Exploring Financial Performance and Audit Opinions in Indonesian Central Government Agencies

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ABSTRACT

This research aims to develop an accurate prediction model for determining the audit opinions issued by the State Audit Agency based on various factors, such as leverage ratios, solvency ratios, liquidity ratios, revenue effectiveness ratios, expenditure efficiency ratios, and surplus. Observations were conducted on 254 audit financial reports from the period 2017 to 2019 from 86 central government agencies. The resulting prediction model complies with the specified model requirements. Out of the six independent variables tested, only two were found to have a statistically significant impact on their audit opinions, namely liquidity ratios and revenue effectiveness ratios. Meanwhile, the other four variables, including leverage ratios, solvency ratios, expenditure efficiency ratios, and surplus, did not have a statistically significant effect. The results of this study provide insights to ministries and government agencies regarding the importance of financial performance in predicting audit opinions.

Keywords : Bureaucratic Reform; Public Sector Audit; Financial Performances; State Revenue; Fund Management

ABSTRAK


Kata Kunci : Reformasi Birokrasi; Audit Sektor Publik; Kinerja Keuangan; Pendapatan Negara; Manajemen Dana
INTRODUCTION

Unlike in private sector, financial audits in public sector have broader objectives because it is conducted for the purposes of to examine the effectiveness of internal control, to sustain accountability of the entity operations, and to report the compliance with statutory on budgeting and accountability to the stakeholders (Ånerud 2007, McCandless 1993). The demand of accountability from citizens in public assets utilization which managed by government entities is the agency theory and management control implementation issue in public sector audit so that can reduce agency costs (Hay and Cordery 2018). The Indonesian government continues to implement a bureaucratic reform programme, which represents a major change in the governance paradigm. This reorganisation is a breakthrough in facing the sizeable challenges of the 21st century and involves all government employees with large budgets.

The programme seeks to modernise various regulations, policies, and management practices of central and local governments, as well as to adapt government duties and functions to new paradigms. According to the Indonesian Ministry of State Apparatus Utilization and Bureaucratic, the bureaucratic reform programme aims to create a professional government bureaucracy that has a good character, is well integrated, delivers a high performance, is free from corruption, collusion, and nepotism, can serve the public, is neutral, prosperous, and dedicated, and upholds the basic values and code of ethics of the state apparatus.

The Indonesian Ministry of State Apparatus Utilization and Bureaucratic launched the development of an integrity zone programme, moving towards a corruption-free zone or clean/serving bureaucratic zone nationally within all the central and local governments. This sustainable programme was initiated in the reform era with the issuance of The People's Consultative Assembly No. XI/1998 concerning a State Organizer that is Clean and Free from corruption, collusion and nepotism, and Law No. 28 of 1999 concerning the Implementation of a State Organizer that is Clean and Free from corruption, collusion, and nepotism. It also included the issuance of the State Finance Law Package, which consists of Law No. 17 of 2003 Regarding State Finance, Law No. 1 of 2004 concerning the State Treasury and Law No. 15 of 2004 concerning the Audit of State Financial Management and Accountability.

Awareness of the need for efficient, effective, professional, transparent, and responsible Public Financial Management (PFM) continues to be disseminated. Public funds are managed at the central government agencies and local government levels (level I at the Regency and City, and level II at Province). The government is currently carrying out a process of structural reforms, deregulation, and simplification of procedures. This requires the support of various auditors including the Corruption Eradication Commission, the Audit Board of the Republic of Indonesia, and internal auditors in both central and local governments, as well as public participation.

It is hoped that awareness of the use of public funds will continue to increase, encourage national economic growth, and contribute to the building of people’s welfare (kabar24.com 2020). In the 2017–2019 financial statements, the value of the State Revenue and Expenditure Budget showed a positive trend and was recorded as Rp. 1,750 trillion, Rp. 1,894 trillion and Rp. 2,165 trillion, respectively. These amounts were allocated to the central government agencies to carry out the programme (Indonesian Ministry of Finance 2019).

The preparation of government financial statements is required to follow the Indonesian Government Accounting Standards, which regulate accountability for management and reporting. By following the standards correctly and ensuring there is
adequate disclosure, compliance with laws and regulations and an effective internal control system, a government entity will obtain an assessment of the fairness of its financial statements with an unqualified audit opinion. The development of Government Accounting Standards began with the issuance of Government Regulation of the Republic of Indonesia Number 24/2005 concerning Government Accounting Standards. These standards were later updated by Government Regulation Number 71/2010 related to the application of the accrual basis in a government accounting system and continued to the most recent 2019 version of Government Accounting Standards.

