Government Reporting and Quality of Public Services: Are They Twins?

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Abstract
Research aims: This study aims to analyze the effect of audit findings and audit recommendation follow-up on the quality of public services through the quality of financial reports.

Design/Methodology/Approach: This study employed cross-sectional regression using data from 170 observations of 34 ministries and institutions in Indonesia for the 2015-2019 period by adopting a purposive sampling method. Hypotheses testing was performed using binary logistic regression analysis, multiple linear regression, and path analysis.

Research findings: The results showcased that the audit findings negatively impacted the quality of financial reports, while audit recommendation follow-up did not affect the quality of financial reports. The audit findings also did not influence the quality of public services, while audit recommendation follow-up led to better public services.

Practical and Theoretical contribution/Originality: Central government institutions are expected to improve the effectiveness of the internal control system and compliance with laws and regulations in managing state finances to create more quality and reliable financial information. These institutions are also encouraged to overcome non-tax revenue irregularities to promote good governance in public service. The study provides empirical evidence regarding the determinants of public service quality by developing new measurements associated with the characteristic of non-tax revenue imposed by the line ministries and agencies.

Research limitation: Future research is needed to develop the quality of public service indicators with other indicators and consider using primary data through a questionnaire survey to measure the quality of public services.

Keywords: Audit findings; Audit recommendation follow-up; Financial reports; Non-tax revenue; Public services

Introduction
The central government’s financial reporting quality has substantially progressed in recent years (Tiurmaida et al., 2021). The number of ministries and agencies obtaining unqualified opinions has also risen sharply since 2015. Although this reporting quality has been better-off, particularly in 2020, where only a pair of national governments declared to be qualified in their financial reporting, the delivery of public services still faces various problems. In this regard, implementing an accrual accounting system to provide a good quality government financial report is supposed to impact the quality of public services (Furqan et al., 2020). However, people are doubtful that services are convoluted and difficult to reach.
Moreover, the public service phenomenon by the bureaucracy is far from remarkable performance (Sancoko, 2011). For instance, long-winded service procedures, the uncertainty of timing, and high prices lead to reasonable service that is hard to afford by the community (Maryam 2016). The Ombudsman also considers that the quality of government public services is getting lower, and the mechanism for receiving public complaints has not been systematic (Kunjaman, 2020). Besides, the service provided is impressive protracted, and slow. Based on the report published by the Ombudsman in 2019, there were 7,903 public reports with 613 complaints against ministry agencies, 560 complaints against police institutions, and 517 complaints against the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency. It indicates that services in the ministry and agencies have not met public expectations.

Public service is, in fact, essential to government performance and is in line with the new public management concept. Broadbent and Guthrie (2008) revealed that the paradigm shift in the functions and duties of the public sector led to fundamental changes in funding, governance, and accountability for the operation and control of public services. According to stakeholder theory, organizational entities carry out activities not only for their interests but also for stakeholders’ benefits. In this case, the quality of financial reports describes how financial management meets applicable criteria to improve the quality of public services to stakeholders. The better the quality of financial reporting, the higher the government should perform satisfaction with public service delivery. Therefore, Connolly and Hyndman (2006) stated that the quality of accrual-based accounting reports is an essential indicator in assessing the successful implementation of new public management in the public sector.

Even though unqualified opinion is now abundant among Indonesian central governments (Figure 1a), audit findings and implications, as reported by the Indonesian Supreme Auditor (BPK-RI), must be paid more attention to (Pamungkas et al., 2019). Audit findings basically reveal some problems in the weaknesses of the internal control system, non-compliance with regulations, inefficiency, ineffectiveness, and uneconomic government practice in managing the national budget (BPK-RI, 2021). It is suggested by Furqan et al. (2020), who confirmed that as an external auditor, BPK-RI proposes evaluating internal control structure and compliance aspects of financial management within governments. The audit findings also indicate the presence of fraud, non-compliance, and misuse of government money potential (Liu & Lin, 2012; Nguyen et al., 2017; Setyaningrum, 2017; Bo et al., 2020). BPK-RI subsequently proposes recommendations on audit findings to be followed up by the government. Follow-up audits will improve the sustainability of the organization’s financial management so that it is expected to promote public service quality. Figure 1b below shows that government institutions’ corrective actions are not at an optimum level yet. As can be seen, as of June 30, 2020, the percentage of unfinished recommendations was still high, approximately 42%, while the number of findings was still above a couple of thousand items. These figures may contradict the fact that almost all ministries and government agencies were awarded unqualified opinions (Figure 1a).
Figures 1a and 1b depict that the better quality of government financial reports was not followed by a decrease in the number of audit findings over the 2015-2019 period. Meanwhile, audit recommendation follow-up has consistently risen, although the audit findings have remained relatively stable. These phenomena might occur when government institutions take some actions regarding audit recommendations by creating standardized procedures, issuing regulations, and establishing new government (functional) units; those potentially become some other audit findings. Evy et al. (2021) asserted that the more government and functional units, the more complex the business process to understand by the auditor, and therefore the more information to be disclosed. Hence, implementing new procedures and regulations post audit recommendation might induce audit findings if the weakness of internal control arises. The new procedures might also affect public service delivery for society.

