



Determinants and Measurement Quality of the Financial Statements of Local Governments in Indonesia

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Abstract

The aim of this research is to create a measurement index of the quality of the financial statements of local governments (FSLGs) using data from the accountability and performance reports on government entities (APRGEs), FSLG notes, and the internal control systems (ICS). The APRGEs have many indicators, but the relevant ones are the accounting information system (AIS), competence, performance, and good government governance (GGG). The measurement index sourced from the APRGEs is calculated from the percentage of performance achieved for every indicator. There are 35 main and seven conditional indicators taken from the FSLG notes. The ICS has 101 indicators. The sample comprises 25 local governments of provinces, cities and municipalities from 2015 to 2018. EViews 8 was used for statistical computation. The output of the measurement index is the FSLG quality assessment category. The index can be used to measure the quality of FSLGs produced by local governments. The results of the statistical testing show that competence and GGG affect the quality of FSLGs, but AIS and performance do not. However, AIS and performance can still be used to measure the quality of FSLGs. AIS is a primary need that cannot be left out of the process of presenting FSLGs. Likewise for performance, each local government already has its own key performance indicators (KPIs) which will enable the civil state apparatus (CSA) to operate efficiently and follow the rules, including the preparation of FSLGs. The implication is to facilitate internal and external parties in assessing and improving the quality of financial statements of local governments.

Keywords:

Accounting information system
Competence
Performance
Good government governance
The quality of financial statements
of local governments.

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1. Introduction

Financial statements of local governments (FSLGs) describe the condition and financial performance of the entity. The quality of FSLGs is recognized after being audited by The Audit Board of the Republic of Indonesia. FSLGs were presented using a cash basis, then switched to a Cash Toward Accrual (CTA) basis from 2010 to 2014. The accrual basis was fully implemented in 2015. Several government agencies around the

world do not use the accrual basis yet, even though they use Government Accounting Standards (GAS). The accrual basis requires a good accounting information system (AIS) with sufficient support for its applications, programs, and hardware (Efendi, Darwanis, & Abdullah, 2017). Adequate competencies and good performance from each employee are also needed (Andini & Yusrawati, 2015). In this case, good governance from the government is also necessary (Simon, Mas' ud, & Su'un, 2016). However, the application of a good AIS does not always provide the best audit opinion. Likewise, the competence of a civil state apparatus (CSA) does not always provide a good audit opinion. Transparency in governance management has been implemented by performing the principles of good governance by some local governments. However, the audit opinion they received was not the best. This research aims to create a measurement index of the FSLGs using data from the Accountability and Performance Reports on Government Entities (APRGEs), FSLG notes, and their internal control system (ICS). The APRGEs provide information on the implementation of programs, activities, and policies to ensure the implementation of vision, missions, goals, and targets of local governments. COSO (2019) defines an ICS as:

“A process, effected by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.”

An ICS is essential in producing quality FSLGs. The creation of the measurement index of the quality of FSLGs is proposed for ease of measurement and as an alternative measurement tool.

2. Literature Review

2.1. Agency Theory

In this research, the agency theory was used to explain the phenomenon of the presentation of FSLGs for reporting and responsibility obligations of the management of local government to the public. Empirically, local governments tend to provide asymmetric information based on their interests, which means that the public interest is not fulfilled (Pandansari, 2016). Jensen and Meckling (1976) defined an agency relationship as *“a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent”*.

This study uses agency theory because the government as the agent and the society as the principal requires an accountability report from the agent, which must be submitted and explained by the government. The government as an agent also has a responsibility to provide valuable information for users of FSLGs.

2.2. Accountability and Performance Reports on Government Entities (APRGE)

There are many indicators in APRGEs, but the relevant ones are AIS, competence, performance, and GGG. The goal of the APRGE presentation is the highest grade of APRGE submitted by the Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia. The review method to determine the grade of APRGE is by summarizing the final calculation of each component's grade. Then, the outcome of summarized figures will be recognized as the final grade of the APRGE. The final value is used to determine the level of accountability of the local government relating to its performance.

2.3. Accounting Information System (AIS)

AIS technology is an important tool in preparing FSLGs. The benchmarks used to measure the AIS are the improvement in the quality of regional financial management and the realization of a local government based on information and communication technology (ICT).

2.4. Competence

Spencer and Signe (1993) stated that:

“A competency is an underlying characteristic of an individual that is causally related to criterion referenced effective and/or superior performance in a job or situation”.

2.5. Good Government Governance (GGG)

The United Nations Development Programme (2015) issued by the UN System Task Team on The Post-2015 UN Development Agenda 2012 defines GGG as follows:

“Governance is the exercise of economic, political and administrative authorities to manage a country’s affairs at all levels. It comprises mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. Governance has “three legs”: economic, political and administrative. Economic governance includes decision-making processes that affect a country’s economic activities and its relationships with other economies. Political governance is the process of decision making to formulate policy. Administrative governance is the system of policy implementation”.

2.6. Performance

FSLGs describe local governments’ performance for interested parties. Good local government performance is obtained through the cooperation of all elements, both from higher-level management and the lower-level staff who prepare FSLGs.

