920	Fit	✓
RMSEA	≤ 0.08	0.040	Close Fit	✓
CMIN/DF	≤ 2.00	1.298	Fit	✓
IFI	≥ 0.90	0.927	Fit	✓
PNFI	≥ 0.60	0.691	Fit	✓

Source: IBM AMOS 29 output, processed (2026).

All six GoF indices satisfy recommended cut-off criteria. The RMSEA value of 0.040 falls within the 'close fit' category (≤ 0.05), indicating the model closely approximates the population covariance structure and is well specified.

F. Coefficient of Determination (R^2)

The squared multiple correlation coefficient (R^2) for Treasurer Performance is 0.629, indicating that 62.9% of the variance in Treasurer Performance is jointly explained by HRQ, ICS, OC, and Motivation. The remaining 37.1% is attributable to factors external to the model, such as leadership style, digital financial literacy, or workload intensity.

G. Hypothesis Testing - Direct Effects (SEM-AMOS)

Table 7. Hypothesis Testing - Direct Effects

Path Relationship	Estimate	S.E.	C.R.	p-value	Result
HRQ → Treasurer Performance	0.346	0.123	2.807	0.005	Accepted (H1)
ICS → Treasurer Performance	0.200	0.116	1.722	0.085	Rejected (H2)
OC → Treasurer Performance	0.212	0.089	2.376	0.018	Accepted (H3)
Motivation → Treasurer Performance	0.238	0.114	2.086	0.037	Accepted (H4)

Decision criteria: H accepted if C.R. ≥ 1.96 and $p < 0.05$. Source: IBM AMOS 29 output, processed (2026).

H. Moderated Regression Analysis (MRA)

Table 8. Moderated Regression Analysis Results

Interaction (Moderation)	Estimate	S.E.	C.R.	p-value	Result
HRQ × M → Treasurer Performance	0.000	0.028	0.003	0.998	Not Significant (H5 Rejected)
ICS × M → Treasurer Performance	-0.015	0.027	-0.545	0.586	Not Significant (H6 Rejected)
OC × M → Treasurer Performance	-0.015	0.024	-0.612	0.540	Not Significant (H7 Rejected)

Source: Processed research results (2026).

None of the three interaction terms attains statistical significance (all $p > 0.05$, all C.R. values $< \pm 1.96$), confirming that Motivation does not function as a significant moderator of any predictor–performance relationship.

F. Summary of Hypothesis Results

Table 9. Comprehensive Hypothesis Testing Summary

H	Hypothesis Statement	Statistical Decision	Conclusion
H1	Human Resource Quality has a positive and significant effect on Treasurer Performance.	C.R. = 2.807; p = 0.005	Accepted — Positive & Significant
H2	Internal Control System has a positive and significant effect on Treasurer Performance.	C.R. = 1.722; p = 0.085	Rejected — Not Significant
H3	Organizational Culture has a positive and significant effect on Treasurer Performance.	C.R. = 2.376; p = 0.018	Accepted — Positive & Significant
H4	Motivation has a positive and significant direct effect on Treasurer Performance.	C.R. = 2.086; p = 0.037	Accepted — Positive & Significant
H5	Motivation moderates the effect of HRQ on Treasurer Performance.	C.R. = 0.003; p = 0.998	Rejected — No Moderation
H6	Motivation moderates the effect of ICS on Treasurer Performance.	C.R. = -0.545; p = 0.586	Rejected — No Moderation
H7	Motivation moderates the effect of OC on Treasurer Performance.	C.R. = -0.612; p = 0.540	Rejected — No Moderation

Source: Processed research results (2026).

G. DISCUSSION

a) Human Resource Quality and Treasurer Performance (H1 Accepted)

The finding that Human Resource Quality exerts a positive and significant effect on Treasurer Performance ($\beta = 0.346$; C.R. = 2.807; $p = 0.005$) is both theoretically expected and empirically consonant with the broader literature. This result affirms the core proposition of Stewardship Theory: when organizational stewards possess high levels of competence, they are better equipped to fulfill fiduciary responsibilities with accuracy, integrity, and timeliness. Treasurers with strong academic backgrounds, comprehensive training in financial software, and experience in public finance are demonstrably more capable of producing reliable expenditure accountability reports (SPM, LKJiP, LKPJ) within statutory timelines.