Furthermore, Rakhman (2019) and Graycar (2015) suggested that conflicts of interest, misinformation, bribery, nepotism, lawful uncertainty concerning bribery, and other fraudulent acts influenced good governance, particularly public services. From the study results, it can be assumed that the audit findings illustrated a weak internal control system and non-compliance with regulations, leading to government losses and acts of
corruption. The high number of audit findings then induces a lower quality of financial reports and public services (Furqan et al., 2020).

The increased quality of financial reports might be followed by improved public service quality. Factors affecting the quality of government financial statements have been extensively discussed in various studies (such as Tirmaida et al., 2021; Furqan et al., 2020; Fachriyandana & Wibowo, 2020; Ratmono & Sutrisno, 2019; Pamungkas et al., 2018; Rahayu & Fidiana, 2018; Din et al., 2017; Setyowati et al., 2017; Setyaningrum 2017, Sari 2015). Notwithstanding the above references, those results are inconclusive regarding government financial reporting quality determinants. Most studies also discussed the impact of audit findings, audit recommendation follow-up, and government size on government reporting quality.

On the other hand, the effect of financial reporting quality on government performance is rarely found and provides different results (Wijayanti & Suryandari, 2020; Artha et al., 2020, Jannah et al., 2020). Those studies scrutinized the impact of audit results on financial performance. Yet, little evidence explored public service determinants without considering government reporting quality (Rakhman, 2019; Graycar, 2015; Bose, 2004). A recent study by Furqan et al. (2020) revealed that financial report quality led to a better quality of public services because efforts to improve the quality of financial reports would be one way to improve the quality of public services. They also found that those audit findings negatively affected the quality of public services in local governments either directly or indirectly through the quality of financial reports. Meanwhile, audit recommendation follow-up led to a higher level of public services, either directly or indirectly, through the quality of financial reports. Moreover, Kiswanto and Fatmawati (2019) also proved that audit findings and follow-up audit findings influenced local government performance. However, it is not consistent with the research results of Artha et al. (2015), uncovering that audit findings did not affect the performance of local government administration.

Based on the above studies, government financial reporting and public service may leave gaps to fill. The first issue is that the relationship between audit results and financial statement quality has not resulted in uniform conclusions. Meanwhile, the association between audit results, government reporting, and public service quality still lack references. It is the first motivation for conducting the study. The next concern is about the measurement of public service quality. Furqan et al. (2020) have conducted a study on sub-national governments using local government performance scores published by the Ministry of Home Affairs. While the measurement of public service in the lower level of governments is relatively not difficult to find, the data for central government is various and strictly limited to access.

Therefore, this study differs from Furqan et al. (2020) in light of the data observed. The current researchers analyzed national governments, while Furqan et al. (2020) discussed sub-national governments. Secondly, the researchers developed another public service quality indicator not present in the study of Furqan et al. (2020). Related to that, the measurement of public service quality in central governments becomes the most...
challenging to discuss in this research. Therefore, this research contributes to developing public service quality measurement among central governments.

The current researchers also used non-tax revenue (PNBP) data as a proxy to measure the central government's public service quality for several reasons. Firstly, non-tax revenue is imposed on society from public service delivery in various line ministries and agencies. The amount of non-tax revenue collected by national governments may indicate the quantity of public service demanded by society. Under Law Number 9 of 2018, funds from non-tax revenue can be used to meet expenditures to improve service quality (Wibowo et al., 2021). Secondly, data regarding non-tax revenue is accessible by formal request to the Ministry of Finance. Therefore, this study enriches literature by providing a new measurement of public service quality in line ministries and government agencies.

Further, this paper provides evidence that audit findings negatively affect government financial reporting quality, while audit recommendation follow-up promotes better public service quality within central government institutions. This study also contributes a new measurement of public service quality, which is relatively new for the indicator among line ministries and agencies. Practically, this research proposes suggestions for both BPK-RI as a supreme auditor and central government offices as public service providers. The former needs to re-evaluate recommendations to be more effective in encouraging public service improvement. Meanwhile, the latter needs to create a more excellent internal control system and appropriate standard of operating procedure regarding public service delivery.

**Literature Review and Hypotheses Development**

Jensen and Meckling (1976) explain that the agency relationship arises due to a contractual bond between the agent and the principal. In the public sector, the agent is described as the government, whereas the principal is the community (Zimmerman, 1977). To overcome the problem of asymmetric information, the government must prepare financial reports that provide quality information and meet the elements of the criteria set. In addition, the unqualified opinion given by the Supreme Auditor on the financial statements provides information to the principal that financial management has been carried out properly so that the possibility of corruption is least likely (Setyaningrum & Martani, 2017). Government auditing may also help curb corruption (Liu & Lin, 2012).

Meanwhile, the audit findings indicate that the organization's internal control system is ineffective, non-compliance with laws and financial accounting standards, and ineffective revenue and expenditure management (Nguyen et al., 2017; Setyaningrum, 2017; Bo et al., 2020). Besides, the quality of financial reports can be affected by audit findings. The more audit finding disclosed by the auditor, the more likely government reporting awarded qualified opinion.

On the other side, stakeholder theory suggests that the company is an entity that does not only operate for personal interests but also provides benefits to all its stakeholders.
(Ghozali & Chairi, 2014). The organization's existence is strongly influenced by the support of stakeholders in the organization. Thus, an organization must maintain relationships with its stakeholders by disclosing information to stakeholders and accommodating their needs and desires of stakeholders (Tiurmaida et al., 2021). Hence, stakeholders may rely on audit reporting to evaluate government performance (Pamungkas et al., 2021).