2.7. The Quality of FSLGs

Good quality FSLGs must be submitted in a reliable, relevant, trustworthy, and understandable presentation. To obtain quality FSLGs, supporting factors such as competence and AIS are needed.

2.8. Accrual Basis

The application of the accrual-based accounting system has several stages, starting from the cash basis in 2005 and earlier, then the Cash Toward Accrual (CTA), which was fully implemented in 2015. The application of accrual-based accounting is set out under the accrual-based Government Accounting Standards (GAS).

2.9. The Measurement Index of FSLGs

In this research, the other quality measurement methods of FSLGs will be added. The measurement tool used the data from the APRGE and FSLG notes. The measurement index of the quality of FSLGs, sourced from APRGEs, is calculated from the percentage of performance achievement of every indicator for each variable (AIS, competence, performance, and GGG).

Table 1. APRGE Measurement Index.

No.	Indicator
	I. Accounting information system
1	Increased quality of regional financial management.
2	The establishment of government-based information & communication technology.
3	Increased public access to information & communication systems.
4	The establishment of e-government regulations.
5	The increase of internet-based public services.
6	The development of management information systems.
	II. Competence
	The increase of the professionalism of the examining apparatus and the invention of bureaucratic transparency.
1	The increasing number of supervisory employees participating in training.
2	The realization of competent, competitive, trustworthy, professional, and responsible government employees.
3	The increasing number of staff who have completed bachelor's and master's degrees.
4	The increasing level of clean government.
5	The realization of a disciplined and integrated apparatus.
6	The decreasing amount of undisciplined civil servants.
7	
	III. Performance
1	The increasing quality and productivity of the workforce.
2	The increasing number of civil state apparatus employees who receive competency-based training.
3	The increasing quality of financial reports.
4	The increasing value and predicate of accountability performance of government agencies.
5	The results of the audit board's opinion.
6	The increasing number of certified auditors.
7	The implementation of local governments' accountability and bureaucracy.
8	The fulfillment of minimum service standards and standard operating procedures by each local government agency.
	IV. Good government governance
1	Improved performance of governance and cooperation between regions.
2	The increase of transparency and public accountability.
3	The increasing percentage of government institutions & management to achieve efficiency & effectiveness in local government administration.
4	The increasing value of APRGEs.
5	The improvement of effective and efficient governance.

Table 1 contains the measurement index sourced from APRGEs. The index contains indicators used to measure the independent variables of AIS, competence, performance, and GGG.

Table 2 contains 35 main indicators sourced from the FSLG notes, while Table 3 contains the seven conditional indicators sourced from the FSLG notes.

Table 2. Main Indicators.

No.	Main indicator
1	General information and description of the entity.
2	The description of the reporting entity: domicile, legal form, jurisdiction, main activities of operation, and the operational basis according to the regulations.
3	Realization and financial position of the reporting entity in its entirety.
4	Realization of progress and the financial/fiscal position of the reporting entity.
5	The reporting entity presents information about the differences in realization and financial/fiscal positions for the current and previous periods.
6	Government policies regarding raising income, spending efficiency, and selecting resources or finance management.
7	Macroeconomic disclosure.
8	Budget changes in the current and prior periods.
9	Reporting entities follow the budget conditions and developments.
10	The comparison between the target and the realization of state/local government budgets.
11	General description of the government's financial performance in realizing potential revenue on Budget Realization Reports and expenditure allocations that have been determined in the state/local government budgets.
12	The structure of revenue in the Budget Realization Report and the reasons for the difference between the target and the realization.
13	The basis for the presentation of financial statements and accounting policies.
14	Basic assumptions or concepts of accounting for the preparation of financial statements.
15	The basic assumptions for financial reporting are the assumptions of an independent entity, the entity's sustainability, and measurability in terms of money.
16	The government does not liquidate the reporting entities in the short term.
17	The financial statement presents the activities that can be valued in terms of money.
18	The users of FSLGs are the public, people's representatives, supervisory agencies, auditing institutions, and parties who are involved in donations, investments, and loans.
19	The selected accounting policies on preparing financial statements.
20	The accounting policies are customized to the conditions of the reporting entity.
21	Accounting policies and preparation of financial statements are based on sound judgment, removing uncertainty regarding transactions, substance over form, and materiality.
22	The accounting principles and methods of their application affect the presentation of the Budget Realization Report, the Changes in the Excess Budget Balance, the Balance Sheet, the Operational Report, the Cash Flow Statement, and Report on Changes in Equity.
23	Accounting policies regarding reporting entities, basic accounting principles, measurement bases, and accounting policies relating to Government Accounting Standards.
24	Basic accounting principles.
25	Measurement based on the presentation of financial statements.
26	Accounting policies in terms of revenue recognition in the Budget Realization Reports and Operational Reports; expenditure and expense recognition; consolidation report preparation principles; investment; recognition and termination/write-off of tangible and intangible assets; construction contracts; partnerships with third parties; research costs; development, supply and formation of reserve funds; the establishment of employee welfare funds; and foreign currency interpretation.
27	The financial statements show the correlation between the current numbers and those of the previous period.
28	Details and explanations are given for each item in the Budget Realization Report, Changes in Budget Balance Report, Balance Sheet, Operational Report, Cash Flow Statement, and Changes in Equity Report.
29	The explanation of the post revenue Budget Realization Report, expenditure, and financing.
30	Explanation of the Changes in Budget Balance Reports.
31	The explanation of income-related Operational Reports and expenses.
32	The description of the balance sheet for assets, liabilities, and equity.
33	The explanation of the cash flow statement for operating activities, investing in non-financial assets, financing activities, and non-budgeting activities.
34	Explanation of the Statement of Changes in Equity at the beginning of the period, surplus/deficit-related Operational Statement, the cumulative impact of changes in policy/fundamental errors, and equity at the end of the period.
35	FSLG notes do not duplicate the account details.