These findings corroborate Siti Maimunah et al. (2021) and Mita et al. (2021), who established the positive influence of HRQ on financial management performance in regional government contexts, and align with Ginung et al. (2024), who confirmed a positive HRQ effect on employee performance at Bawaslu. Siregar (2019) specifically demonstrated that HRQ positively predicts regional financial performance when mediated by management information systems a finding particularly relevant given the Education Department's increasing reliance on digital financial platforms. Hasan et al. (2022) and Natalia et al. (2025) further underscore the role of human capital augmented by information technology.

A critical contextual nuance is that persistent competency gaps exist among school-level treasurers, particularly those recently transitioned following Permen Dikdasmen No. 8/2025's prohibition on ASN teachers serving as BOS treasurers. Many incoming Tenaga Kependidikan staff lack formal accounting training, underscoring the urgency of systematic competency development programs including technical training, certification (as mandated by Perpres No. 7/2016), and mentoring particularly for newly appointed school-level treasurers.

b) Internal Control System and Treasurer Performance (H2 Rejected)

Contrary to theoretical expectation, the Internal Control System did not demonstrate a statistically significant effect on Treasurer Performance (β = 0.200; C.R. = 1.722; p = 0.085). While the direction is positive, it fails to meet conventional significance thresholds. This finding, while counterintuitive, is consistent with an emerging body of literature questioning the universality of the ICS–performance relationship in public sector settings (Mokoginta et al., 2017).

From a Stewardship Theory perspective, this result suggests that formal control mechanisms are insufficient substitutes for intrinsic professional commitment: if treasurers are not inherently aligned with organizational goals, or if ICS is implemented inconsistently, the mere existence of control structures will not automatically translate into performance improvement. Shanella et al. (2026) reach a similar conclusion. Contextually, BPK North Sumatra's 2024 audit identified 30 schools with BOSP accountability non-compliance, indicating substantial gaps between ICS policy design and ground-level implementation. Sarwono & Munari (2022) argue that without clear procedural workflows and regular internal audits, organizations struggle to detect and correct irregularities—a condition descriptively applicable to parts of the study population.

c) Organizational Culture and Treasurer Performance (H3 Accepted)

Organizational Culture exerted a positive and significant effect on Treasurer Performance (β = 0.212; C.R. = 2.376; p = 0.018). This result affirms that the normative environment encompassing shared values of integrity, collaborative work norms, and openness to procedural innovation meaningfully shapes performance outcomes. When organizational culture promotes transparency and accountability as institutional values rather than mere compliance obligations, treasurers are more likely to internalize these standards and apply them consistently.

These findings resonate with Benedicta & Samuel (2025), Rifai et al. (2025), Kesek et al. (2021), and Bagus et al. (2024), all of whom demonstrate significant OC performance relationships. However, it is notable that Jufrizen et al. (2021) found no significant OC effect in a comparable regional treasury directorate in North Sumatra—a divergence that may reflect differences in cultural maturity and leadership quality across institutions. This study's field observations corroborate that a significant proportion of employees reported limited exposure to a clearly defined organizational culture, characterized by inadequate directional leadership, unresolved interpersonal conflicts, and insufficient incentives for innovation, indicating substantial room for cultural strengthening.

d) Motivation and Treasurer Performance (H4 Accepted)

Motivation directly and significantly predicts Treasurer Performance (β = 0.238; C.R. = 2.086; p = 0.037). This finding aligns with Herzberg's (1959) Two-Factor Theory—motivational forces including intrinsic satisfaction from task accomplishment, recognition, and professional development drive performance improvement. Driss et al. (2024), Djajengatmodjoa et al. (2024), and Firliyani (2024) collectively confirm strong positive associations between motivation and financial officer performance, consistent with this study's findings. From a Stewardship Theory perspective, motivated treasurers exhibit elevated organizational identification and translate this commitment into higher-quality financial outputs.