Turning to the legitimacy theory, as revealed by Suchman (1995), legitimacy formation is caused by the condition of the organizational nature in line with the goals of the parties around the organization's activities. Legitimacy is also an orientation to take sides with the community, individuals, and the government in managing the company (Gray et al., 1995). When the organization's legitimacy is lost, the organizational goals will be challenging due to the reduced flow of resources the organization receives. As such, an organization needs to design and manage institutions to protect its legitimacy. Legitimacy theory can also apply to the public sector. Government activities, consequently, must align with the values and norms that apply to society so that community trust will arise (Haniffa & Cooke, 2005).

Mandated by Bills of 25/1999, public service became more popular during bureaucracy reform. Sancoko (2011) addressed that public service is also the most important element in improving the quality of social life in any society. In addition, Nugraha (2018) stated that public services are various forms of services, either in the form of goods or services, carried out mandatorily by several government institutions. Here, ministries may impose user charges for public service under Law Number 9 of 2018 concerning Non-Tax Revenue. Wibowo et al. (2021) then explained that the idea of non-tax revenue levies on governmental services is for budget and public service enhancement purposes. By adopting earmarked non-tax revenue for specific purposes, the government is willing to ensure that public service provision could be available and affordable.

Mourre and Reut (2019) further suggested that the role of user charges is to support a more efficient use and allocation of government resources. Much literature on user charges has focused on the price signaling function of costs (Sun & Jung, 2011; Bierhanzl & Downing, 2004; Jung & Bae, 2011). Bird (2001) also argued that user charges achieve the goal of economic efficiency by providing information to public sector suppliers as to how much clients are actually willing to pay for particular services.

In this study, the legitimacy theory is related to the government’s need for community legitimacy in supporting the implementation and financing of development. The government, represented by ministries/agencies, will seek to improve accountability and the quality of its performance by providing financial information and public services to maintain the legitimacy of the public.

In measuring the quality of financial statements, the audit findings are substantial elements. Thus, a better financial statement should contain fewer problems either in the number of findings or the monetary terms (Pamungkas et al., 2019). Audit findings also originated from comparing criteria and facts (Agustiningsih et al., 2021). Besides, the audit
findings indicate a poor internal control system (Fachriyandana & Wibowo, 2020; Masyitoh, 2014) and incorporated corruption level (Liu & Lin, 2012).

Furthermore, the quality of financial statements can be affected by audit findings. The more findings revealed, the less likely it will result in good opinion generated and otherwise (Rahmi & Ariani, 2020). This opinion is generally associated with compliance with regulations and weaknesses in an internal control system with a financial impact (Rahayu & Fidiana, 2018). This argument is also supported by the research of Furqan et al. (2020), Setyaningrum (2017), and Johnson et al. (2012). The study of Amyulianthy et al. (2020) also reported that audit findings could have a negative effect on audit opinion. Therefore, the first hypothesis was proposed as follows:

\[ H_1: \text{Audit findings negatively affect the quality of financial reports.} \]

Following the legitimacy theory, the government carries out its duties to meet the community’s needs to continue getting support and trust from the environment. In addition, the Regulation of the BPK RI Number 2 of 2017 defines audit recommendations as auditors’ suggestions based on the examinations’ results addressed to authorized persons and bodies to take action (Rahmi & Ariani 2020). Audit recommendation follow-up also indicates that improvement efforts will enhance the quality of financial reports. This action also represents the effectiveness of internal supervision by the internal auditor (Furqan et al., 2020). Besides, this follow-up indicates the commitment level of central governments to overcome accountability problems (Pamungkas et al., 2019). Governments that follow up on recommendations from the results of the prior year’s audit tend to have better internal control systems (Astriani, 2014), may affect good governance (Arifianti et al., 2014; Sari, 2013), and result in an improved audit result for subsequent year (Pratiwi & Aryani, 2016).

Studies conducted by Furqan et al. (2020) and Agustina and Setyaningrum (2020) showed a positive relationship between audit recommendation follow-up and the quality of financial reports. Moreover, Pratiwi and Aryani (2016) confirmed that corrective actions on audit results would likely influence audit opinion. Thus, the researchers expect that audit recommendations will improve government reporting quality. Hence, the second hypothesis for this study is:

\[ H_2: \text{Audit recommendation follow-up positively affects the quality of the financial reports.} \]

Agency theory describes the relationship between agents and principals that can lead to asymmetric information (Jensen & Meckling, 1976). In this regard, the audit results released by the independent party denote how the government’s internal control system is implemented, the level of compliance with accounting standards, financial reporting, and violations in revenue and expenditure management. The more effective national governments’ follow-up recommendations, as the audit report, the more accountable financial management is in the following period (Liu & Lin, 2012). Regarding this
argument, conceptually realizing public service quality will be significantly affected by government funding management effectiveness and the accountability level in delivering public services (Furqan et al., 2020).