Table 3. Conditional Indicators

Conditional indicators	
1	The description of issues that affect the financial condition of the reporting entity in a future period.
2	Significant events during the reporting year, such as changes in government management, previous mismanagement, commitments or contingencies that cannot be presented on the financial statements balance sheet, the merging or expansion of entities for the current year, and events that have a social impact, for example, strikes that the government must overcome.
3	Changes in accounting policies that are not material in the same year should be disclosed if they have a material effect on the following year.
4	Considering the types of activities and policies to be disclosed in the FSLG notes.
5	The reporting entities provide other financial information.
6	The responsibility for managing assets and resources off the balance sheet, including loss or damage of assets and resources.
7	Unregulated accounting standards must be revealed.

The measurement scale that enables ease of interpretation of target achievements in the measurement index developed by the researchers is described in Table 4 as follows:

Table 4. Value Category for the Measurement Index of the Quality of FSLG.

No.	Category	Number value %	Interpretation
1	A	≥ 100	Satisfactory (Qualified)
2	B	> 90 – 99	Good (Not qualified, but still classified as good and adequately adheres to GAS)
3	C	> 80 – 90	Enough (Not qualified but still sufficient to comply with GAS)
4	D	> 70 – 80	Bad (The FSLG does not qualify because it does not fulfil the required GAS disclosures)
5	E	< 70	Poor (The FSLG notes are inadequate)

Table 4 describes the value categories for the measurement index of the quality of FSLGs. Category A with a value range ≥ 100% is interpreted as Satisfactory. Category B with a value range of 90–99% is interpreted as good quality. Category C with a value range of 80–90% is interpreted as enough. Category D with a value range of 70–80% is interpreted as bad quality. Category E with values < 70% is interpreted as poor quality. Furthermore, Internal Control System (ICS) will be added as an indicator for measuring the quality of FSLG in the notes.

To measure the ICS, questionnaires were drawn up. Nowadays, local governments do not produce ICS reports which would have been submitted in the FSLG notes. Table 5 contains 101 indicators for ICS derived from the elements of internal control (Control Environment, Risk Assessment, Control Activity, Information and Communication, and Monitoring).

Table 5. ICS Indicators.

Internal control system (ICS)	
Element: Control environment	
Integrity and ethical values	
1	There are written internal policies or rules on behavior that explain the sanctions for fraud or dishonesty established by the administration (a code of ethics and penalties for violations).
2	The policies or rules have been communicated to all employees.
3	Employees have signed a written statement agreeing to adhere to the code of conduct (e.g., an integrity pact such as the Regulation of the Minister for Empowerment of State Apparatus and Bureaucratic Reform number 60, 2012).
4	There is a special unit within the local government that enforces rules regarding employee behavior.
5	Employees who break rules or policies are sanctioned by the supervisor accordingly.
6	The penalties for violations have been communicated to all employees so that they are aware of the consequences of deviations and offenses committed.
7	There are formal procedures for setting out, changing, or eliminating a control in the local government environment.
Commitment to competence	
8	The local government determines the qualifications or requirements of education, the knowledge, and skill that must be met to occupy or perform certain duties (competence standards for each office and duty executive).
9	Employees who were to occupy a particular office or committee were appropriately tested.