Nevertheless, context-specific factors constrain motivational levels. High-performing treasurers tend to receive disproportionately heavy workloads as a function of their competence, potentially eroding intrinsic motivation over time. A subset of respondents reported reluctance to accept promotions due to relocation concerns. Delayed overtime compensation for work on public holidays also functions as a hygiene-factor deficit that negatively affects motivational states (Herzberg, 1959). These contextual moderators suggest that motivation, while a significant performance driver, requires targeted organizational interventions to sustain its positive effect.

e) Motivation as a Moderator: H5, H6, H7 (All Rejected)

The MRA results reveal that Motivation does not significantly moderate any predictor–performance relationship: HRQ × M (C.R. = 0.003; p = 0.998), ICS × M (C.R. = −0.545; p = 0.586), and OC × M (C.R. = −0.612; p = 0.540). These results, while initially surprising given Motivation's significant direct effect, are theoretically interpretable and consistent with Ferayani et al.'s (2018) caution that the moderating role of motivation is context-specific and may not generalize across all predictor–performance pathways.

For the HRQ × Motivation interaction (H5), the absence of moderation suggests that competent treasury professionals operate as stewards whose performance is primarily driven by their internalized professional identity rather than by external motivational reinforcement consistent with Rahayu et al. (2026), who find that competence and motivation are independently significant but do not interact in performance amplification. For ICS × Motivation (H6), the regulatory and procedural nature of internal control systems makes their effectiveness contingent on structural compliance and supervisory oversight rather than individual motivational states (Jacob & Tina, 2020). For OC × Motivation (H7), alignment with Nursyamsul (2025), Nazla et al. (2023), Kadek (2025), and Darul & Setyo (2020) all reporting non-significant moderating effects suggests that when employees are embedded in a strong accountability culture, additional motivational reinforcement provides minimal marginal performance uplift. This finding implies that organizational interventions should treat HRQ development, ICS strengthening, OC cultivation, and motivation enhancement as independent performance levers rather than multiplicative ones.

CONCLUSION

This study investigated the influence of Human Resource Quality (HRQ), Internal Control System (ICS), and Organizational Culture (OC) on Treasurer Performance (TP) in the Department of Education, North Sumatra Province, with Motivation (M) as a moderating variable, using SEM-AMOS and Moderated Regression Analysis on 188 government treasurers.

Principal findings are as follows. First, Human Resource Quality is the strongest predictor of Treasurer Performance ($\beta = 0.346$; $p = 0.005$), underscoring the irreplaceable role of competence in enabling accurate and accountable public financial management. Second, the Internal Control System did not significantly predict Treasurer Performance ($\beta = 0.200$; $p = 0.085$), reflecting the persistent gap between SPIP policy design and ground-level implementation in North Sumatra's school network. Third, Organizational Culture significantly enhances Treasurer Performance ($\beta = 0.212$; $p = 0.018$), highlighting the importance of institutional values and behavioral norms. Fourth, Motivation directly and significantly improves Treasurer Performance ($\beta = 0.238$; $p = 0.037$), affirming the role of intrinsic and extrinsic work drives in sustaining accountability behaviors. Fifth, Motivation fails to significantly moderate any predictor–performance relationship (all $p > 0.05$), indicating that HRQ, ICS, and OC operate as independent performance drivers not contingent on motivational amplification. The model's R^2 of 0.629 reflects strong explanatory power.

For policy and practice, the findings call for: (1) mandatory periodic technical training and accounting competency certification for all school-level treasurers, especially those newly designated under Permen Dikdasmen No. 8/2025 and in compliance with Perpres No. 7/2016; (2) structural strengthening of ICS through empowered internal audit functions, clear supervisory accountability chains, and regular compliance audits; (3) deliberate organizational culture development through institutional values socialization, leadership exemplarity, and recognition programs; and (4) motivation-sustaining mechanisms including transparent workload distribution, timely compensation, and career development pathways.

Future research should extend this framework by incorporating mediating mechanisms (e.g., information systems quality, organizational commitment), exploring longitudinal designs to track performance improvement trajectories following regulatory interventions, and expanding geographic scope to other provincial education departments for comparative analysis. Interaction effects with transformational leadership and digital financial literacy also represent productive avenues for future inquiry.

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