When audit findings are low, it indicates that financial management has been carried out correctly since it is supported by an effective control system and compliance with regulations and vice versa. Furqan et al. (2020) and Artha et al. (2015) revealed a negative effect of audit findings on the quality of public services and financial performance, respectively. According to agency theory, the ministries must also be monitored to ensure that management is carried out under applicable rules and regulations, particularly associated with public service delivery. A study has also been conducted by Harumiati and Payamta (2014). Meanwhile, Marfiana and Kurniasih (2013) found that the audit finding variable had a negative effect on the financial performance of government institutions. It is supported by Furqan et al. (2020), affirming that the quality of financial reports could strengthen the relationship of audit findings to the quality of public services. The more audit findings, the lower-level audit opinion will be, affecting the quality of public services. Therefore, the following hypotheses are proposed for further analysis regarding the above explanation.

$H_{3a}$: Audit findings negatively affect the quality of public services.

$H_{3b}$: Audit findings negatively affect the quality of public services through financial report quality.

Based on the legitimacy theory, the government seeks to maintain public trust. Follow-up audit recommendations are thus carried out to improve the quality of public services to preserve trust in society. Research by Furqan et al. (2020) uncovered that the follow-up to audit recommendations positively affected the quality of public services. Kiswanto and Fatmawati (2018) also revealed that the higher the follow-up to audit recommendations, the higher the performance of local governments. In other words, implementing audit recommendations can improve the organization's weaknesses to improve public service quality.

Audit recommendations also enforce line ministries to maintain public trust by improving the quality of its financial management and public services. A study conducted by Setyaningrum (2017) disclosed that the audit recommendation follow-up positively affected the quality of financial reports. These results illustrate that when the government implements audit recommendations from the auditors, it will improve government performance. Therefore, improvements to the management of state finances will provide improvements to public services. Furqan et al. (2020) also showed that the audit recommendation follow-up positively affected the quality of public services through the quality of financial reports.

Referring to the preceding argument, a couple of hypotheses associated with audit recommendation follow-up and public services are as follows:
H₄a: Audit recommendation follow-up positively affects the quality of public services.

H₄b: Audit recommendation follow-up positively affects the quality of public services through financial reporting quality.

The quality of financial reports signals the financial management carried out by the government (agent). Based on the legitimacy theory, the organization can afford the legitimacy or trust of its people by disclosing complete financial information and improving its services. Efforts to lift the quality of financial reports may accelerate organizations to take action to enhance the effectiveness of their performance. Subsequently, the legitimacy of the community will be gained. Due to the limited literature discussing the financial report and public service quality in Indonesia, the researchers may consider performance determinants literature instead. Studies conducted by Amalina and Sumardjo (2020), Al-Dmour et al. (2018), and Sohail (2019) revealed that the quality of financial reports influenced performance. Furqan et al. (2020) also demonstrated that the quality of financial reports significantly affected the quality of public services. Thus, the following hypothesis proposed in this study is:

H₅: The quality of financial reports positively affects the quality of public services.

Based on hypothesis development explained in the previous section, Figure 2 summarizes the theoretical model to highlight all constructed hypotheses.

Figure 2 Theoretical Model

Research Method

This study used a quantitative approach in panel analysis, collecting secondary data from government offices. The research objects were the Indonesian governmental
departments that imposed non-tax revenue from public service delivery over the 2015-2019 period. Then, the audit findings and recommendation data originated from BPK, while non-tax revenue came from the Directorate General of Treasury of the Ministry of Finance (DJPB). To obtain the appropriate data, the sampling in this study employed a purposive sampling technique, determined based on specific criteria, as shown in Table 1. The total number of samples was 170 observations (balanced) from 34 central government institutions for the five years.

Table 1 Sample Selection Criteria

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Line ministries/agencies present financial reports.</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Reduced</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>New ministries/institutions formed in 2015-2019</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Ministries/institutions have no non-tax revenue.</td>
<td>49</td>
</tr>
<tr>
<td>Sample total</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Observation period (2015-2019)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Observation total</td>
<td></td>
<td>170</td>
</tr>
</tbody>
</table>

In addition, the independent variables were audit findings (FIND) and audit recommendation follow-up (FOLLUPt-1). Audit findings are defined as the examination results caused by differences between conditions and criteria. The audit findings were represented by the number of non-compliance with regulations and weaknesses of the internal control system, adopting the research of Furqan et al. (2020) and Fachriyandana and Wibowo (2020). Meanwhile, audit recommendation follow-up is characterized as an activity carried out by the auditee and other authorized parties to complete the recommendations on the results of examining the BPK findings (BPK 2017). In this study, audit recommendation follow-up was described by the ratio between follow-up regarding recommendations and the total number of audit recommendations in the preceding year (Furqan et al., 2020; Agustina & Setyaningrum, 2020).

Then, the control variable is termed as a constant variable to avoid the influence of external factors not examined (Sugiyono, 2017). The control variable used was the size of the ministry/institution. Besides, the proxy employed the ratio of the budget realization of the general fund (DIPA-RM) to total assets. Here, the realization of general fund (pure rupiah) expenditure against total assets illustrates the size of government agencies in financing their needs.