10	There are efforts made by local governments to improve employee knowledge and skills through training or courses.
11	There are training or courses conducted by governments according to the needs of employees or the job requirements.
12	There are formal or informal programs with guidelines for new employee orientation and training.
13	Local government employees have the required competence levels according to the standards of competence set out for each department (e.g., the financial statements arranger has an education background in accounting).
14	The continuation of staff education receives support from the local government (there is a scholarship and training for qualified workers).
15	Each employee receives ongoing education and training according to their roles and capacities.
16	There is a monitoring mechanism in place to ensure that every employee receives technical training according to their field of work.
17	Employees must complete a minimum number of hours of training.
Management philosophy and operating style	
18	The regional leaders make regular reports on the progress of program implementation and activities to be submitted to the local government.
19	The report contains the target timelines, obstacles, and achievements of programs and activities.
20	The Regional Head holds regular meetings with all other Regional Heads to evaluate the achievement of programs and activities based on reports from each unit leader.
21	Any decisions made by the chairman are discussed with the subordinate(s).
22	The local government is involved in designing changes in the control structure: - Controls are adequately monitored - There are follow-up actions on deviations from the applicable control elements.
23	The regional unit leaders implement standard procedures for each process and require employees to follow these procedures.
24	The local government is willing to accept advice from competent parties regarding important matters related to accounting and internal control issues.
25	The local government has a sense of responsibility for its financial statements, emphasizing the importance of the accuracy of accounting data and generally accepted accounting methods as well as the obligation to carry out routine reconciliations between related accounting units (for example, the Regional General Treasurer with the Expenditure Treasurer, or the Accounting Sector or the Asset Sector with the Regional Work Unit Goods Manager).
26	No one leader in the local government environment is dominant compared to other leaders, so the checks and balances between the leaders are adequate.
27	There are indications that the Regional Head and his staff: • Want fair financial statements • Are honest in responding to auditor's questions • Are conscientious in making accounting estimates • Have integrity • Have a strong sense of control.
28	The Regional Head makes improvements/adjustments to the regional unit leaders.
29	There is a written policy regarding the pattern of transfer, rotation, and promotion of employees.
Organizational structure	
30	The organizational structure is determined by regional regulations.
31	The organizational structure describes the main tasks, functions, responsibilities, and authorities for each work unit.
32	The organizational structure provides an adequate overall framework for planning, directing, monitoring, and facilitating the sufficient flow of information.
33	There are adjustments to changes in the organizational structure related to changes in laws and regulations and the strategic environment.
34	There is a job analysis to determine the number of employees needed for each unit within the local government organization.
Delegation of authority and responsibility	
35	Job descriptions are set by superiors for each employee, especially for employees who are responsible for managing regional budgets and assets.
36	The policies and procedures set by the management for each task have been stated in writing so that the employees are aware of the authorities and responsibilities, especially procedures related to budget management (there are standard operating procedures in every budget

	management procedure from planning to reporting).
37	Employees who do not carry out their duties and responsibilities will be penalized.
38	Delegation of tasks and authority is given to employees who can realize the main goals and functions of the work unit.
39	The capacity for delegation of authority is well regulated so the division of tasks is fairly even among employees.
Policies and practices related to human resources	
40	The local government has employee competency standards that include background knowledge, skills and education for each position as the basis for recruiting new employees.
41	Employees who are recruited or accepted have matched their background knowledge, skills, and education with the required qualifications.
42	Employees are placed in work units that fit with their educational background and technical competencies (for example, employees with accounting education backgrounds are placed in organizational units that prepare financial statements).
43	Employee promotion is based on work performance, rank, and seniority.
44	There is an adequate employee performance appraisal mechanism in addition to the DP3 which is carried out at the end of the year.
45	Each employee transfer considers the technical ability of the employee with the technical needs of the work unit.
46	The local government implements a reward and punishment system for achieving employee performance.
47	There is an employee transfer policy within the bureau/finance section (tasks are rotated periodically among employees).
Element: Risk assessment	
48	The local government has identified risks that may hinder the preparation of regional financial reports, such as late submission of accountability letters.
49	The local government has anticipated changes in regulations and accounting standards related to the recording and reporting process.
50	The local government has anticipated weaknesses in the use of information technology in transaction processing, such as backing up data if data stored on a computer is lost, or program bottlenecks.
51	The local government has anticipated changes in personnel by transferring employees where applicable within the bureau/finance division or the work unit in charge of finance and bookkeeping.
52	The local government has anticipated the possibility of collusion between employees who are family members. Employees who have relatives who are members of staff are not placed in units/positions that have a strategic relationship.
53	Cash withdrawal is handled by the cash holder/treasurer periodically and suddenly by the internal audit function.
54	There is a new or improved system (information technology) that has been implemented by the regional government in processing financial transactions.
55	All of the systems (information technology) created or selected have been tested before being applied in processing transaction data.
56	The employee turnover rate is quite high in bookkeeping and finance.
57	There is pressure on employees to immediately complete financial reports in too short a time.
Element: Control activity	
Information processing controls	
58	The signing of payment orders, checks, disbursement orders or other documents is only carried out by personnel who have been appointed in the Decree of the Regional Head.
59	Payment orders, checks, disbursement orders, or other important documents are verified before being signed by the designated personnel.
60	Payment orders, checks, disbursement orders, and other important documents that are not used are stored in a safe place.
61	There are prenumbered serial numbers on payment orders, checks, disbursement orders, and other forms/documents.
62	There is a reconciliation between regional treasury accounts, cash in the expense treasury and cash in the receipt treasury, with periodic and routine checks of accounting records, receipts and expenses.
63	There is periodic matching between the general ledger and the subsidiary ledgers.

