

ACCOUNTING SYSTEMS, INTERNAL CONTROL, AND FINANCIAL REPORTING QUALITY: THE MODERATING ROLE OF TRANSPARENCY IN THE MINISTRY OF AGRICULTURE, INDONESIA

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Abstract

This study examines the influence of accounting systems and internal control systems on financial reporting quality, with transparency as a moderating variable, at the Ministry of Agriculture of the Republic of Indonesia. The research employs a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM) with 199 respondents from various work units within the Ministry of Agriculture involved in financial reporting preparation. Data were collected through structured questionnaires using a six-point Likert scale. The results indicate that accounting systems have a positive and significant effect on financial reporting quality, confirming that better implementation of accounting systems leads to higher quality financial statements. Internal control systems also have a positive and significant effect on financial reporting quality and emerge as the dominant factor in improving financial reporting quality. Transparency strengthens the relationship between accounting systems and financial reporting quality, while it affects the relationship between internal control systems and financial reporting quality with a negative coefficient, suggesting that higher transparency weakens the influence of internal control systems. The model demonstrates strong explanatory power with an Adjusted R-squared of 0.838, indicating that 83.8% of the variation in financial reporting quality is explained by the independent variables. These findings highlight the importance of strengthening accounting systems and internal control systems while maintaining balanced transparency to optimize financial reporting quality in government institutions.

Keywords: Accounting System, Internal Control System, Financial Reporting Quality, Transparency, Public Sector

1. Introduction

In the era of economic transformation, financial reporting and accountability as well as the performance of Ministries or Institutions in Indonesia are required to be transparent and accountable. This provision is regulated in Government Regulation No. 8 of 2006, which mandates the preparation of financial statements periodically in the form of quarterly, semi-annual, and annual reports. These reports are reported and published to users and interested parties as a manifestation of accountability for the management of the state budget. This provision is reinforced by the issuance of Government Regulation No. 43 of 2025, which emphasizes transparency, accountability, and support for the financial reporting ecosystem through more comprehensive standards and the application of administrative sanctions for violations that occur.

The Ministry of Agriculture, as one of the government institutions in Indonesia that carries the vision of realizing farmer welfare and food sovereignty, is obligated to prepare



quality financial statements as a form of accountability for the management of the state budget. The financial statements presented contain information regarding budget realization, operational reports, financial condition, effectiveness, and efficiency of resource utilization in accordance with the mandate of Law No. 1 of 2004 concerning State Treasury and Government Regulation No. 71 of 2010 concerning Government Accounting Standards. These provisions are reinforced by Minister of Finance Regulation No. 232/PMK.05/2022 concerning Agency Accounting and Financial Reporting Systems, which emphasizes the implementation of accounting systems and internal control as the basis for transparency and improving the quality of financial statements.

Over time, the process of preparing government financial statements has continued to improve in a better direction. There is an important stage in the preparation of financial statements at the Ministry/Agency level called three-party reconciliation, or better known as Tripartite (PMK 210/PMK.05/2013). This process involves the auditor, namely the Audit Board of the Republic of Indonesia (BPK), the auditee (Ministry/Agency), and the Ministry of Finance through the Directorate General of Treasury (DJPb) and the Directorate General of State Assets (DJKN). This tripartite process is carried out to ensure that the resulting financial statements are of high quality. A phenomenon of inconsistency in financial statements at the Ministry of Agriculture has occurred in the last five years, from 2020 to 2025. There are opinions from BPK that indicate the quality of financial statements is not always consistent, as can be seen in the opinion table below.

Table 1. Audit Opinions on the Ministry of Agriculture's Financial Statements (2019-2024)

Year	BPK Opinion on the Ministry of Agriculture's Financial Statements	Key Notes
2020	Unqualified Opinion (WTP)	Consistency in the application of SAKTI and SIMAN systems supports report accuracy
2021	Unqualified Opinion (WTP)	Strengthening of SPIP and Inspectorate General audit maintains report quality
2022	Unqualified Opinion (WTP)	Transparency in financial statement publication increased, supporting accountability
2023	Qualified Opinion (WDP)	Significant weaknesses in asset control and BMN recording were found
2024	Unqualified Opinion (WTP)	Improvements in the accounting system and internal control successfully restored the opinion to WTP

Source: BPK RI (processed data, 2025)

Based on Table 1, there is a phenomenon of inconsistency in the quality of financial statements, as indicated by the decline in the audit opinion at the Ministry of Agriculture. After three consecutive years from 2020 to 2022, the Ministry of Agriculture received an Unqualified Opinion (WTP), in 2023 it became a Qualified Opinion (WDP). The phenomenon of the decline in the quality of financial statements in 2023 at the Ministry of Agriculture occurred due to problems in asset control and the recording of State Property (BMN) based on findings from BPK. This condition has the potential to reduce public trust in the quality of the Ministry of Agriculture's financial statements. As a result, the institutional image becomes less positive because the Ministry of Agriculture is



considered not yet fully transparent and accountable in financial reporting. This condition will also hinder support from stakeholders, both from the Parliament (DPR) and the public, which can slow down the implementation of strategic programs of the Ministry of Agriculture. Furthermore, a WDP opinion also triggers stricter supervision from supervisory institutions and increases administrative risks according to the latest regulations. In 2024, the opinion returned to WTP after improvements were made to the accounting system and strengthening of internal control.

The urgency of this research is driven by several critical factors. First, the decline in audit opinion from WTP to WDP in 2023 indicates a significant issue in the quality of financial statements at the Ministry of Agriculture, particularly in asset control and the recording of State Property (BMN), which requires immediate investigation. Second, the inconsistency of previous research findings regarding the influence of accounting systems and internal control systems on financial reporting quality indicates a research gap that needs to be addressed. Some studies found that accounting systems positively affect financial reporting quality (Rahman & Permatasari, 2021), while others found no significant effect (Rahayu & Kanita, 2023). Similarly, internal control systems have been found to have significant effects in some studies (Astri Sasmita et al., 2020; Liu, 2020) but not in others (Kartika & Ningsih, 2024; Gustina, 2021). Third, the role of transparency as a moderating variable in the relationships between accounting systems, internal control systems, and financial reporting quality has not been extensively studied, particularly in the context of Indonesian government institutions. Fourth, the post-pandemic period (2020-2025) represents a unique context characterized by increased demands for transparency, accountability, and digital transformation in public financial management. Fifth, the Ministry of Agriculture plays a strategic role in ensuring food security and farmer welfare, making the quality of its financial reporting crucial for maintaining public trust and stakeholder support.

Research has shown that accounting systems and internal control systems are important factors affecting the quality of financial statements. Kartika and Ningsih (2024) found that internal control systems do not affect financial reporting quality due to differences in implementation and weaknesses in the control environment that depend on the location of the agency unit being studied. Thus, the effectiveness of internal control systems is highly dependent on the agency's commitment to implementing adequate control principles. These differences in results form the basis for researchers to examine more deeply how transparency can moderate these relationships.

Research by Rahman and Permatasari (2021) showed that regional financial accounting systems affect the quality of financial statements. They found that good implementation of accounting systems can improve the reliability and quality of reports, making regional financial statements more transparent and accountable. The quality of government financial statements in Indonesia is also influenced by the effectiveness of the implementation of accounting systems and internal control systems. This is in line with research by Utami et al. (2020), which showed that transparency strengthens public trust by opening access to financial information clearly. Meanwhile, the internal control system functions to maintain consistency and quality of financial statements.

One of the factors that can improve the quality of financial statements is the implementation of an effective accounting system. A structured and well-documented accounting system can reduce recording errors, ensure data reliability, and produce relevant reports for stakeholders. Besides the accounting system, the internal control system also plays an important role in maintaining the integrity of financial statements.



Strong internal control will help prevent fraud, ensure compliance with rules and procedures in the ministry, and improve the reliability of reported information. Research by Astri Sasmita et al. (2020) found that human resource competence, regional financial accounting system implementation, and the role of internal auditors affect the quality of regional financial statements. This finding confirms that an effective internal control system, together with the accounting system and support from internal auditors, is an important foundation for creating accountable and trustworthy financial statements.