Next, intermediary variables generally affect the relationship between the independent and dependent variables in an indirect connection and cannot be observed and measured (Sugiyono, 2017). In this study, the intermediary variable was the quality of financial reports (FINQ), with audit opinion as a measurement proxy. The audit opinion was measured using a dummy variable. Unqualified financial statement opinion (WTP) was given a value of 1 (one), while opinions other than WTP were given a value of 0 (zero). Meanwhile, the measurement of audit opinion refers to the research of Furqan et al. (2020) and Agustina and Setyaningrum (2020).
Moreover, the dependent variable used in this study was the quality of public services. Here, no or little literature proposes public service indicators at central government offices. Data concerning this measurement were unavailable as well. A prior study by Furqan et al. (2020) only used performance scores for local governments. Thus, the current researchers proposed a new approach that may be relevant for a proxy of the measurement. In this study, the quality of public services is defined as the services provided by the ministries/agencies related to their duties and functions associated with non-tax revenue levies. The public service in this study was then measured using the expenditure ratio derived from the earmarked budget from non-tax revenue to total assets. The indicator illustrates that the greater the government spending funded from non-tax revenue, the more service activities are delivered to society. The funds are also strictly allocated from non-tax revenue to maintain and enhance public service quality as mandated by Law Number 20 of 1997, amended by Law Number 9 of 2018.

The empirical model to test the research hypothesis can be seen in the following equations.

\[
\text{FINQ}_t = \alpha_0 + \alpha_1 \text{FIND}_t + \alpha_2 \text{FOLLUP}_{t-1} + \alpha_3 \text{SIZE}_t + e \quad \text{................................. (1)}
\]

\[
\text{PUBQ}_t = \beta_0 + \beta_1 \text{FINQ}_t + \beta_2 \text{FIND}_t + \beta_3 \text{FOLLUP}_{t-1} + \beta_4 \text{SIZE}_t + e \quad \text{................................. (2)}
\]

Equation I examined the direct effect of audit findings and audit recommendation follow-up on the quality of financial reports. Equation II explored the direct impact of the quality of financial reports, audit findings, and audit recommendation follow-up on the quality of public services. Equations I and II were tested separately using binary logistic regression and multiple linear regression in the EViews 9 application. Testing with Sobel path analysis was then used to test the indirect effect of audit findings and audit recommendation follow-up on the quality of public services through the quality of financial reports.

Result and Discussion

The descriptive statistical analysis showed as many as 170 observations (Table 2), where the average PUBQ value was 0.038704, with the highest value of 0.428 and the lowest value of 0.0001706. These figures indicate that national governments had efficiently disbursed money compared to their total assets to carry out public services, whereas the average non-tax revenue funding was only below 5% of assets. Then, FINQ revealed the highest value of 1 (one) and the lowest of 0 (zero), with the average reaching 0.88. It denotes that most line ministries were awarded unqualified opinions by Supreme Auditor.

Meanwhile, FIND uncovered an average value of 17.84118, a minimum value of 1 (one) case, and a maximum of 80 cases. Then, FOLLUPt-1 yielded an average value of 0.4417 with a maximum value of 1 or 100% followed up and a minimum of 0 (zero). The audit results depict that central governments have several problems to solve regarding accountability. Meanwhile, the SIZE variable demonstrated an average value of 0.733, a
minimum value of 0.00423, and a maximum of 6.8954. The SIZE data signifies that this study’s line ministry varied from small to big offices.

### Table 2 Descriptive Statistic

<table>
<thead>
<tr>
<th>Variables</th>
<th>PUBQ</th>
<th>FINQ</th>
<th>FIND</th>
<th>FOLLUP_t-1</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.038704</td>
<td>0.882353</td>
<td>17.84118</td>
<td>0.441780</td>
<td>0.733504</td>
</tr>
<tr>
<td>Median</td>
<td>0.013253</td>
<td>1</td>
<td>16</td>
<td>0.396810</td>
<td>0.462643</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.428491</td>
<td>1</td>
<td>80</td>
<td>1</td>
<td>6.895421</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.74E-06</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.004230</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.070318</td>
<td>0.323142</td>
<td>10.78260</td>
<td>0.280902</td>
<td>0.891007</td>
</tr>
<tr>
<td>Observation</td>
<td>170</td>
<td>170</td>
<td>170</td>
<td>170</td>
<td>170</td>
</tr>
</tbody>
</table>

**Description:**
- PUBQ: Public service quality; FINQ: Financial reporting quality; FIND: Audit findings of weaknesses in the internal control system plus non-compliance with laws and regulations; FOLLUP: Audit recommendation follow-up; SIZE: Size

The first step in this study was to test the direct effect of the independent variables on the FINQ variable. Table 3 presents the variable correlation analysis for independent variables in logistic regression (model 1). All independent variables were not correlated since the correlation coefficient was far below 0.90.

### Table 3 Variable Correlation Analysis-Model I

<table>
<thead>
<tr>
<th></th>
<th>FIND</th>
<th>FOLLUP_t-1</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIND</td>
<td>1.000</td>
<td>-0.386</td>
<td>-0.002</td>
</tr>
<tr>
<td>FOLLUP_t-1</td>
<td>-0.386</td>
<td>1.000</td>
<td>0.108</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.002</td>
<td>0.108</td>
<td>1.000</td>
</tr>
</tbody>
</table>

This binary logistic regression does not require a normality test, heteroscedasticity test, and autocorrelation test, yet a multicollinearity test is essential (Ghozali, 2018). The examination indicates that the VIF score for each independent value was around 1.0 (no more than 10), and the tolerance value was approximately 0.9, above the accepted level (0.1). Thus, there was no multicollinearity in this binary logistic model.