Segregation of duties	
64	The responsibility for carrying out transactions, recording transactions, and storing assets obtained from transactions is carried out by different people or fields within the regional work units and the regional government.
65	Each stage of the execution of a transaction is carried out by a different person.
66	The general ledger and subsidiary ledgers are held by different people.
67	The employee who performs the bank reconciliation is separate from the employee who prepares the checks/disbursement orders.
68	The payment orders, checks, or other securities are signed by a different person from the person who prepared them.
69	There is a separation between the person signing the check and the cash receipts department.
70	There is a separation of duties between the parties carrying out the procurement of goods, inspecting the goods resulting from the procurement, receiving the goods from the procurement, and administering the bookkeeping.
Physical controls, data, documents and records	
71	There are access restrictions to the document storage room, data processing equipment, and asset storage (such as computers in the bookkeeping department and inventory/goods warehouse).
72	The document area and data processing equipment are equipped with a good security system, and there is a business continuity plan in case of damage from fire or floods.
73	There are access/password restrictions for unauthorized persons on data processing and storage equipment (computers, servers, etc.).
74	Passwords are changed periodically.
75	Physical access is protected and system monitoring has been implemented and action is taken if necessary.
76	The safety deposit box is locked when not in use and the combination lock and other keys are restricted to certain people.
77	Existing controls are detailed in process documents, flowcharts, etc.
Performance reviews	
78	The local government analyzes the causes of the difference between the budget and the realization of revenues and expenditures.
79	A reporting mechanism compares the performance target with the actual level of achievement (APRGE or other documents).
80	Local governments make comparisons between their accountability reports as well as relevant information, such as statistical data.
81	Leaders within the local government conduct a comparative analysis between the realization of the budget and last year's forecast.
82	The results of the comparative analysis of the budget and the realization of income and expenditure as well as the achievement of performance reveal problems.
83	The Regional Head orders the regional work units to follow up on the results of the analysis, and the follow-up is documented for performance improvement.
Elements: Information and communication	
84	Only valid and verified proof of transactions is recorded or journalized (related to the Existence and Occurrence Assertions).
85	All valid or verified proof of transactions in the fiscal year is designed to be recorded (related to the Completeness Assertion).
86	All rights and obligations of local governments caused by transactions have been recorded (related to the Rights and Obligations Assertions).
87	All transactions have been measured or stated in rupiah values and allocated according to their respective posts (related to the Valuation and Allocation Assertions).
88	All transactions are reported and adequate (related to the Presentation and Disclosure Assertions).
89	Journal entries are supported by complete recorded data and are accompanied by complete supporting documents.
90	The recording is carried out by employees who are authorized to do so.
91	Each task is carried out under the main task.
92	Each journal entry must be approved by the competent authority.
93	Bookkeeping evidence is filed neatly.
94	Employees receive socialization regarding the established accounting policies.
95	Reports are prepared on time, informative, and distributed to the rightful parties.

96	There is an integrated information system that allows the practice of financial decentralization to be monitored centrally (the information systems between regional work units and regional Financial Management units are integrated).
Element: Monitoring	
97	Every recommendation to improve the Internal Control Structure submitted by the Internal Auditor and External Auditor has been implemented and monitored by the DPRD.
98	The audit findings have been followed up as a whole.
99	Public complaints or issues in the mass media receive attention from the regional government and the regional people's representative council and are followed up by the authorized regional work units.
100	The division of tasks and authority is properly monitored.
101	The leader periodically receives reports on the status of the completion of recommendations submitted by internal and external auditors to ensure the quality and timeliness of the completion of each recommendation.

2.10. Research Hypotheses

H₁: The accounting information system (AIS) has a positive effect on the quality of FSLGs.

Regional financial accounting information systems are capable of handling regional financial management processes, from budget preparation to regional financial reporting (Sahasale & Setiyowati, 2018). Efendi et al. (2017) stated that the application of an AIS will result in faster transaction processing and the calculations will have a higher degree of accuracy, which will lead to an increase in the quality and reliability of FSLGs. Gafur, Yusuf, and Lamaya (2016) stated that the regional financial AIS also has a very important role in making decisions. The AIS is a resource designed to submit all the data for decision making. Efendi et al. (2017); Sahasale and Setiyowati (2018) and Gafur et al. (2016) stated that that the AIS has a positive effect on the quality of FSLGs.

H₂: Competence has a positive effect on the quality of FSLGs.

A competent human resources (HR) department will be able to understand accounting logic. This must be supported by a background in accounting education and experience in finance, often attending tutoring and completing training (Kurniawan, 2016). Competence to carry out their duties and responsibilities with adequate experience, training and education can help employees complete the work assigned to them. This can support local governments in producing reliable FSLGs (Efendi et al., 2017). The more competent human resources are, the higher the quality of FSLGs. If the competence of human resources is low, it will result in less qualified FSLGs (Wibawa, Sinarwati, & Yuniarta, 2017). Wibawa et al. (2017); Kurniawan (2016) and Efendi et al. (2017) showed that competence has a positive effect on the quality of FSLGs.

H₃: The accounting information system (AIS) has a positive effect on performance.