However, it is not widely known by all parties that an assessment of the fairness of the financial statements of central and local governments does not necessarily mean that the management of activities is free from corruption. Due to limited number of staffs with competence in accounting and finance, a mandatory program must be provided for them either in formal or special training program. This program will increase a quality of financial reporting in local government by higher transparency index (Boner and Walker 1994; Misra 2008). The audit opinion released is based on audit procedures carried out based on the State Financial Audit Standards. It includes the professional judgement of an auditor, which sometimes contains a subjective interpretation of the laws and regulations.

Moreover, various cases certainly require valid treatment, and this requires professional judgement, competence, and experience. To ensure quality control and quality assurance in the assignment of state financial audits, it must be based on and guided by the mandate of the law, a code of ethics, the State Financial Audit Standards, the quality confidence acquisition system, audit management guidelines, audit support management guidelines, implementation instructions, non-inspection guidelines, technical instructions, and standard operating procedures/work instructions.

The Indonesian central government agencies, with their various characteristics, can be identified from the value of their total assets, number of employees, representative offices, and capital structure. These elements are among the characteristics of local governments that must be considered if a region is seeking to develop policies on regional development. Each of their financial management of the allocated budget is reported and audited by Audit Board of the Republic of Indonesia. Furthermore, consolidated financial statements of all Indonesian central government agencies is also prepared and audited. Rahayu dan Salman Jumaili (2018) compared financial ratios of the consolidated financial statements and found that for 2004-2016 period, the highest level of the liquidity ratio occurred in 2008 whilst the lowest solvability ratio of equities occurred in 2006.

Other ratios like solvency ratio of assets reached the lowest point in 2012, the effectiveness income ratio peaked in 2008, and expenditure efficiency ratio reached the lowest point in 2016. This paper identified better progress of the good governance practice in Indonesia. From the first time that consolidated financial statements been audited in 2004, the results are varies. Started in 2004-2008 period, disclaimer opinion given by Audit Board of the Republic of Indonesia, continued in 2009-2015 period with qualified opinion, and unqualified opinion released for 2016-2021 period.

According to a press release from the Bureau of Public Relations and International Cooperation of the Audit Board of the Republic of Indonesia (the Audit Board of the Republic of Indonesia, 2020), they issued an unqualified opinion for the central government financial statements of 2019, a total of 84 out of 87 central government agencies financial statements were given an unqualified opinion compared to 81 in 2018, two agencies had a qualified opinion and one agency received a disclaimer opinion. This large majority of unqualified opinions could certainly be seen as a success for Government Accounting Standards compliance. However, based on the findings of Indonesian Corruption Watch (ICW), the five sectors identified as containing the most corruption in
2018 were village fund infrastructure, government, education infrastructure, transportation and health (Gabrillin 2020).

There continues to be only a very limited amount of research into audit opinions on the financial statements of central government agencies in Indonesia. Huge amounts of the public funds that are managed involve all aspects of people's lives, while the demands for transparency and accountability in PFM are very large. This situation differs from that found in developed countries, where the management of public funds is a serious concern for all stakeholders and both the people, and their representatives seek to properly exercise control.

Furthermore, PFM conducted with transparency and accountability reduces the risk of misuse of allocation and spending, as well as providing benefits for all parties, thereby increasing people's welfare. This study aims to (1) obtain new results for the various factors tested using financial statement data from all central government agencies regarding the determinants of their audit opinion, and (2) identify benefits from the implications of the research findings to bring to the attention of central government agencies so that each of them can manage its activities more professionally, transparently and responsibly, particularly in relation to the financial aspect so that it can safeguard the state’s assets.

Theoretical Framework
Agency problem occurred both in private and public sector. In public sector, citizens as principal delegates their authority to the agent, the government has greater access in managing public funds rather than citizens so that it can potentially cause information asymmetry. Running programs for the purpose of providing welfare to the citizens, however, government possibly cannot be trusted in wholly comply to all rules. Therefore, by increasing accountability and transparency, a good governance practice in financial management of the state will lower the opportunity in abuse of power (Zimmerman 1977; Dixit 2002; Setiawan 2012; Agusti 2014; De Oliveira and Dan Filho 2017). Moreover, government has advantages in publishing their achievements for their interests so that can determine audit evidence to be verified. By conducting public sector audit is expected to reduce agency costs which represented by the loss of wealth caused by management's decisions (Jahera and Colbert 1988; Dixit 2002; Hay and Cordery 2018).