Furthermore, the regression results for model I equation showed the effect of audit findings, audit recommendation follow-up, and organizational size on the quality of financial reports (Table 4). The regression model used was binary logistic regression because FINQ uses dummy variables. Based on the likelihood ratio (LR) and Hesmer Lemeshow statistic, this binary logistic model was feasible, fit, and acceptable (prob-LR statistic<0.05). In addition, the coefficient of determination in equation I is indicated using the McFadden R-squared value, showing that the independent variables could explain the dependent variable by 10.46%, while other variables outside the research model influenced the rest.
Table 4 The Results of the Regression Equation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIND</td>
<td>-0.059266</td>
<td>0.0056</td>
</tr>
<tr>
<td>FOLLOW_{t-1}</td>
<td>0.601956</td>
<td>0.5672</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.285573</td>
<td>0.2197</td>
</tr>
<tr>
<td>C</td>
<td>3.227591</td>
<td>0.0000</td>
</tr>
<tr>
<td>McFadden R-Squared</td>
<td>0.1046</td>
<td></td>
</tr>
<tr>
<td>LR Statistic</td>
<td>12.87779</td>
<td></td>
</tr>
<tr>
<td>Prob (LR-statistic)</td>
<td>0.004098</td>
<td></td>
</tr>
<tr>
<td>Hosmer Lemeshow Statistic</td>
<td>11.1498</td>
<td></td>
</tr>
<tr>
<td>Prob (Chi-Square)</td>
<td>0.1934</td>
<td></td>
</tr>
</tbody>
</table>

Then, the second step was the independent variables' direct effect on the PUBQ variable. Table 5 presents the variable correlation analysis for independent variables in panel regression (model 2). All related variables were not correlated as the correlation coefficient was below 0.90.

Table 5 Variable Correlation Analysis-Model II

<table>
<thead>
<tr>
<th></th>
<th>FINQ</th>
<th>FIND</th>
<th>FOLLOW</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINQ</td>
<td>1.000000</td>
<td>-0.287301</td>
<td>0.109333</td>
<td>-0.110406</td>
</tr>
<tr>
<td>FIND</td>
<td>-0.287301</td>
<td>1.000000</td>
<td>-0.386336</td>
<td>-0.002040</td>
</tr>
<tr>
<td>FOLLOW</td>
<td>0.109333</td>
<td>-0.386336</td>
<td>1.000000</td>
<td>0.108145</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.110406</td>
<td>-0.002040</td>
<td>0.108145</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

In this research, equation II model examined the direct effect of the intermediary variable on the quality of financial reports and the independent variables of audit findings and audit recommendation follow-up on the quality of public services on the dependent variable of PUBQ, using multiple linear regression. After using the Chow, Hausman, and Lagrange Multiple tests, the researchers selected the fixed effect model. The following step tested the classical assumptions to ensure that the regression model met the BLUE (Best Linear Unbiased Estimate) assumption. The classical assumption test consisted of normality, heteroscedasticity, multicollinearity, and autocorrelation tests.

Table 6 The Results of the Regression Equation II

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINQ</td>
<td>-0.000420</td>
<td>0.7716</td>
</tr>
<tr>
<td>FIND</td>
<td>-1.84E-05</td>
<td>0.7822</td>
</tr>
<tr>
<td>FOLLOW_{t-1}</td>
<td>0.006486</td>
<td>0.0088</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.018315</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>0.023104</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.924588</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-Square</td>
<td>0.903450</td>
<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td>43.74017</td>
<td></td>
</tr>
<tr>
<td>Prob (F-Statistic)</td>
<td>0.000000</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.934440</td>
<td></td>
</tr>
</tbody>
</table>
Table 6 presents the multiple linear regression results of the fixed effect model using the Generalized Least Square method due to heteroskedasticity. Adjusted R-Squared showed that the independent variables could explain the dependent variable PUBQ by 90.3%, whereas other variables outside the study influenced the remaining 9.7%. In addition, Prob (F-Statistic) revealed the value<significance value=5%, meaning that the independent variables simultaneously affected the dependent variable.

To test the indirect effect of the independent variables on the dependent variable through the intermediate variable, the Sobel test was carried out. Based on the path analysis results using the Sobel test, the indirect effect of audit findings on the quality of public services through the quality of financial reports showed a coefficient value of 0.00000249, a standard error of 0.0000088266, and a t-count value of 0.282009561. They were smaller than the t-table value of 1.97445, indicating that the audit findings had no indirect effect on the quality of public services, with the quality of financial reports as an intermediary variable. Meanwhile, the indirect impact of audit recommendation follow-up on the quality of public services through the quality of financial reports uncovered a coefficient value of -0.0002528, a standard error of 0.001745861, and a t-count value of -0.1481. They were smaller than the value of the t-table of 1.97445, thus signifying that the audit recommendation follow-up significantly did not have an indirect effect on the quality of public services with the quality of financial reports as an intermediary variable.

Audit Findings, Government Reporting, and Public Service Quality

The audit findings result from an assessment of the audit conducted by BPK on the auditee's financial statements considering the control system and compliance with laws and regulations. Based on agency theory, supervision of agents is carried out to ensure that the financial information submitted is guaranteed and free from asymmetric information. The higher the audit findings, the more likely the financial statements presented have material misstatements, affecting the opinion on the financial statements. This study's results showed that those audit findings significantly and negatively affected the quality of financial statements. Thus, the more audit findings on the audit of the ministry/institution's financial statements, the probability of obtaining an unqualified opinion decreases. The results of this study align with prior studies by Furqan et al. (2020), Fachriyandana and Wibowo (2020), Sari et al. (2015), Setiyawati (2016), and Johnson et al. (2012).