The application of AIS starts by grouping, classifying, recording and processing government financial activities into a financial report to produce accurate information. The existence of technology-based tools, namely AIS, will make it easier to prepare financial reports. The government's performance will be reflected in how civil state employees in local government agencies produce timely financial reports using the AIS (Armel, Nasir, & Safitri, 2017).

H₄: Competence has a positive effect on performance.

Human resource competence in terms of quality and quantity can increase the value of the information contained in FSLGs. Employee competence must always be sharpened and improved to ensure effective performance. Competence is very important in supporting the quality of civil state apparatus (CSA) in carrying out their field of work. The suitability between the competence of the apparatus and their field of work will help the civil state apparatus employees understand their work properly.

Hanifa, Wawo, and Husin (2016) and Inapty and Martiningsih (2016) stated that competence has a positive effect on performance.

H₅: Performance has a positive effect on the quality of FSLGs.

The performance of an apparatus is very important in supporting local government agencies toward financial management. This is because the performance of the apparatus is also very influential on the quality of FSLGs. Zarlín and Khairani (2017) stated that the performance of an apparatus has a positive effect on the quality of FSLGs.

H₆: The accounting information system (AIS) has a positive effect on the quality of FSLGs, with good government governance (GGG) as a moderating variable.

AIS must also be supported by GGG so that the information made available to users can provide benefits and help in making decisions for users of FSLGs. When the GGG is excellent, will affect the government's

AIS. [Sihasale and Setiyowati \(2018\)](#) and [Untary and Ardiyanto \(2015\)](#) stated that AIS has a positive effect on the quality of FSLGs. Moreover, [Kewo and Rufaedah \(2019\)](#) stated that GGG has a positive effect on the quality of FSLGs.

H₁: Competence has a positive effect on the quality of FSLGs, with good government governance (GGG) as a moderating variable.

In excellent regional financial management, local government agencies must have competent human resources. It is believed that competent human resources can affect the quality of FSLGs. In addition to GGG, the competence of the apparatus will be properly channeled according to its field and will be able to produce quality FSLGs. [Wibawa et al. \(2017\)](#) and [Andini and Yusrawati \(2015\)](#) stated that competence has a positive effect on the quality of FSLGs. Moreover, [Oktarina \(2016\)](#) stated that competence and GGG have a positive effect on the quality of FSLGs.

2.11. Framework

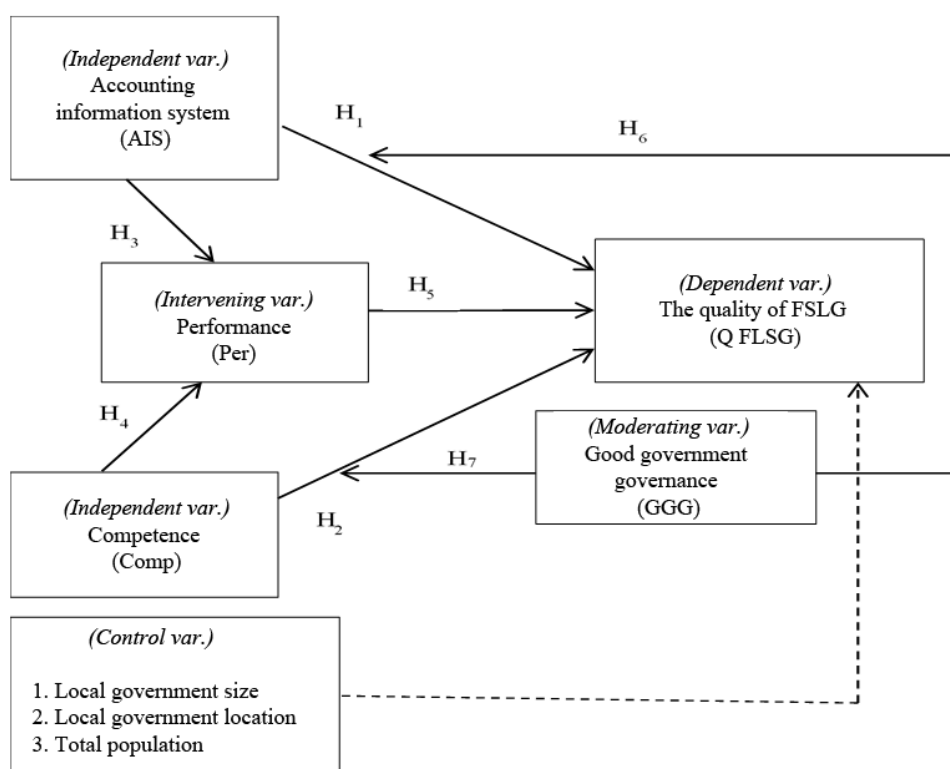


Figure 1. Framework.

The framework shown in [Figure 1](#) explains the relationship between the variables of AIS, competence, performance and GGG, with the quality of FSLG and the control variables used, namely local government size, local government location, and total population.

3. Research Method

3.1. Sample Selection and Data Collection

The data population in this research comprises 25 local governments of provinces, cities, and municipals with a period of research four years, from 2015 to 2018. This research uses panel data, which is a combination of cross-sectional and time-series data. EViews 8 was used for statistical computation.