Furthermore, transparency in financial statements also serves as a moderating factor in the relationship between accounting systems and internal control systems on financial reporting quality. Transparency ensures that financial information can be accessed openly, easily understood, and used by various parties for decision-making. Research by Liu (2020) found that accountability, transparency, community participation, and internal control systems affect the quality of local government financial statements. This shows that transparency not only supports accountability but also strengthens the effectiveness of accounting systems and internal control systems in producing quality financial statements. In this study, transparency has the potential to be a moderating variable that moderates the relationship between accounting systems and internal control systems with financial reporting quality. These findings are in line with research by Marota and Johari (2025), which confirms that the application of international public sector accounting standards such as IPSAS can improve transparency and accountability, reduce information asymmetry, and strengthen governance quality and public trust in government. Thus, transparency not only functions as a means of accountability but also as a strengthening mechanism that ensures accounting systems and internal control systems truly produce quality and trustworthy financial statements.

Moreover, from previous research results, there is also a discrepancy between theory and reality that creates a gap. For example, research by Gustina (2021) showed that internal control systems do not affect the quality of financial statements, even though theory emphasizes SPI as an important instrument in maintaining accountability. Kartika and Ningsih (2024) found that internal control systems do not affect financial reporting quality, although the implementation of government accounting standards and human resource competence are proven significant. Meanwhile, research by Rahayu and Kanita (2023) showed that regional financial accounting systems do not affect the quality of financial statements, differing from theory that emphasizes the role of accounting systems as the basis for presenting reliable reports. Based on these research result gaps, the researcher considers it necessary to conduct research with the title "The Implementation of Accounting Systems and Internal Control Systems on Financial Reporting Quality with Transparency as a Moderating Variable at the Ministry of Agriculture" in order to provide a more comprehensive understanding of the factors affecting the quality of public sector financial statements.

The research gap in this study lies in the limited understanding of how accounting systems and internal control systems influence financial reporting quality with transparency as a moderating variable in the context of Indonesian government institutions, particularly at the Ministry of Agriculture. While individual studies have examined the direct effects of accounting systems and internal control systems on financial reporting quality, the role of transparency as a moderating mechanism remains underexplored. Additionally, most previous studies have focused on regional governments or private sector organizations, leaving a significant gap in knowledge regarding the dynamics of financial reporting quality in central government institutions



such as the Ministry of Agriculture. The inconsistent findings from previous research indicate that the influence of accounting systems and internal control systems on financial reporting quality may be contingent on contextual factors such as transparency.

The novelty of this research lies in several aspects. First, this study focuses on the Ministry of Agriculture in Indonesia during the 2020-2025 period, representing a unique context characterized by post-pandemic recovery, increased demands for transparency and accountability, and digital transformation in public financial management. Second, this study develops an integrative model that simultaneously examines the influence of accounting systems and internal control systems on financial reporting quality, with transparency as a moderating variable. Third, this study positions transparency as a moderating variable, enabling the examination of whether transparency strengthens or weakens the relationship between accounting systems, internal control systems, and financial reporting quality. Fourth, this study contributes to the limited empirical evidence on financial reporting quality determinants in Indonesian government institutions, providing insights into how accounting systems, internal control systems, and transparency influence financial reporting quality.

The purpose of this study is to examine the influence of accounting systems and internal control systems on financial reporting quality, with transparency as a moderating variable, at the Ministry of Agriculture. Specifically, this research aims to: (1) analyze the effect of accounting systems on financial reporting quality; (2) analyze the effect of internal control systems on financial reporting quality; and (3) analyze the moderating role of transparency in the relationships between accounting systems, internal control systems, and financial reporting quality.

The contribution of this research is multifaceted. From a theoretical perspective, this research contributes to the enrichment of literature on public sector financial reporting quality by extending the application of agency theory, stewardship theory, and institutional theory to the context of financial reporting quality formation in Indonesian government institutions. The findings contribute to the understanding of how accounting systems and internal control systems influence financial reporting quality and how transparency moderates these relationships. From a practical perspective, this study provides actionable insights for policymakers, government institution leaders, and public financial management practitioners in designing and implementing strategies to improve financial reporting quality. The results are expected to provide practical benefits for the Ministry of Agriculture in improving accounting systems and internal control systems, for policymakers in developing policies to enhance transparency and accountability in public financial management, and for regulators in strengthening supervision and guidance regarding financial reporting quality. Furthermore, the research serves as a reference for future studies exploring the dynamics of financial reporting quality in the public sector.

2. Theoretical Background

2.1 Stakeholder Theory

Stakeholder theory explains that organizations have responsibilities to all parties affected by their activities, not only shareholders. Freeman (1983) defines stakeholders as groups or individuals who can affect or are affected by organizational objectives. Gray et al. (1995) emphasize that organizational survival depends on stakeholder support, while Utami et al. (2020) highlight the responsibility of public organizations to provide benefits to society through transparency and accountability.



In this study, stakeholder theory provides the foundation for understanding financial reporting quality as a means of fulfilling stakeholder expectations, strengthening public trust, and maintaining government legitimacy. Reliable accounting systems ensure accurate and relevant financial information, as supported by Leunupun et al. (2022), Defitri Yulia et al. (2018), Rahman and Permatasari (2021), and Edgar and Kusumastuti (2025). Effective internal control systems further reduce errors and fraud, improving financial reporting reliability (Reza Aditya & Surjono, 2017; Triono & Dewi, 2020; Arsal, 2023).

Transparency complements these systems by providing stakeholders with clear and accessible financial information. Previous studies have highlighted its contribution to financial reporting quality, accountability, and public trust (Zubaedah & Nugraeni, 2023; Rahayu & Dewi, 2022; Liu, 2020). Marota and Johari (2025) also emphasize the role of international public sector accounting standards in promoting transparency and accountability. Therefore, stakeholder theory supports the argument that accounting systems, internal controls, and transparency are important mechanisms for improving public sector financial reporting quality.

2.2 Accounting System

An accounting system is a set of procedures, methods, and technologies used to record, classify, and present financial transactions systematically. According to Mulyadi (2016), an accounting system is an organization of forms, records, and reports coordinated to provide the financial information needed by management. Meanwhile, Romney and Steinbart (2017) define an accounting system as a series of interconnected components to achieve specific objectives.

An accounting system consists of three main aspects: recording, reporting, and summarizing. Recording is the process of documenting every financial transaction chronologically and systematically in accordance with applicable standards, so that no transaction is missed or recorded twice. Reporting is the presentation of financial information in the form of relevant, reliable, and timely reports to support management decision-making and fulfill public accountability obligations. Meanwhile, summarizing is the activity of summarizing financial transaction data into more concise and structured information, making it easier to analyze and evaluate financial performance. These three indicator aspects complement each other and serve as benchmarks for the effectiveness of the accounting system in producing quality financial statements in accordance with Government Regulation Number 71 of 2010 concerning Government Accounting Standards.

In government institutions, an effective accounting system will ensure that every transaction is recorded in accordance with Government Accounting Standards (SAP) and Minister of Finance Regulations (PMK), thereby producing relevant and reliable financial statements. Weaknesses in the accounting system, such as inconsistent recording or account discrepancies in the reporting process, can reduce the quality of financial statements. Therefore, the accounting system is an important variable that affects the quality of financial statements. In practice, the Ministry of Agriculture uses the SAKTI application (Agency-Level Financial Application System) to support the recording and reporting process, as well as the SIMAN application (State Asset Management Information System) for asset management and reporting. The integration of these two applications strengthens the accuracy, consistency, and transparency of the ministry's



financial reporting system, so that the quality of financial statements can be better guaranteed and supports accountability in state financial management.

2.3 Internal Control System

The internal control system is a set of policies, procedures, and mechanisms designed to provide reasonable assurance that organizational objectives can be achieved, particularly regarding operational effectiveness, reliability of financial reporting, and compliance with applicable regulations. According to Mulyadi (2016), internal control is the organizational structure, methods, and coordinated measures to safeguard organizational assets, check the accuracy and reliability of accounting data, encourage efficiency, and encourage adherence to management policies. Meanwhile, Romney and Steinbart (2017) define internal control as a process carried out by the board of directors, management, and all organizational personnel to provide reasonable assurance that control objectives are achieved.