Related to signalling theory, the objective of government in providing good signal to citizens is to convince them to support government in running their programs. Therefore, government needs to provide a transparent and accountable financial information which can reduce information asymmetry. A higher disclosure of financial performance can be seen as government responsible in fulfilling information to the public and be as a promotional way to their political agenda. Those can be achieved through publishing a quality financial statement that leads to getting unqualified audit opinion and supported by the implementation of good internal control system in government financial management. Therefore, it shows a good signal to the stakeholders (Evans and Patton 1987; Hilmi dan Martani 2012; Agusti 2014; Arifin dan Fitriasari 2014; Setyaningrum 2015).

Financial Performance
The UK government, Parliament, and the National Audit Office work together and closely to ensure that the spending of taxpayers' money is managed efficiently and effectively, following the principle of value for money. The existing budgeting system also ensures that public spending is controlled. The three elements of the budgeting process are planning, spending and performance control. Using a collective set of processes, the
government's planning and performance framework includes setting priorities, planning activities, allocating money, and monitoring progress and performance (UK HM Treasury 2021). In Indonesia, the Public Management Fund (PFM) reform established after the 1997–1998 Asian Financial Crisis included amending the constitution, decentralisation, and reforms to public expenditure and revenue management (IDS 2020).

PFM involves the management of all government activities, including the mobilisation of revenue, funds allocated to various activities, expenditure, and accounting records for spent funds. The annual budget cycle aims to ensure that public expenditure is well planned, executed, and accounted for (Simson R. et al. 2011). Six dimensions are used to ensure good PFM, namely the credibility of the budget; comprehensiveness and transparency; policy-based budgeting; predictability and control in budget execution; accounting, recording, and reporting; and external scrutiny and audit (Whiteman 2012).

In Indonesia, planning and budgeting practice have followed New Public Management (NPM) approach which offers a modern bureaucracy in serving the public in efficient and effective ways. NPM have been implemented following Law of Republic Indonesia Number 17/2003 concerning State Finance, Law of Republic Indonesia Number 15/2004 concerning State Treasury, and Law of Republic Indonesia Number 15/2004 concerning Audit of State Management and Finance Responsibility. Furthermore, Indonesia has also implemented a Redesign of Planning and Budgeting System (RPBS) approach using performance base and money follows programme which also related to the NPM.

The RPBS approach offers a holistic, integrated, thematic, and spatial development planning which prioritize the national programme following president's vision and mission. The purpose of this implementation is to gain a direct impact for wider community from the development programme. For this reason, a national priority is needed that eliminates the sectoral ego which will slow down the process. To support the above plan, the Government Regulation 17/2017 concerning Harmonization of National Development Planning and Budgeting is released (Madjid 2020; Achmad Zunaidi 2022).

State budget management on the performance basis provides important measurement on how government manages the programme. Full disclosure of its management in the form of financial statements and later audited by the Audit Board of the Republic of Indonesia is a part of fulfilling public responsibility on the aspects of accountability and transparency to the stakeholders such as government managers, creditors, bond investors, legislators, citizens, media etc. Using principles of economic, efficient, and effective in managing state budget, good governance implementation in public sector will reduce the abuse of power that can lead to corruption.

Furthermore, governmental financial performance measurements are needed to evaluate the use of public funds and to monitor possibly the signs of fiscal distress occurrence. This is because taxpayers are now more demanding for government services, provide early warning system to avoid financial distress, future debt service payments etc. Using financial ratios will help to monitor government financial performance to sustain services in the long run. These are growth and diversity of revenue sources, effectiveness of expenditures, operating results, short and long-term debt burden, capital outlay etc. Moreover, interpretation of financial analysis is challenging, but these are recognizable signs of fiscal distress: decline in revenues relative to expenditures, declining property values, declining economic activity (e.g., retail sales), erosion of capital plant, increasing levels of unfunded obligations, and inadequate capital expenditures.