3.2. Measurement of Study Variables

3.2.1. Independent Variables

The independent variables in this study are accounting information systems, competence, performance, and good government governance and they are measured using indicators sourced from APRGEs. In conducting the assessment, the percentage of the performance achievement figures are totaled for all indicators of each variable and the average value is used.

3.2.2. Dependent Variables

The indicators of the quality of FSLGs comprise 35 main and seven conditional indicators. The presence of the main indicators is given a value of “1”, and “0” otherwise. Meanwhile, the presence of conditional indicators will be given a score of 0.5, and its absence does not affect the calculation of the measurement of quality.

3.2.3. Control Variables

In this study, the three control variables are local government location, local government size, and total population, and these were used to test the effect of the independent variables on the dependent variables. These variables were chosen as control variables due to the availability of quantified data that could be used in statistical calculations. [Suhardjanto and Yulianingtyas \(2010\)](#) found that local governments in Java tend to comply with Government Accounting Standards (GAS). The size of the local government in this study is proxied by using total assets, which is based on the research of [Putri and Arza \(2015\)](#) and [Waliyyani and Makhmud \(2015\)](#). A larger population in one territory will encourage the need more disclosure of FSLGs ([Hendriyani & Tahar, 2015](#)). (Size = Ln Total Local Government Assets).

3.3. Model Specification

Formal testing to determine which model is better to use is based on statistical decisions. Statistically, three tests can be used to determine which method to choose. These are the Chow test (common effects vs fixed effects), the Hausman test (fixed effects vs random effects), and the Lagrange multiplier test (common effects vs random effects).

3.4. Data Analysis Method

The data analysis design is used to test the effect of the AIS and competence on the quality of FSLGs, with GGG as the moderating variable and performance as an intervening variable. The panel data equation models are as follows:

Equation I:

$$Q \text{ FSLG} = a + \beta_1 \text{ AIS} + \beta_2 \text{ Comp} + \beta_3 \text{ Per} + \beta_4 \text{ Size} + \beta_5 \text{ Loc} + \beta_6 \text{ TP} + e$$

$$\text{Per} = a + \beta_1 \text{ AIS} + \beta_2 \text{ Comp} + e$$

$$Q \text{ FSLG} = a + \beta_1 \text{ AIS} + \beta_2 \text{ Comp} + \beta_3 \text{ AIS.GGG} + \beta_4 \text{ Comp.GGG} + e$$

Equation II:

$$Q \text{ FSLG} = a + \beta_1 \text{ AIS} + \beta_2 \text{ Comp} + \beta_3 \text{ Per} + \beta_4 \text{ Size} + \beta_5 \text{ Loc} + \beta_6 \text{ TP} + \beta_7 \text{ AIS.GGG} + \beta_8 \text{ Comp.GGG} + e$$

4. Results and Discussion

Based on the descriptive statistics in [Table 6](#), the mean value of the quality of FSLGs is 34.3650, indicating that the average quality of FSLGs is high.

The mean value for AIS is 0.9617, indicating that almost all local governments sampled in this research have successfully implemented their AIS. The mean value of competence is 0.9622, which indicates that the competence of the civil state apparatus is high. The mean performance value is 0.9865, which indicates that the overall performance of the CSA is good. The mean value of GGG is 0.9808, indicating that most of the samples used in the research have a good level of governance. The mean value of the quality of FSLGs, AIS, competence, performance, and GGG are greater than the standard deviation, indicating the distribution of small data variables and shows that the mean value can be used as a representation of all data.

Table 6. Descriptive statistics.

Sample: 2015–2018						
	Mean	Median	Maximum	Minimum	Std. deviation	Observations
Quality of FSLGs	34.3650	35.0000	36.0000	29.0000	1.5983	100
AIS	0.9617	1.0000	1.6667	0.3455	0.1518	100
Competence	0.9622	0.9981	2.2654	0.0750	0.2965	100
Performance	0.9865	1.0000	1.8120	0.0528	0.1776	100
GGG	0.9808	1.0000	2.4767	0.3100	0.2538	100
LG size	29.1379	28.7514	33.8313	27.9324	1.2007	100
LG location	1.2000	1.0000	2.0000	1.0000	0.4020	100
Total population	1,711,413	805,255	12,488,160	126,578	2,900,278	100

Table 7. Sobel Test Results.

Performance	Coefficient	SE
AIS	0.029075	0.119534
Competence	0.190723	0.055145
FSLG quality	Coefficient	SE
Performance	0.292179	0.180411
	Sobel value	t-stat
AIS -> Performance -> FSLG quality	0.24	0.8099
Competence -> Performance -> FSLG quality	1.446	0.142

Based on Table 7, it can be concluded that performance is not able to mediate the effect of the AIS and competence on the quality of FSLGs.

This study tested the coefficient of determination, or the adjusted R-squared, to determine the percentage contribution of the independent variable to the dependent variable. From Table 8, it can be seen that the adjusted R-squared value is over 10%, so the model is considered adequate.