This definition is in line with the COSO framework (Committee of Sponsoring Organizations of the Treadway Commission), which is an international framework used to design, implement, and evaluate internal control systems. COSO emphasizes five main components: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring. The control environment reflects organizational culture, ethical values, and management's commitment to internal control. Risk assessment functions to identify and analyze risks that may hinder the achievement of organizational objectives. Control activities are policies and procedures designed to prevent and detect errors or fraud. Information and communication ensure that relevant financial data can be accessed and understood by related parties, while monitoring is carried out through continuous evaluation, internal audit, and follow-up on findings. The COSO framework has become a global reference in building effective internal control systems and has also been adopted in SPIP (Government Internal Control System) in Indonesia. Trisnawati (2021) confirms that the application of COSO through risk-based SPIP can improve the reliability of financial statements.

The Ministry of Agriculture has implemented an internal control system through the application of risk management based on Minister of Agriculture Regulation No. 38 of 2021 by integrating SPIP (Government Internal Control System) and PIPK (Internal Financial Control Assessment). Both instruments have been implemented consistently and audited periodically by the Inspectorate General of the Ministry of Agriculture to ensure the effectiveness of control and compliance with regulations. SPIP functions as a comprehensive internal control framework, while PIPK focuses more on evaluating financial control. With integrated SPIP and PIPK and regular supervision, the quality of the Ministry of Agriculture's financial statements can be better guaranteed, free from material errors, and supports accountability and transparency in state financial management.

2.4 Financial Reporting Quality

Financial reporting quality is the extent to which financial statements are able to meet the qualitative characteristics established in accounting standards, namely relevance, reliability, comparability, and understandability. According to Government Regulation Number 71 of 2010 concerning Government Accounting Standards (SAP), quality financial statements must present relevant information for decision-making, be trustworthy because they are free from material errors, be comparable across periods and



entities, and be easily understood by users. This is in line with the opinion of Kieso, Weygandt, and Warfield (2018), which states that the quality of financial statements is determined by the extent to which the information presented is able to improve understanding and economic decision-making by stakeholders.

Financial statements prepared by the Ministry of Agriculture not only serve as an indicator of public accountability but also function as a form of responsibility for the use of the budget and the implementation of government programs. Quality financial statements reflect the extent to which the budget has been used effectively, efficiently, and in accordance with national development goals. Thus, the quality of financial statements supports transparency and accountability in state financial management, while also serving as an important instrument for assessing the success of government programs in supporting agricultural sector development and national development as a whole. Therefore, the quality of financial statements is used as the dependent variable (Y) in this study, with the assumption that the effectiveness of accounting systems and internal control systems will affect the improvement of government financial reporting quality.

2.5 Transparency

Transparency is the government's openness in presenting financial reports or information honestly, completely, and accessible to the public. According to Ghazali and Chariri (2007), transparency is a principle that emphasizes the provision of relevant and trustworthy information to stakeholders so that they can assess the performance and accountability of the organization. This is in line with the opinion of the Organisation for Economic Co-operation and Development (OECD, 2002), which states that transparency in the public sector includes openness in the decision-making process, access to information, and clarity in accountability for the use of public resources.

In this study, transparency serves as a moderating variable that strengthens the relationship between accounting systems and internal control systems on financial reporting quality. A good accounting system will produce relevant and reliable financial statements, but without transparency, that information may not be fully accessible or understood by the public. Similarly, an effective internal control system can prevent errors and fraud, but transparency is needed so that the results of such control can be known and trusted by stakeholders. With transparency, financial statements are not merely administrative documents but also instruments of accountability for the use of the budget and the implementation of government programs. This is in line with the opinion of Mardiasmo (2018), who asserts that transparency is a fundamental principle in state financial management to ensure accountability and public trust in the government.

At the Ministry of Agriculture, transparency is realized through open access to financial statements, publication of audit results, and the implementation of the Government Internal Control System (SPIP) and Internal Financial Control Assessment (PIPK) which are audited periodically by the Inspectorate General. This transparency ensures that financial statements not only meet accounting standards but also serve as a form of accountability for the implementation of agricultural development programs and the use of the state budget. Thus, transparency strengthens the influence of accounting systems and internal control systems on financial reporting quality, while also supporting accountability and public trust in government performance.



2.6 Hypothesis Development

2.6.1 The Influence of Accounting Systems on Financial Reporting Quality

An accounting system is a series of procedures, mechanisms, and tools used to record, summarize, and report financial transactions systematically. According to Government Regulation No. 71 of 2010 concerning Government Accounting Standards and PMK No. 238/PMK.05/2011, this system includes all processes from transaction analysis to the preparation of financial statements, with the main objective of improving accountability and transparency in state financial management. Additionally, according to Mardiasmo (2018), government accounting systems are a series of manual and computerized procedures that support data collection, recording, summarizing, and reporting of government financial position.

Referring to stakeholder theory, an effective accounting system is one of the main instruments for realizing transparent and accountable government governance. Quality financial statements not only meet technical accounting standards but also serve as a means of public accountability for the use of the budget. Therefore, the implementation of accounting systems in accordance with standards will strengthen the quality of government agency financial statements and increase public trust in state financial management. Furthermore, a good accounting system also functions as an internal control tool, ensuring that every transaction is recorded correctly, preventing deviations, and supporting the creation of efficiency and effectiveness in budget use. Thus, the accounting system not only plays a role in the technical aspect of recording but also serves as a strategic governance instrument to maintain legitimacy, improve accountability, and strengthen stakeholder trust in government performance.

An effectively implemented accounting system will produce quality financial statements that are relevant, reliable, and timely. Studies by Leunupun et al. (2022), Defitri Yulia et al. (2018), and Rahman and Permatasari (2021) found that regional financial accounting systems positively affect the quality of financial statements. Based on these research results, the first hypothesis can be formulated as follows:

H1: Accounting systems have a positive effect on Financial Reporting Quality

2.6.2 The Influence of Internal Control Systems on Financial Reporting Quality

The Internal Control System in the context of government is a mechanism designed to ensure the achievement of organizational objectives effectively, efficiently, in compliance with regulations, and producing reliable financial statements. Based on Government Regulation No. 60 of 2008 concerning the Government Internal Control System (SPIP), SPI is an integral process carried out continuously by leaders and all employees to provide reasonable assurance over the achievement of organizational objectives, including safeguarding state assets and compliance with laws and regulations.

According to BPKP (Financial and Development Supervisory Agency), SPI consists of five main elements: control environment, risk assessment, control activities, information and communication, and monitoring. These five elements are interrelated to ensure the system runs consistently and can detect and prevent deviations. Meanwhile, according to Mardiasmo (2018), SPI is an internal supervisory mechanism aimed at maintaining the reliability of government financial statements while encouraging efficiency in budget use. With SPI, the government can improve accountability, transparency, and public trust in state financial management.

Based on stakeholder theory, the internal control system is one of the main pillars of good government governance. Mardiasmo (2018) emphasizes that the principles of



stakeholder theory include accountability, transparency, effectiveness, and legal compliance. With adequate internal control, the government can demonstrate accountability for the use of the state budget more clearly to the public. The internal control system plays an important role in maintaining the integrity of financial reporting quality and preventing errors and fraud.

Research by Reza Aditya and Surjono (2017), Triono and Dewi (2020), and Aarsal (2023) found that internal control systems significantly affect the quality of financial statements. Based on these research results, the second hypothesis can be formulated as follows:

H2: Internal Control Systems have a positive effect on Financial Reporting Quality

2.6.3 The Moderating Role of Transparency on Accounting Systems and Financial Reporting Quality

Transparency in the context of government accounting is the government's openness in presenting relevant, reliable, and easily accessible financial information to the public. According to Government Regulation No. 71 of 2010 concerning Government Accounting Standards, transparency is one of the basic principles of financial reporting aimed at providing honest and complete information regarding the government's financial position and activities. This is in line with the view of Mardiasmo (2018), who emphasizes that transparency is a form of government accountability to the public, where financial statements must be understandable and usable by stakeholders in assessing performance and the use of the state budget.