This research implies that the line ministries should strive to put audit findings at a lower level to improve the government reporting quality (Furqan et al., 2020). In this study, the researchers may say that when the central governments have a large number of audit findings, it indicates that many forms of violations (including corruption activities) occur in national government institutions. Audit findings also reveal opportunities for irregularities and cause abuse of authority, which results in ineffective and inefficient financial management (Siregar & Rudiansyah, 2019). In addition, audit findings denote a decrease in the credibility of the information presented in the financial statements, which will negatively affect the quality of financial reports. Non-compliance with regulations can also result in potential losses and a lack of income, which has a material impact on the
relevant ministries/agencies (Amyulianthy et al., 2020). Besides, violation of compliance with laws and regulations will impact the not fair presentation of financial information, affecting the opinion obtained.

Turning to the public service quality issue, audit findings denote weaknesses in the internal control system and government non-compliance. This condition leads to ineffective financial management that results in public service delivery. According to agency theory, the agency relationship between the agent and the principal will lead to the emergence of asymmetric information, impacting moral hazard. This study’s results revealed that the audit findings did not affect the quality of public services. These results are not consistent with studies by Furqan et al. (2020), Kiswanto and Fatmawati (2019), and Sudarsana and Shidiq (2013). However, this study’s results align with the research conducted by Wijayanti and Suryandari (2020), Amalina and Sumardjo (2020), Noviyanti and Kiswanto (2016), and Artha et al. (2015).

The researchers may also argue that the number of not material findings is thought to significantly impact the government administration’s performance. It is not supported by agency theory either. For that reason, governments must be monitored to ensure that management is carried out in accordance with regulations to guarantee accountability in public service (Wijayanti & Suryandari, 2020). The audit findings were also assessed by the number of cases related to financial management, while public service quality was represented by the non-tax revenue budget absorbed in delivering services. Therefore, it might not describe the overall association between those variables because audit findings relate not only to financial performance but also to administration matters (Noviyanti & Kiswanto, 2016). Another argument is that audit findings did not directly link to the public service activities or that internal supervision was effective. Audit recommendation follow-up promptly executed by ministries is also possible (Artha et al., 2015).

The Indirect Effect of Audit Findings

Based on the legitimacy theory, the government is willing to provide the best values through financial statement disclosures to provide an overview of the government’s performance. The smaller the audit findings, it illustrates that financial management has been carried out properly, affecting the opinions obtained and providing a good overview of the government’s performance to the public. This study’s results showed no significant effect of audit findings on the quality of public services through the quality of financial reports. The study results are not in accordance with the research of Furqan et al. (2020), stating that audit findings could indirectly affect the quality of public services through the quality of financial reports. The audit findings did not significantly impact the quality of public services, presumably because the audits carried out were only based on the financial management process, which did not assess the government’s overall performance. In addition, the quality of financial reports could not mediate the effect of audit findings on the quality of public services since examining financial statements was limited to assessing the fairness of financial statements.
Discussion: Audit Recommendation, Government Reporting, and Public Service Quality

The study results revealed that the audit recommendation follow-up had no significant effect on the quality of financial statements. The results of this study are not in line with the research of Furqan et al. (2020), Agustina and Setyaningrum (2020), Setyaningrum (2017), Sari et al. (2015), and Johnson et al. (2012). However, this study is in line with Nurdiono et al. (2016) and Agusti (2014). Nurdiono et al. (2016) also said that the recommendations given and followed up could not guarantee that the financial statements are free from errors or misinformation. It is possible due to differences in interpretation of the recommendations given. In addition, other factors causing the audit recommendation follow-up not to affect the opinion of the financial statements are that the audit recommendations might not be right on target, lack of leadership commitment, and not yet strict sanctions for negligent work units in completing follow-up audit results.

Regarding public service issues, referring to stakeholder theory, management will try to carry out interests according to stakeholder expectations. This study’s results uncovered that the audit recommendation follow-up had a significant positive effect on the quality of public services. The results of this study are in accordance with Furqan et al. (2020) and Kiswanto and Fatmawati (2019). In this case, audit recommendation follow-up plays an essential role in increasing efficiency, effectiveness, and accountability in implementing tasks and functions in government, especially in financial management and public services. Another factor causing audit recommendation follow-up to influence the quality of public services is that the follow-up in accordance with the recommendations will improve government performance and the quality of public services. In contrast, an unfinished previous year’s audit recommendation by the auditee may affect audit findings in the current audit period, depending on how high the materiality level is. Based on stakeholder theory, the prior recommendation that significantly affects subsequent year process business in delivering public service must be considered by the auditee to follow up in a high priority. Governments should also pay more attention to several aspects that make stakeholders dissatisfied.