Regarding the financial management of government entities, the treasury function is regulated in Law No. 1 of 2004 concerning the State Treasury, regulated by the Finance Minister of the Republic of Indonesia as the State Treasurer. Its role is to carry out the
function of the state treasury (collecting all state revenues and paying all state expenditures), and it is authorised to regulate and maintain government accounts. In implementing the treasury function, the Finance Minister appoints a State Treasurer representative to execute the State Revenue and Expenditure Budget in the designated work area. The State Treasurer is one of the government financial reporting entities led by the finance minister, although its operational activities are managed by the Director General of Treasury of the Ministry of Finance, Republic of Indonesia.

The Ministry of Finance of the Republic of Indonesia has begun issuing regulations that are continuously being updated regarding the measurement and evaluation of effective and efficient budget management so that optimal results are obtained in the use of government spending and the achievement of performance targets. For this reason, it is necessary to formulate strategic targets, performance indicators of strategic targets, programme targets, indicators of programme performance, programme outputs and output indicators at the central government agencies and echelon I levels.

The reward and punishment system applicable to the central government agencies is intended to motivate their budget management performance. The applicable regulations are Regulation of Finance Minister of the Republic of Indonesia Number 89/PMK.02/2013 concerning Procedures for Awarding and Imposition of Sanctions for the Implementation of State Agencies Budgets, and Regulation of Finance Minister of the Republic of Indonesia Number 22/PMK.02/2021 concerning Measurement and Budget Performance Evaluation on the Implementation of Work Plans and Budgets of State Agencies.

There is an annual awarding and assessment of central agencies budget performance with three award categories, namely agencies with large, medium, and small budgets. For the 2021 fiscal year, Finance Minister Decree Number 58/KMK.02/2022 concerning the Determination of State Agencies Awarded for the Budget Performance of State Agencies for Fiscal Year 2021 was issued. A total of five agencies receives a large budget, including the Ministry of Finance, Ministry of Law and Human Rights, the National Police, the Ministry of Religious Affairs, and the Ministry of Education and Culture, all of which have received excellent performance scores sequentially.

The financial performance of a government institution can be drawn from its financial statements, which consist of balance sheets, budget realisation reports, operational reports, and cash flow reports. Decision-makers then analyse the financial statements to obtain an overview of the financial performance in a budget year (Mahmudi 2015). Ibrahim (2017) explained that the performance of government agencies can be considered good if the amount of expenditure realised is smaller than the budget. This shows that they have carried out the same activities at a lower cost, while the inverse applies if the amount spent exceeds the budget. In terms of revenue, a government institution is deemed to have a good financial performance if the amount of revenue it earns equals or exceeds its revenue target, and vice versa. Any surplus is thus used as a measure of productivity.

The use of other financial performance evaluation tools ensures that the performance of government institutions can be measured. These evaluation tools include financial ratios in the form of the leverage ratio, liquidity ratio and solvency ratio, revenue effectiveness ratio, expenditure efficiency ratio, and the surplus achieved. Good government budget management will produce useful and targeted programmes that detail how the allocated expenditures will be absorbed, along with the achievement of revenue targets in financing these activities. The principles of budgeting must be met during the budget cycle; these include being transparent and accountable, disciplined, fair, efficient, and effective. The State Revenue and Expenditure Budget that is prepared in line with a
The central government agencies are encouraged to improve their PFM, as demonstrated through their budget management performance and achievement of a surplus. The surplus/deficit in the operational reports used in this study is described in Government Accounting Standards No. 12 concerning Operational Reports. In this standard, the operational report presents an overview of the elements of income, expenses, the surplus/deficit from operational and non-operational activities, and the Operational Reports surplus/deficit during one financial reporting period.

The Operational Reports surplus/deficit is the difference between Operational Reports income and expenses during one reporting period, obtained after calculating the surplus/deficit from non-operational activities and extraordinary items. The resulting surplus/deficit balance will be transferred to the Statement of Changes of Equity at the end of the period. In this study, the financial performance evaluation of government institutions based on the size of the leverage ratio, liquidity ratio and solvency ratio, revenue effectiveness ratio, expenditure efficiency ratio, and surplus will be tested for their effect on the audit opinion.

Research on governmental financial performances conducted both in Indonesian Central Government (ministries and institutions) and local government (province, regency, and city). In central government level, Fitri and Khotimah (2022) conducted the research on Indonesian ministries and instructions in 2015-2019 period. The results show that revenue effectiveness and expenditure efficiency can increase the accountability of financial reporting measured by audit opinion released by Audit Board of the Republic of Indonesia. Other research found that fluctuations in financial performance of the Indonesian Ministries and Institutions in 2014-2016 period. Liquidity and independence ratio at good level whilst revenue growth ratio and expenditure efficiency not at good level (Indriyani dan Pandansari 2018).