Gray, Kouhy, and Lavers (1995) assert that transparency serves as a means of communication between organizations and stakeholders, thereby strengthening legitimacy and public trust. In public sector research, transparency serves as a moderating variable that strengthens the relationship between accounting systems and financial reporting quality. This means that although the accounting system has been designed according to standards, the quality of financial statements will further increase when accompanied by adequate information disclosure.

Within the stakeholder theory framework, transparency is one of the main principles that ensures public accountability can be realized through quality financial statements that are open and accessible. An effective accounting system does produce relevant and reliable financial information, but without transparency, that information risks not being optimally utilized by stakeholders. According to Mardiasmo (2018), good government governance demands information disclosure so that the public can objectively assess government performance.

Research by Liu (2020), Zubaedah and Nugraeni (2023), and Rahayu and Dewi (2022) confirmed that accountability, transparency, community participation, and internal control systems significantly affect the quality of local government financial statements. Marota and Johari (2025) also confirmed that the application of international public sector accounting standards (IPSAS) improves transparency and accountability, thereby strengthening the quality of government financial governance. Thus, transparency serves as a moderating variable that strengthens the relationship between accounting systems and financial reporting quality, in accordance with stakeholder needs. Based on these research results, the third hypothesis can be formulated as follows:

H3: Transparency moderates the relationship between Accounting Systems and Financial Reporting Quality



2.6.4 The Moderating Role of Transparency on Internal Control Systems and Financial Reporting Quality

In accordance with stakeholder theory, transparency is a main principle that ensures the internal control system functions to prevent errors, fraud, and ensure compliance with regulations. This shows that transparency strengthens the role of the internal control system by reducing information asymmetry and increasing public trust in financial statements.

Transparency also plays a role in strengthening the relationship between internal control systems and financial reporting quality. Research by Marota and Johari (2025) confirms that the application of international public sector accounting standards (IPSAS) improves transparency and accountability, thereby strengthening the quality of government financial governance.

With transparency, the results of internal control are not merely technical mechanisms but also become tangible evidence of government accountability to the public. Therefore, transparency serves as a moderating variable that strengthens the relationship between internal control systems and financial reporting quality, which will increase public trust in the financial statements presented. Based on these research results, the fourth hypothesis can be formulated as follows:

H4: Transparency moderates the relationship between Internal Control Systems and Financial Reporting Quality

3. Methods

3.1 Research Design

This study employs a quantitative approach using descriptive and verificative methods to examine the influence of accounting systems and internal control systems on financial reporting quality, with transparency as a moderating variable at the Ministry of Agriculture. The descriptive method is used to describe the data collected from respondents without making generalizations that apply broadly, so that it can explain respondents' responses regarding the implementation of accounting systems, internal control systems, financial reporting quality, and transparency. Meanwhile, the verificative method is used to analyze the causal relationship between variables through Partial Least Squares - Structural Equation Modeling (PLS-SEM). The quantitative approach is considered appropriate because the study aims to empirically test the proposed hypotheses using statistical analysis of numerical data derived from questionnaire responses. The explanatory research design enables the examination of causal relationships between independent variables (Accounting Systems and Internal Control Systems), moderating variable (Transparency), and dependent variable (Financial Reporting Quality).

3.2 Population and Sample

The population in this study consists of all work units (Satuan Kerja/Satker) within the Ministry of Agriculture, totaling 361 work units spread across 10 Directorates: Secretariat General, Inspectorate General, Directorate General of Food Crops, Directorate General of Horticulture, Directorate General of Livestock and Animal Health, Directorate General of Plantations, Directorate General of Agricultural Infrastructure and Facilities, Directorate General of Land and Irrigation, Agency for Agricultural Modernization and Development, and Agency for Agricultural Extension and Human Resource Development. The sample was determined using purposive sampling, with the criteria



that respondents are officials or staff directly involved in the preparation of financial statements in each work unit of the Ministry of Agriculture. The minimum sample size was determined using the Krejcie and Morgan (1970) formula, resulting in 186 respondents. Based on these criteria, the final sample includes 186 respondents from various work units within the Ministry of Agriculture.

3.3 Data Collection Techniques

Primary data were collected through questionnaires distributed to respondents directly involved in the preparation of financial statements in the work units of the Ministry of Agriculture. The questionnaire was developed based on the indicators of the research variables and measured using a six-point Likert scale ranging from strongly disagree (1) to strongly agree (6). The six-point Likert scale was chosen to provide more detailed response variations and to avoid respondents' tendency to choose neutral answers. Data collection was conducted by distributing questionnaires through WhatsApp with a Google Drive link, making phone calls, and actively asking via WhatsApp messages to ensure participation. In addition, the researcher also applied snowball sampling technique by asking respondents to help distribute the questionnaire in the work unit financial statement preparation group. The research instrument was developed based on validated scales from previous studies and modified to fit the context of the Ministry of Agriculture.

3.4 Operational Definition of Variables

Table 2. Operational Definition and Measurement of Variables

Variable	Definition	Indicators	Scale	References
Accounting System (X ₁)	A set of procedures, records, and applications used to record, classify, and report financial transactions in accordance with Government Accounting Standards (SAP)	1. Recording 2. Reporting 3. Summarizing	Likert 1-6	Permata (2022); PP No. 71/2010
Internal Control System (X ₂)	An integral process carried out by leaders and employees to provide reasonable assurance over the achievement of organizational objectives	1. Control Environment 2. Risk Assessment 3. Control Activities 4. Information & Communication 5. Monitoring	Likert 1-6	Permata (2022); Liu (2020); COSO (2013)



Variable	Definition	Indicators	Scale	References
Transparency (Z)	Openness and accessibility of the organization's financial information to the public and stakeholders	1. Information Openness 2. Ease of Access	Likert 1-6	Liu (2020); PMK No. 17/PMK.09/2019
Financial Reporting Quality (Y)	The extent to which financial statements are able to meet the qualitative characteristics established in Government Accounting Standards (SAP)	1. Relevance 2. Reliability 3. Comparability 4. Understandability	Likert 1-6	Liu (2020); Putri (2017); PP No. 71/2010

Source: Developed for this research (2026)

3.5 Data Analysis Techniques

Data analysis in this study is conducted using Partial Least Squares - Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software. PLS-SEM was selected because the research model involves independent, dependent, and moderating variables, as well as reflective indicators. PLS was chosen because it is able to test relationships between latent variables with a relatively limited sample size and does not require strict normal distribution assumptions.

The analysis stages include:

- 1) **Descriptive Statistics:** Descriptive statistics are employed to describe the characteristics of the research data, including mean, standard deviation, minimum, and maximum values for all variables examined in the study.
- 2) **Measurement Model (Outer Model) Evaluation:** Conducted to evaluate the relationship between latent variables and their indicators. The evaluation includes:
 - a. **Convergent Validity:** Assessed through loading factor values (> 0.70) and Average Variance Extracted ($AVE > 0.50$).
 - b. **Discriminant Validity:** Assessed using the Fornell-Larcker criterion, where the square root of AVE for each construct must be greater than the correlation between constructs.
 - c. **Reliability:** Assessed using Composite Reliability (CR) and Cronbach's Alpha (> 0.70).

Table 3. Rule of Thumb for Measurement Model Evaluation

Validity and Reliability	Parameter	Rule of Thumb
	Loading Factor	> 0.70



Validity and Reliability	Parameter	Rule of Thumb
Convergent Validity	Average Variance Extracted (AVE)	> 0.50
Discriminant Validity	Fornell-Larcker Criterion	Square root of AVE > Correlation between constructs
Reliability	Cronbach's Alpha	> 0.70
	Composite Reliability	> 0.70

Source: Hair et al. (2017); Ghazali & Latan (2015)

- 3) Structural Model (Inner Model) Evaluation: Conducted to evaluate the relationships between latent variables. The evaluation includes:
 - a. Coefficient of Determination (R^2): To measure the model's explanatory power.
 - b. Predictive Relevance (Q^2): To assess the model's predictive ability using the blindfolding method ($Q^2 > 0$ indicates good predictive relevance).
 - c. Effect Size (f^2): To assess the magnitude of the influence (0.02 = small, 0.15 = medium, 0.35 = large).