BPK also requires the audited entity to conduct a follow-up on the audit, and the entity must provide a report at least 60 days after the audit recommendations are given, as mandated in BPK Regulation No. 2 of 2017. Good follow-up will have implications for improving organizational governance so that public services will also increase. Sari (2013) revealed that the BPK’s recommendations follow-up positively influenced good governance. Audit recommendation follow-up is vital to enhance accountability, including reducing the potential for non-compliance that indicates corrupt behavior (Liu & Lin, 2012).

Indirect Impact of Audit Recommendation Follow-Up

Based on the path analysis carried out, the study’s results indicated no effect between the audit recommendation follow-up and the quality of public services through the quality of financial reports. These results do not support the legitimacy theory, where the audit recommendation follow-up influenced the quality of financial reports and improved the
quality of public services. The results of this study are not consistent with the research of Furqan et al. (2020) either. It denotes that financial statements could not mediate the effect of financial audit findings on the quality of public services. From these results, it can be assumed that concrete actions to improve audit findings can enhance the quality of public services compared to only disclosing information regarding implementing audit recommendation follow-up in the financial statements in the following year.

**Government Reporting and Public Services: Beyond Discussion**

The final discussion explores the connection between government financial statements and public services. Based on agency theory, it is necessary to have financial reports to avoid asymmetric information between the government and the public. Meanwhile, legitimacy theory states that the government discloses information on financial management to provide an overview to the public about its performance to maintain public trust. This study's results showed that the quality of financial reports had no significant effect on the quality of public services. These results are not in accordance with some works (Furqan et al., 2020; Sohail, M., 2019; Sutopo et al., 2017; and Budianto, 2012). On the other hand, the results of this study are in line with the research of Wijaya et al. (2018), Susanti et al. (2018), and Kusuma and Kurniasih (2017). Marfiana (2013) also asserted that audit opinion awards do not rely on performance assessment, so better government reporting does not necessarily promote the enhancement of government administration. Moreover, Susanti et al. (2018) stated that BPK only examined the fairness of financial statements; therefore, it is not always followed by performance progress.

Audit findings discussed earlier in this study deal with overall activities within line ministries. As such, the researchers may scrutinize the association between audit results and the performance of government institutions by taking into account audit findings in non-tax revenue matters only rather than general findings. As can be seen in Table 7, audit findings in central government entities as non-tax revenue collectors have increased from 2015 through 2019. The amount of money corresponding to these cases also has risen in the same period. These figures indicate that when discussing public service among national government institutions, individuals should pay attention to the accountability problems in non-tax revenue management. There are also unfinished violations due to non-tax revenue mismanagement, such as how ministries manage money earned from the public (Dinarjito, 2017). Unless non-tax revenue problems are solved, the public service issue associated with the user charges levy is still questionable. Moreover, although central government reporting quality has improved, as represented by audit opinion, audit findings related to non-tax revenue matters have also been growing. Thus, further research needs to analyze deeply how public officers are excellent in financial statement preparation but do not totally comply with non-tax revenue regulations. By this, the researchers may argue that the puzzles among audit results, opinion, and public service imposing non-tax revenue would be a brighter picture.
The researchers concluded that the number of audit findings would likely move in the opposite direction with government reporting quality. The more audit finding incidents, the quality of the financial statements would likely decrease. Meanwhile, the follow-up audit recommendations led to better public service delivery in various line ministries. Consequently, this study does not confirm the indirect contribution of audit results to public service performance by using financial statement quality as a mediator. In other words, the quality of public services by government institutions that imposed non-tax revenue was not coming together with the progress of audit opinion. By this, the researchers may say that they are not twin siblings.

Moreover, a significant contribution of this study is dealing with public service measurement in central governments. To overcome the limitations in obtaining a ministry/institutional service quality score, the authors used expenditure realization data sourced from non-tax state revenues (PNBP) as a proxy for the quality of public services. However, the realization of expenditure from PNBP has not fully covered public service activities because some of those activities are covered by the general fund (beyond non-tax revenue).

Therefore, this study has several limitations to address. The researchers only focused on the line ministries and government agencies that imposed non-tax revenue as levies in public service delivery. Some government offices at the national level, which were not collecting revenue, were not covered in this research. Thus, this work lacks generalization. In addition, variables observed in this work did not consider aspects beyond audit matters, such as leadership, internal auditing, information technology, and human resources. Still, these data are valuable to enrich the perspective concerning internal resources within central government institutions that might influence the quality of government reporting and public service. Besides, the indicators of audit findings were only based on the number of cases found, not separated into internal control weaknesses and non-compliance incidents. The results associated with non-tax revenue accountability issues had also not been paid attention to in this study. Accordingly, the effect of audit findings on public service quality was difficult to observe.

Future research is expected to develop the quality of public services with other indicators and consider using primary data through a questionnaire survey to measure the quality of public services. The upcoming study can also extend the research period, using a longer lag time variable and other research method, and taking into account some significant...
variables that may affect the quality of financial reports and the quality of public services, as stated earlier.

This research is also expected to be a valuable resource for government agencies. In addition, BPK is expected to improve the quality of recommendations on audit findings relevant to the priorities of ministries/ agencies. The Supreme Auditor also needs to supervise more intensively over audit recommendations supposed to be followed by governmental departments. On the other hand, national governments are expected to improve the effectiveness of the internal control system and compliance with laws and regulations in managing state finances to create more quality and reliable financial information. These institutions are then expected to overcome non-tax revenue irregularities to promote good governance in public service.

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https://doi.org/10.2307/2490636