Meanwhile, at local government level, research conducted by Suhardjanto (2010) and described that the special characteristics of a regional government compared to other regions; these include the level of regional wealth, level of dependence on central government and the amount of regional capital expenditure. Moreover, Mudhofar and Tahar (2016) conducted financial ratios to financial statements accountability for 698 districts/cities in 2012-2013 period. The results found that only independence ratio of local government and financial performance affects financial reporting accountability. Chaniago and Darmawati (2022) conducted analysis on financial performance of the local government in North Kalimantan Province for the period of 2015-2019. The results found that fiscal decentralization, income growth, suitability of spending, economy, and effectiveness ratios are at good level.

However, regional independence and efficiency ratios are not in good level. Finally, Susanto (2019) applied financial ratio analysis to measure financial performance of Mataram City in 2012-2015. The research found that overall score is insufficient satisfied. This includes effectiveness ratio, efficiency ratio, local government independence, activity ratio, local revenue growth ratio, and expenditure growth ratio due to more operational expenditure spent rather than capital expenditure.

**Governmental Audit**

Auditing is the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria, and it should be done by a competent, independent person (Elder et al. 2020). Audit program implements relevant procedures then report the management’s
financial assertions of an entity. Publishing audit opinion on government financial statements is based on criteria such as comply to governmental accounting standards and rules, adequate disclosure, and effective internal control system. This refers to Law of Republic Indonesia Number 15/2004 concerning Audit of State Management and Finance Responsibility article 16: section (1) regarding audit opinion in government audit report.

The State Financial Audit Standards (2017) explained that the audit is a process of problem identification, analysis and evaluation carried out independently, objectively, and professionally based on audit standards, to assess the truth, accuracy, credibility, and reliability of information regarding the management and responsibility of state finances. The output of a government audit is an audit report. The audit report is a written report from an audit process containing the results of the analysis of the evidence obtained. It is given to parties including representative institutions, the central government agencies and other parties who have an interest in it. For this reason, in the audit result report, each audit must draw up a conclusion as the answer to the audit objectives. The audit opinions issued are unqualified, qualified, adverse and disclaimer. The preparation of an audit report is one of the obligations of government auditors, as stated in Auditing Standards Statement 300 concerning Audit Reporting Standards in the areas of financial audit, performance audit and audit for a specific purpose (The State Financial Audit Standards, 2017).

An audit required assurance on financial economic condition of government entities. The supreme audit board plays an important role in auditing government agencies because they are promoted as a tool for combating corruptions and frauds. The absence of accountability and transparency will lead to the occurrence of corruptions and frauds (Dye, 2007). However, changes in demand of audit in public sector and better public management followed by strengthen audit role in government position This condition increases the credibility of government auditors regarding their independence in maintaining credibility and legitimacy (Gendron, et al. 2001; Pearson 2014).

Studies regarding audit opinion released by the Audit Board of the Republic of Indonesia for central government agencies and local government determined by many factors. The quality of audit assignment revealed by recommendations for further actions conducted by auditee and effectively benefits them from follow-up of audit findings to avoid similar mistakes occurred in the future (Dwiputrantri 2008; Umar 2012; Setyaningrum 2015). In central government agencies, significant factors that affect audit opinion are financial ratio such as spending efficiency, human resource aspect like accounting and finance operator/staff, audit findings, and follow-up of audit findings (Agusti 2014; Winanti 2014; Sari et al. 2015; Setyaningrum 2015; Wibowo 2019).

Meanwhile, the significant factors that influence audit opinion in local government level include financial performance, wealth, expenditure, local income, capital expenditure, efficiency and effectiveness of budget absorption, growth rate, activity ratio, fiscal decentralization, level of dependence to central government, tenure, size, number of population, budget proportion, previous year of audit opinion, total loss of local budget, follow-up on audit findings, weakness of accounting and reporting control system, non-compliance with laws and regulations, administrative irregularities, weakness of internal control system, Finance and Development Supervisory Agency assistance, and non-conformance with the Government Accounting Standards (GAS) (Fatimah et al. 2014; Nuraeni 2014; Nurdiono 2014; Istiyanto 2016; Pratiwi dan Aryani 2016; Kusumawati dan Radmo 2017; Putry and Badrudin 2017; Muraiya dan Nadirsyah 2018; Pamungkas et al. 2018; Pamungkas et al. 2019).
Hypotheses Development