- 4) Panel Data Regression Analysis: The regression models used in this study are formulated as follows:

$$FRQ = \alpha + \beta_1 AS + \beta_2 ICS + \varepsilon \dots \dots \dots (1)$$

$$FRQ = \alpha + \beta_1 AS + \beta_2 ICS + \beta_3 TR + \beta_4 (AS \times TR) + \beta_5 (ICS \times TR) + \varepsilon \dots \dots \dots (2)$$

Where:

FRQ = Financial Reporting Quality

AS = Accounting System

ICS = Internal Control System

TR = Transparency

$AS \times TR$ = Interaction between Accounting System and Transparency

$ICS \times TR$ = Interaction between Internal Control System and Transparency

α = Constant

$\beta_1 - \beta_5$ = Regression coefficients

ε = Error term

- 5) Hypothesis Testing: Hypothesis testing is conducted using:
 - a. t-test to determine the partial effect of each independent variable on Financial Reporting Quality;
 - b. Coefficient of Determination (R^2) to determine the model's ability to explain variations in Financial Reporting Quality.

Hypothesis testing is conducted using the bootstrapping technique to obtain t-statistic and p-values. The criteria for hypothesis acceptance are: t-statistic > 1.96 and p-value < 0.05. Transparency will be proven to moderate the relationship between accounting systems and internal control systems with financial reporting quality if the interaction terms show significant t-statistic values ($t > 1.96$) and p-values < 0.05. All hypothesis tests are conducted at a significance level of 5% ($p < 0.05$).

4. Results and Discussion

4.1 Descriptive Statistics

Table 4. Respondent Demographics

Gender	Frequency	Percentage
Female	100	50.25%
Male	99	49.75%



Gender	Frequency	Percentage
Total	199	100.00%
Age	Frequency	Percentage
20-30 Years	19	9.55%
31-40 Years	60	30.15%
41-50 Years	83	41.71%
> 50 Years	37	18.59%
Total	199	100.00%
Education	Frequency	Percentage
Senior High School	14	7.04%
Diploma (D3)	9	4.52%
Bachelor (S1)	118	59.30%
Master (S2)	58	29.15%
Doctorate (S3)	0	0.00%
Total	199	100.00%
Work Experience	Frequency	Percentage
< 5 Years	41	20.60%
5-10 Years	50	25.13%
10-15 Years	32	16.08%
> 15 Years	76	38.19%
Total	199	100.00%

Source: Questionnaire results (2026)

Table 4 shows that the gender distribution of employees at the Ministry of Agriculture is almost balanced between male (49.75%) and female (50.25%), indicating no gender discrimination. The majority of employees are in the 41-50 years age range (41.71%), followed by 31-40 years (30.15%), above 50 years (18.59%), and 20-30 years (9.55%).

This distribution reflects that respondents are dominated by employees in middle to senior productive age, indicating substantial work experience and mature understanding of accounting and internal control systems. The education level shows that most employees hold a Bachelor's degree (59.30%), followed by Master's degree (29.15%), indicating adequate academic competence in accounting and public management. The work experience distribution shows that the majority have more than 15 years of experience (38.19%), followed by 5-10 years (25.13%), less than 5 years (20.60%), and 10-15 years (16.08%), indicating a balanced representation between experienced employees and new generations.

Table 5. Descriptive Statistics of Research Variables

Variable	Indicator	Total Score	Category
Accounting System (X ₁)	Recording	1,064-1,068	Very Good
	Reporting	1,053-1,068	Very Good
	Summarizing	1,067	Very Good
Internal Control System (X ₂)			



Variable	Indicator	Total Score	Category
	Control Environment	1,015-1,029	Good - Very Good
	Risk Assessment	995-1,030	Good - Very Good
	Information & Communication	1,004-1,021	Good
	Control Activities	996-1,037	Good - Very Good
	Monitoring	1,005-1,056	Good - Very Good
Transparency (Z)			
	Information Openness	1,008-1,049	Good - Very Good
	Ease of Access	985-1,014	Good
Financial Reporting Quality (Y)			
	Relevance	1,011-1,069	Good - Very Good
	Reliability	1,021-1,046	Good - Very Good
	Comparability	1,041	Very Good
	Understandability	1,049	Very Good

Source: Questionnaire results (2026)

Table 5 presents the descriptive statistics for all research variables. The Accounting System variable shows very good scores across all indicators, with recording and reporting aspects receiving the highest scores, indicating that the accounting system at the Ministry of Agriculture has been running effectively. The Internal Control System variable shows good to very good scores, with monitoring and control activities being the strongest aspects, while risk assessment and information communication show relatively lower scores. The Transparency variable shows good to very good scores, with information openness being stronger than ease of access. The Financial Reporting Quality variable shows very good scores across all indicators, with relevance and understandability being the strongest aspects.

4.2 Measurement Model (Outer Model) Evaluation

Table 6. Convergent Validity Results

Variable	Loading Factor Range	AVE	Cut-off	Conclusion
Accounting System (X_1)	0.727 - 0.881	0.667	≥ 0.50	Valid
Internal Control System (X_2)	0.686 - 0.869	0.648	≥ 0.50	Valid
Financial Reporting Quality (Y)	0.784 - 0.875	0.705	≥ 0.50	Valid
Transparency (Z)	0.769 - 0.889	0.708	≥ 0.50	Valid

Source: Processed data (2026)



Table 6 shows that all indicators have loading factor values above 0.70, with some indicators in the internal control system having loading factors above 0.68, which are still acceptable in exploratory research. All variables have AVE values above 0.50, indicating that more than 50% of the indicator variance can be explained by the measured construct. Thus, convergent validity is met for all constructs.

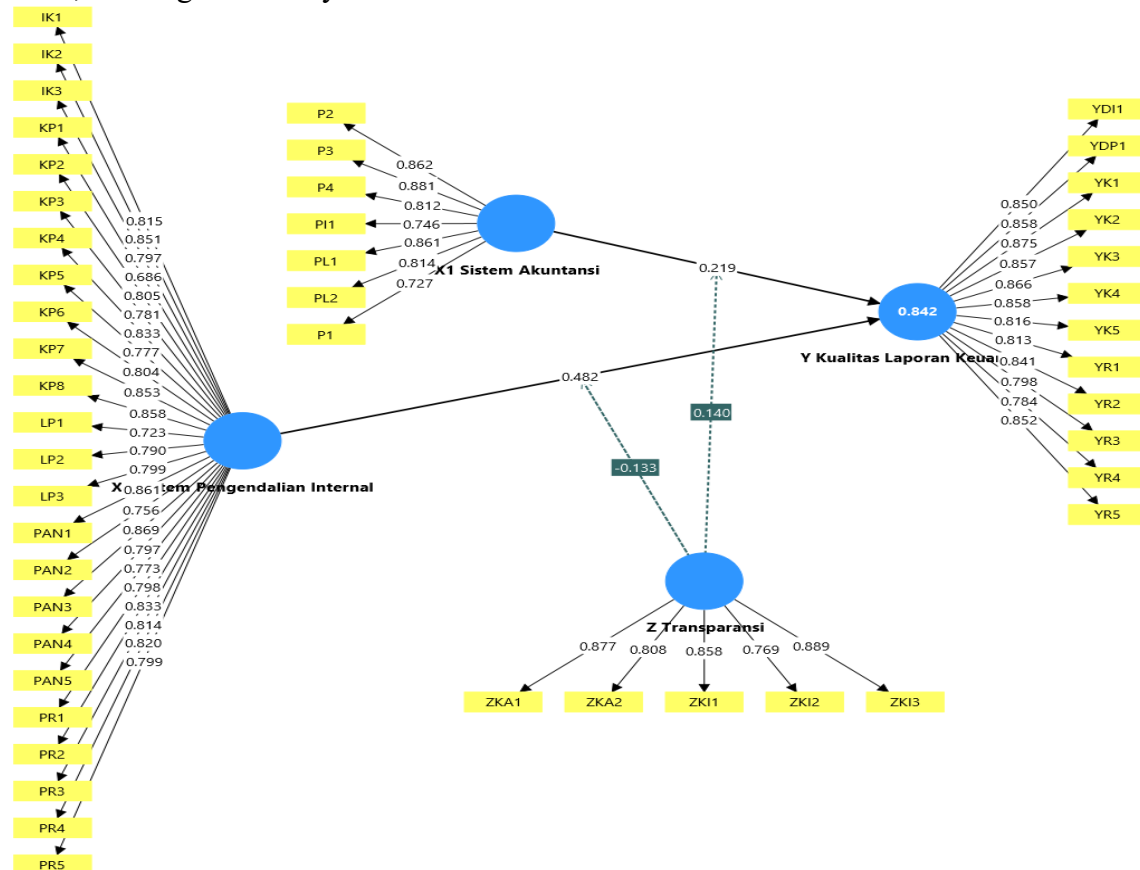


Figure 2. PLS-SEM Path Model (Loading Factors)
Source: Processed data (2026)