Table 8. Determination coefficient test results.

R-squared	0.128282
Adjusted R-squared	0.110308
R-squared	0.987825
Adjusted R-squared	0.986086

The results of the coefficient of determination show an adjusted R-squared value of 0.1103 for model 1 and 0.9860 for model 2. It shows that the independent variables in total can explain variations and contribute to the dependent variable/performance by 11.03%, and the quality of FSLGs is 98.60%. The rest is explained by other variables outside the model.

Table 9. F Test Results.

F-statistic	7.137236
Prob. (F-statistic)	0.001283
F-statistic	567.9538
Prob. (F-statistic)	0.000000

From Table 9, it can be seen that the F statistic and the probability value = 0.00 < 0.05, so H₀ is rejected and it is concluded that the model is fit, with an error rate of 5%, meaning that the independent variables simultaneously affect performance and the quality of FSLGs.

Table 10. t-Test Results on the quality of FSLGs.

Variable	Coefficient	t-statistic	Prob.	Decision	Conclusion
AIS	0.029075	0.243234	0.8083	H ₀ failed to be rejected	Has no significant effect
Competence	0.190723	3.458578	0.0008	H ₀ was rejected	Has a significant effect
Performance	0.292179	1.619520	0.1103	H ₀ failed to be rejected	Has no significant effect
LG size	0.014007	4.316948	0.0001	H ₀ was rejected	Has a significant effect
LG location	0.017029	1.252661	0.2150	H ₀ failed to be rejected	Has no significant effect
Total population	0.006696	0.938685	0.3515	H ₀ failed to be rejected	Has no significant effect

Table 11. t-Test results on performance.

Variable	Coefficient	t-statistic	Prob.	Decision	Conclusion
AIS	0.08314	2.607184	0.0114	H ₀ was rejected	Has a significant effect
Competence	0.079737	2.382792	0.0202	H ₀ was rejected	Has a significant effect

Table 12. T-test results on the quality of FSLG with GGG as the moderating variable.

Variable	Coefficient	t-statistic	Prob.	Decision	Conclusion
AIS_GGG	0.028640	2.189793	0.0323	H ₀ was rejected	Moderate
Competence_GGG	0.053919	7.896429	0.0000	H ₀ was rejected	Moderate

In Tables 10, 11, and 12 it can be seen that only competence has an effect on the quality of FSLGs and performance. Meanwhile, the AIS only affects performance. GGG as a moderating variable also strengthens the effect of AIS and competencies on the quality of FSLGs. This can be seen from the probability value, which is less than 0.05.

Based on the statistical analysis of the first hypothesis (H₁), the AIS has no significant effect on the quality of FSLGs because the data shows that the achievement of local government performance related to the AIS

has approached a maximum value of 100%. The results for second hypothesis (H_2) show that competence has a positive effect on the quality of FSLGs, meaning that the higher the competence of civil state apparatus employees, the higher the quality of FSLGs will be. The results of the analysis relating to the third hypothesis (H_3) shows that the AIS has a positive effect on accepted performance because the use of the AIS will make it easier for civil state apparatus employees to carry out their duties, and it will have a positive impact on their performance. The fourth hypothesis (H_4) is accepted as competence was found to have a positive effect on performance. The results for the fifth hypothesis (H_5) show that performance does not have a significant effect on the quality of FSLGs because performance is already a requirement, so civil state apparatus employees will endeavor to carry out their duties properly. The sixth hypothesis (H_6) is accepted as it was confirmed that GGG strengthens the effect of the AIS on the quality of FSLGs. The seventh hypothesis (H_7), that GGG strengthens the effect of competence on the quality of FSLGs, is accepted because, with GGG, the competences of the civil state apparatus employees will be channeled efficiently.

This study tested the extent of the effect of indicators sourced from APRGEs in measuring the quality of FSLGs. The statistic test results show that AIS and performance do not affect the quality of FSLGs. However, AIS and performance can still be used to measure the quality of FSLGs. AIS is a primary need that cannot be left out in the process of presenting FSLGs. Also, the tabulated data results do not have high variance values, so if they are processed in statistics, it will show that it does not affect the dependent variable. Likewise, with performance, each local government already has its own KPIs, which ensure that civil state apparatus employees work efficiently and effectively and follow existing regulations, including in the preparation of FSLGs.

5. Conclusion

The measurement index of the quality of FSLGs (that comes from APRGEs, FSLG notes, and ICS) has been created successfully in this research, and it can be used to measure the quality of FSLGs produced by local governments. The index developed in this research contains FSLG quality assessment categories.

The limitations encountered in this study include the limited number of research objects, which comprises only 25 local governments. This means that the measurement index developed in this research can only be used to assess the quality of FSLGs. Another limitation is that the local governments still do not produce ICS reports. ICS reports should be submitted in the FSLG notes.

The implications of this research facilitate external parties in assessing the quality of FSLGs. Meanwhile, internal parties can facilitate the improvement of the quality of FSLGs or maintain it. Future research can increase the sample and extend the research period to achieve better results.

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