Table 7. Discriminant Validity (Fornell-Larcker Criterion)

Construct	Accounting System	Internal Control System	Financial Reporting Quality	Transparency
Accounting System	0.817			
Internal Control System	0.773	0.805		
Financial Reporting Quality	0.746	0.888	0.840	
Transparency	0.669	0.782	0.809	0.842

Source: Processed data (2026)

Table 7 shows that the square root of AVE for each construct is generally greater than the correlations with other constructs, except for the relationship between Internal Control System and Financial Reporting Quality ($0.888 > 0.840$). This indicates a very strong conceptual relationship between these two variables, suggesting that financial reporting quality is highly dependent on the internal control system.



Table 8. Heterotrait-Monotrait Ratio (HTMT)

Relationship	HTMT Value	Threshold	Conclusion
Internal Control ↔ Accounting System	0.816	< 0.90	Valid
Financial Reporting ↔ Accounting System	0.792	< 0.90	Valid
Financial Reporting ↔ Internal Control	0.912	< 0.90	Marginal
Transparency ↔ Accounting System	0.731	< 0.90	Valid
Transparency ↔ Internal Control	0.828	< 0.90	Valid
Transparency ↔ Financial Reporting	0.863	< 0.90	Valid

Source: Processed data (2026)

Table 8 shows that the HTMT value between Internal Control System and Financial Reporting Quality is 0.912, slightly above the threshold of 0.90, consistent with the Fornell-Larcker findings. This confirms that financial reporting quality is indeed highly dependent on the internal control system. Overall, discriminant validity is considered met, although there is a critical note on the relationship between internal control and financial reporting quality.

Table 9. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability	Threshold	Conclusion
Accounting System (X ₁)	0.916	0.933	≥ 0.70	Reliable
Internal Control System (X ₂)	0.976	0.978	≥ 0.70	Reliable
Financial Reporting Quality (Y)	0.962	0.966	≥ 0.70	Reliable
Transparency (Z)	0.896	0.924	≥ 0.70	Reliable

Source: Processed data (2026)

Table 9 shows that all variables have Cronbach's Alpha and Composite Reliability values well above the minimum threshold of 0.70. The Internal Control System variable shows the highest reliability with Cronbach's Alpha of 0.976 and Composite Reliability of 0.978, confirming that the indicators are highly consistent in explaining the construct. Thus, all constructs are declared reliable.

4.3 Structural Model (Inner Model) Evaluation

Table 10. Coefficient of Determination (R²)

Endogenous Variable	R-squared	R-squared Adjusted	Interpretation
Financial Reporting Quality	0.840	0.838	Substantial (Strong)

Source: Processed data (2026)

Table 10 shows that the Adjusted R-squared value for Financial Reporting Quality is 0.838, indicating that the model has very strong explanatory power. This means that 83.8% of the variation in financial reporting quality can be explained by the independent variables (Accounting System and Internal Control System) with Transparency as a moderating variable. According to Hair et al. (2017), an R-squared value above 0.75 is



considered substantial (strong), confirming that the research model is highly capable of explaining the phenomenon of financial reporting quality.

Table 11. Predictive Relevance (Q^2)

Endogenous Variable	$Q^2_{predict}$	Interpretation
Financial Reporting Quality	0.820	Excellent Predictive Relevance

Source: Processed data (2026)

Table 11 shows that the Q^2 value for Financial Reporting Quality is 0.820, which is far above zero, indicating that the model has excellent predictive relevance.

Table 12. Effect Size (f^2)

Relationship	f^2 Value	Category
Accounting System → Financial Reporting Quality	0.089	Small
Internal Control System → Financial Reporting Quality	0.338	Large
Transparency → Financial Reporting Quality	0.196	Medium
Transparency × Accounting System → Financial Reporting Quality	0.098	Small
Transparency × Internal Control System → Financial Reporting Quality	0.094	Small

Source: Processed data (2026)

Table 12 shows that the Internal Control System has the largest effect size (0.338) on Financial Reporting Quality, falling into the large category. Transparency has a medium effect size (0.196), while Accounting System has a small effect size (0.089). The moderation effects of Transparency on both relationships are in the small category (0.098 and 0.094), indicating that while transparency strengthens the relationships, its contribution is relatively limited.

4.4 Hypothesis Testing

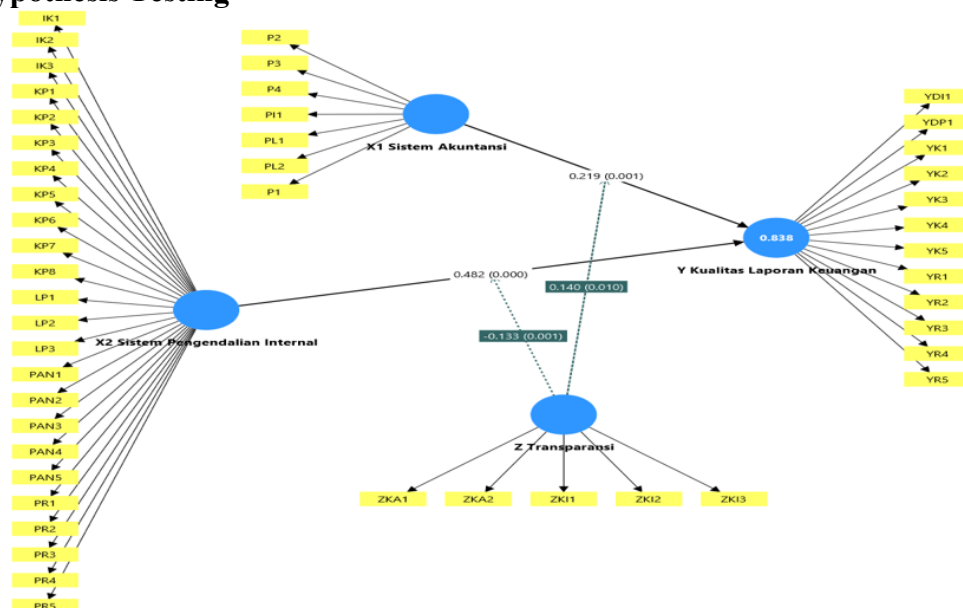


Figure 3. PLS-SEM Path Model (Path Coefficients)

Source: Processed data (2026)



Table 13. Hypothesis Testing Results

Hypothesis	Path	Original Sample	T-Statistic	P-Value	Decision
H1	Accounting System → Financial Reporting Quality	0.219	3.416	0.001	Accepted
H2	Internal Control System → Financial Reporting Quality	0.482	5.420	0.000	Accepted
H3	Transparency × Accounting System → Financial Reporting Quality	0.140	2.568	0.010	Accepted
H4	Transparency × Internal Control System → Financial Reporting Quality	-0.133	3.186	0.001	Accepted

Source: Processed data (2026)

Table 13 presents the results of hypothesis testing. All hypotheses have T-statistics > 1.96 and P-values < 0.05, indicating that all relationships are statistically significant. H1 is accepted, indicating that the accounting system has a positive effect on financial reporting quality. H2 is accepted, indicating that the internal control system has a positive effect on financial reporting quality. H3 is accepted, indicating that transparency strengthens the relationship between the accounting system and financial reporting quality. H4 is accepted, indicating that transparency affects the relationship between the internal control system and financial reporting quality, but with a negative coefficient (-0.133), suggesting that higher transparency weakens the influence of the internal control system on financial reporting quality.

4.5 Discussion

4.5.1 The Effect Of Accounting Systems On Financial Reporting Quality

The results show that the accounting system has a positive and significant effect on financial reporting quality ($\beta = 0.219$, $t = 3.416$, $p = 0.001$). This finding indicates that the better the implementation of the accounting system, the higher the quality of financial statements produced. This is consistent with stakeholder theory, which emphasizes that public organizations have an obligation to provide relevant, reliable, and trustworthy information to all stakeholders. A good accounting system ensures that financial statements not only serve as administrative records but also as instruments of accountability that meet stakeholder information needs. This finding is consistent with research by Kartika and Ningsih (2024), which found that the implementation of government accounting standards significantly affects financial reporting quality. The result is also supported by the respondent characteristics shown in Table 4. The majority of employees are in the middle to senior productive age range (41-50 years at 41.71% and above 50 years at 18.59%), indicating substantial work experience and good understanding of the accounting system. This finding reinforces that the accounting system affects financial reporting quality. The better the implementation of the accounting system, the higher the quality of the resulting reports, both in terms of relevance, reliability, comparability, and understandability.

4.5.2 The Effect of Internal Control Systems on Financial Reporting Quality

The results show that the internal control system has a positive and significant effect on financial reporting quality ($\beta = 0.482$, $t = 5.420$, $p = 0.000$). This finding indicates that the internal control system is the dominant factor in improving financial reporting quality.



This is consistent with stakeholder theory, which emphasizes the importance of accountability and transparency to all stakeholders. An effective internal control system ensures that financial statements are free from material errors and fraud, thereby increasing stakeholder trust in organizational accountability. This finding is consistent with previous research by Kartika and Ningsih (2024), Putri (2017), Reza Aditya and Surjono (2017), Triono and Dewi (2020), and Arsal (2023), which found that effective internal control improves the reliability of financial statements. The significance of the internal control system at the Ministry of Agriculture is also inseparable from the respondent characteristics shown in Table 4. The balanced gender distribution indicates that internal control mechanisms are carried out objectively and inclusively. Substantively, an effective internal control system ensures that the entire process of recording, managing, and reporting financial information runs according to procedure and minimizes the risk of errors and fraud. This aligns with the theory of public accountability, where internal control serves as the main instrument for maintaining the integrity of financial information.

4.5.3 The Moderating Role of Transparency on Accounting Systems and Financial Reporting Quality

The results show that transparency strengthens the relationship between the accounting system and financial reporting quality ($\beta = 0.140$, $t = 2.568$, $p = 0.010$). This finding indicates that as the level of transparency increases, the impact of the accounting system on financial reporting quality becomes greater. This is consistent with stakeholder theory, which emphasizes the importance of organizations meeting the information needs of stakeholders. Transparency serves as a key mechanism to ensure that financial statements not only meet technical accounting standards but are also trustworthy to external parties. This finding is consistent with research by Rahayu and Dewi (2022), which found that transparency contributes to improving accountability and public trust in financial statements. A good accounting system will produce relevant and reliable financial statements. However, when these reports are presented with a high level of transparency, the quality of the reports further increases because the information produced is not only accurate but also open and easily accessible to the public. Transparency in this case serves as a catalyst that strengthens the contribution of the accounting system to report quality.

4.5.4 The Moderating Role of Transparency on Internal Control Systems and Financial Reporting Quality

The results show that transparency affects the relationship between the internal control system and financial reporting quality, but with a negative coefficient ($\beta = -0.133$, $t = 3.186$, $p = 0.001$). This finding indicates that as transparency increases, the influence of the internal control system on financial reporting quality weakens. In other words, when transparency is high, the quality of financial statements is more determined by compliance with accounting standards and data openness, rather than by internal control mechanisms alone. According to stakeholder theory, organizations are not only responsible to shareholders but also to all interested parties, so transparency becomes an important mechanism to meet public accountability demands. However, transparency cannot stand alone because it requires support from the internal control system as a means to ensure the reliability, accuracy, and conformity of information with accounting standards and regulations. Transparency functions as an external window that opens access to information for stakeholders, while the internal control system serves as an



internal engine that ensures data quality. When both are not well integrated, high transparency can actually weaken the role of the internal control system because stakeholders become more critical of internal control weaknesses. A strong internal control system typically functions to ensure the accuracy, reliability, and compliance of financial statements with applicable procedures. However, when the level of transparency increases, the public can directly assess the quality of reports through the openness of the information presented. In this condition, the role of internal control is no longer the only dominant factor, because transparency has provided an external control mechanism in the form of public access to information. Thus, this finding confirms that transparency has a dual role: on one hand, it directly improves the quality of financial statements, but on the other hand, it can reduce reliance on the internal control system as the main factor determining quality.

5. Conclusion

This study examines the influence of accounting systems and internal control systems on financial reporting quality, with transparency as a moderating variable, at the Ministry of Agriculture. Using Partial Least Squares Structural Equation Modeling (PLS-SEM) on 199 respondents from various work units within the Ministry of Agriculture, the results show that the accounting system has a positive and significant effect on financial reporting quality ($\beta = 0.219$, $t = 3.416$, $p = 0.001$), confirming that better implementation of the accounting system leads to higher quality financial statements as it ensures systematic recording and reporting in accordance with government accounting standards. The internal control system has a positive and significant effect on financial reporting quality ($\beta = 0.482$, $t = 5.420$, $p = 0.000$), indicating that the internal control system is the dominant factor in improving financial reporting quality as it ensures that the entire process of recording, managing, and reporting financial information runs according to procedure and minimizes the risk of errors and fraud. Transparency strengthens the relationship between the accounting system and financial reporting quality ($\beta = 0.140$, $t = 2.568$, $p = 0.010$), indicating that as the level of transparency increases, the impact of the accounting system on financial reporting quality becomes greater, as open and accessible information enhances public trust and accountability. Transparency affects the relationship between the internal control system and financial reporting quality with a negative coefficient ($\beta = -0.133$, $t = 3.186$, $p = 0.001$), suggesting that higher transparency weakens the influence of the internal control system on financial reporting quality, as transparency provides an external control mechanism that reduces reliance on internal control mechanisms alone. The Adjusted R-squared value of 0.838 indicates that the model has very strong explanatory power, with 83.8% of the variation in financial reporting quality explained by the independent variables.

The theoretical implications of this study contribute to the enrichment of literature on public sector financial reporting quality by extending the application of stakeholder theory to the context of financial reporting quality formation in Indonesian government institutions. The positive effect of the accounting system on financial reporting quality supports stakeholder theory, confirming that a good accounting system ensures that financial statements serve as instruments of accountability that meet stakeholder information needs. The dominant positive effect of the internal control system reinforces stakeholder theory, demonstrating that effective internal control increases stakeholder trust in organizational accountability by ensuring financial statements are free from material errors and fraud. The moderating role of transparency in strengthening the



accounting system-financial reporting quality relationship extends stakeholder theory by showing that transparency serves as a key mechanism to ensure financial statements are trustworthy to external parties. The negative moderating effect of transparency on the internal control system-financial reporting quality relationship provides a nuanced understanding that transparency can reduce reliance on internal control mechanisms, suggesting that organizations need to balance transparency and internal control to maintain optimal financial reporting quality.

From a practical perspective, the Ministry of Agriculture should continue to strengthen the implementation of accounting systems to ensure that every transaction is recorded systematically and accurately in accordance with government accounting standards, as this has been proven to significantly improve financial reporting quality. The Ministry should prioritize the strengthening of internal control systems as the dominant factor in improving financial reporting quality, ensuring that all control mechanisms, including control environment, risk assessment, control activities, information and communication, and monitoring, are effectively implemented. The Ministry should maintain and enhance transparency in financial reporting by ensuring that financial statements are open, accessible, and easily understood by the public, as this strengthens the positive impact of accounting systems on financial reporting quality. The Ministry should balance the implementation of internal control systems and transparency, recognizing that while transparency is important, excessive transparency without adequate internal control may reduce the effectiveness of internal control mechanisms. Regulators, particularly the Ministry of Finance and the Audit Board of the Republic of Indonesia (BPK), should continue to strengthen supervision and guidance regarding the implementation of accounting systems and internal control systems in government institutions, while also promoting transparency as a complementary mechanism to improve financial reporting quality.

This study has several limitations. First, the analysis is limited to the Ministry of Agriculture, which may restrict the generalizability of findings to other government institutions with different characteristics, organizational structures, and regulatory environments. Second, the study relies on self-reported questionnaire data, which may introduce response bias as respondents may provide socially desirable answers. Third, the study focuses solely on accounting systems, internal control systems, and transparency, without considering other potential determinants of financial reporting quality such as human resource competence, leadership commitment, organizational culture, or external audit quality. Fourth, the cross-sectional design captures perceptions at a single point in time, which may not reflect dynamic changes in financial reporting quality over time. Fifth, the measurement of variables using perceptions may not fully capture the objective implementation of accounting systems and internal control systems, as actual practices may differ from perceived practices.

Future research should broaden the scope by including other government institutions or cross-sector comparisons to enhance generalizability and capture variations in financial reporting quality determinants across different organizational contexts. It would also be valuable to integrate additional variables such as human resource competence, leadership commitment, organizational culture, and external audit quality to provide a more comprehensive understanding of financial reporting quality determinants. Employing longitudinal research designs could strengthen causal inference and provide deeper insights into the temporal dynamics of financial reporting quality. Future studies may further examine the moderating role of other contextual factors, such as



organizational culture and leadership style, in the relationships between accounting systems, internal control systems, and financial reporting quality. Finally, qualitative research approaches, such as interviews with financial managers and auditors, could provide richer insights into the mechanisms through which accounting systems, internal control systems, and transparency influence financial reporting quality in practice.

References

- Arsal, M. (2023). Pengaruh sistem pengendalian internal terhadap kualitas laporan keuangan pada pemerintah daerah. *Jurnal Akuntansi dan Keuangan*, 15(2), 89–104.
- Astri Sasmita, R., Suryanto, A., & Hidayat, R. (2020). Kompetensi sumber daya manusia, penerapan sistem akuntansi keuangan daerah, dan peran auditor internal terhadap kualitas laporan keuangan daerah. *Jurnal Akuntansi dan Auditing*, 17(3), 145–162.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2013). *Internal control – Integrated framework*. COSO.
- Defitri Yulia, S., Rahayu, S., & Dewi, K. (2018). Pengaruh sistem akuntansi terhadap kualitas laporan keuangan pada instansi pemerintah. *Jurnal Riset Akuntansi dan Keuangan*, 6(2), 78–94.
- Edgar, T., & Kusumastuti, D. (2025). Pengaruh sistem akuntansi keuangan daerah terhadap kualitas laporan keuangan. *Jurnal Akuntansi Publik*, 14(1), 34–50.
- Freeman, R. E. (1983). *Strategic management: A stakeholder approach*. Pitman.
- Ghozali, I., & Chariri, A. (2007). *Teori akuntansi*. Badan Penerbit Universitas Diponegoro.
- Ghozali, I., & Latan, H. (2015). *Partial Least Squares: Konsep, teknik dan aplikasi menggunakan program SmartPLS 3.0*. Badan Penerbit Universitas Diponegoro.
- Government Regulation No. 43 of 2025 concerning Transparency, Accountability, and Support for the Financial Reporting Ecosystem.
- Government Regulation No. 60 of 2008 concerning Government Internal Control System (SPIP).
- Government Regulation No. 71 of 2010 concerning Government Accounting Standards (SAP).
- Government Regulation No. 8 of 2006 concerning Financial Reporting and Performance of Government Institutions.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47–77.
<https://doi.org/10.1108/09513579510146996>
- Gustina, R. (2021). Pengaruh sistem pengendalian internal terhadap kualitas laporan keuangan pemerintah daerah. *Jurnal Akuntansi dan Manajemen*, 12(3), 112–128.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
- Kartika, S., & Ningsih, R. (2024). Pengaruh penerapan standar akuntansi pemerintah dan sistem pengendalian internal terhadap kualitas laporan keuangan. *Jurnal Akuntansi Publik*, 13(1), 45–62.
- Kieso, D. E., Weygandt, J. J., & Warfield, T. D. (2018). *Intermediate accounting* (17th ed.). John Wiley & Sons.



- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Law No. 1 of 2004 concerning State Treasury.
- Leunupun, P., Rantung, R., & Sumarauw, J. (2022). Pengaruh sistem akuntansi keuangan daerah terhadap kualitas laporan keuangan. *Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 10(1), 56–72.
- Liu, M. S. (2020). Akuntabilitas, transparansi, partisipasi masyarakat, dan sistem pengendalian internal terhadap kualitas laporan keuangan pemerintah daerah. *Jurnal Akuntansi dan Keuangan*, 12(2), 89–106.
- Mardiasmo. (2018). *Akuntansi sektor publik*. Penerbit Andi.
- Marota, R., & Johari, R. (2025). Enhancing governance through IPSAS: Impacts on transparency and accountability in public sector financial reporting. *Journal of Public Budgeting, Accounting & Financial Management*, 37(1), 78–95.
- Minister of Agriculture Regulation No. 38 of 2021 concerning Risk Management and Internal Control Systems.
- Minister of Finance Regulation No. 232/PMK.05/2022 concerning Accounting Systems and Financial Reporting of Agencies.
- Mulyadi. (2016). *Sistem akuntansi*. Salemba Empat.
- Organisation for Economic Co-operation and Development (OECD). (2002). *OECD best practice guidelines for public financial management*. OECD Publishing.
- Permata, S. (2022). Pengaruh sistem akuntansi dan sistem pengendalian internal terhadap kualitas laporan keuangan. *Jurnal Akuntansi dan Auditing*, 19(2), 123–140.
- PMK 210/PMK.05/2013 concerning Three-Party Reconciliation (Tripartite).
- Putri, R. (2017). Pengaruh sistem pengendalian internal terhadap kualitas laporan keuangan pada instansi pemerintah. *Jurnal Akuntansi dan Keuangan*, 9(1), 34–50.
- Rahayu, S., & Dewi, K. (2022). Transparansi dan akuntabilitas dalam pelaporan keuangan pemerintah daerah. *Jurnal Akuntansi Publik*, 11(2), 67–84.
- Rahayu, S., & Kanita, A. D. (2023). Pengaruh sistem akuntansi keuangan daerah terhadap kualitas laporan keuangan. *Jurnal Akuntansi dan Keuangan*, 14(1), 56–72.
- Rahman, A., & Permatasari, Y. (2021). Pengaruh sistem akuntansi keuangan daerah dan kompetensi sumber daya manusia terhadap kualitas laporan keuangan daerah. *Jurnal Akuntansi dan Auditing*, 18(1), 45–62.
- Reza Aditya, F., & Surjono, W. (2017). Pengaruh sistem pengendalian internal terhadap kualitas laporan keuangan pemerintah daerah. *Jurnal Akuntansi dan Manajemen*, 8(2), 78–94.
- Romney, M. B., & Steinbart, P. J. (2017). *Accounting information systems* (14th ed.). Pearson.
- Triono, R., & Dewi, K. (2020). Pengaruh lingkungan pengendalian, penilaian risiko, informasi dan komunikasi, serta pemantauan terhadap kualitas laporan keuangan. *Jurnal Akuntansi dan Keuangan*, 13(2), 89–106.
- Trisnawati, R., Sari, M., & Nugroho, A. (2021). Penerapan sistem pengendalian internal berbasis risiko dalam meningkatkan keandalan laporan keuangan. *Jurnal Akuntansi dan Auditing*, 20(1), 34–52.
- Utami, R., Suryanto, A., & Hidayat, R. (2020). Transparansi dan sistem pengendalian internal terhadap kualitas laporan keuangan pemerintah. *Jurnal Akuntansi Publik*, 9(2), 78–94.



Zubaedah, S., & Nugraeni, R. (2023). Pengaruh transparansi dan akuntabilitas terhadap kualitas laporan keuangan pemerintah daerah. *Jurnal Akuntansi dan Keuangan*, 15(3), 112–130.