Performance measurement plays a crucial role as an evaluation and accountability tool in government financial management, especially when presenting information to the public through calculations and analyses of revenue and expenditure budget targets achieved. Government performance in managing programs becomes apparent through efficient expenditure allocation and the effective generation of revenue. To evaluate this performance, financial ratios and the 3E approach (economic, efficient, and effective) of value for money have been commonly used (Pramono, 2014; Nainu et al., 2017; Poyoh et al., 2017; Susanto, 2019).

Furthermore, government financial performance evaluation, coupled with compliance with governmental accounting standards in recognizing, measuring, and presenting financial statements, is subjected to regular audits by the Audit Board of the Republic of Indonesia. The audit results lead to the issuance of an audit opinion for each central government agency and local government entity, enhancing accountability and transparency in public financial management. This audit opinion provides stakeholders with assurance regarding the government’s performance in managing public funds.

In evaluating government entities’ budget management, it becomes imperative to understand the distinctive characteristics of central and local governments. These characteristics encompass aspects such as the size of their assets, regional wealth, the extent of dependence on other parties, and capital expenditures (Suhardjanto, 2010). Additionally, Mahsun (2016) suggests that government financial performance measurement can involve budget analysis, including assessing spending efficiency by comparing budget realization and expenditures, as well as calculating revenue effectiveness by comparing revenue realization and revenue targets. Other research by Muraiya and Nadirsyah (2018) indicates that fiscal decentralization and the effectiveness of budget absorption by local government entities have a significant impact on financial reporting accountability, as reflected in the audit opinion.

This study employs income effectiveness and budget efficiency as proxies to measure financial performance (Mahsun, 2016; Ibrahim, 2017) and assess their influence on the audit opinion. It is noteworthy that previous studies have also highlighted the impact of financial ratios related to the characteristics of central and local governments on the audit opinion. These factors include budget proportion (Nurdiono, 2014), wealth, expenditure, and size (Pratiwi dan Aryani, 2016), the level of dependence on the central government, growth rate, and activity ratio (Putri dan Badrudin, 2017), efficiency and effectiveness of budget absorption (Muraiay dan Nadirsyah, 2018), size (Pamungkas et al., 2019), and the efficiency aspect of ministry expenditure (Wibowo, 2019). Building upon the contextual background and research insights previously outlined, this study presents a comprehensive set of hypotheses. Specifically, we propose the following hypotheses: \( H_1 \) suggests that the leverage ratio of central government agencies significantly impacts the determination of audit opinions. Moving on to \( H_2 \), it posits that the liquidity ratio of these agencies exerts a significant influence on the audit opinion decision. \( H_3 \) extends this notion, asserting that the solvency ratio plays a significant role in shaping the audit opinion.

Meanwhile, \( H_4 \) emphasizes the significance of the revenue effectiveness ratio of central government agencies as a determinant of audit opinions. Expanding further, \( H_5 \) suggests that the audit opinion decision is significantly affected by the expenditure efficiency ratio. In a parallel vein, \( H_6 \) posits that the surplus of central government agencies has a notable impact on audit opinion determinations. Lastly, \( H_7 \) synthesizes these variables, suggesting that the collective interplay of the leverage ratio, liquidity ratio, solvency ratio, revenue effectiveness ratio, expenditure efficiency ratio, and surplus within
central government agencies holds substantial sway over the ultimate audit opinion decision.

Source: Data processed, 2023

Figure 1. Conceptual Framework

RESEARCH METHOD

In this study, the research object is the population of all central government agencies of the Republic of Indonesia audited by the Audit Board of the Republic of Indonesia during the period 2017–2019, consisting of 89 government institutions (Appendix 1. List of Central Government Agencies in Indonesia 2017-2019), encompassing state institutions, central government institutions (ministries and non-ministerial institutions), coordinating ministries, and cabinet-level agencies. This time frame was chosen due to its pre-COVID-19 conditions, ensuring that the financial status of central government agencies remained stable.

Data collection involved the acquisition of complete financial statements through two methods: (1) Downloads from the official websites of all central government agencies, which provided half of the required data, and (2) Correspondence with the Information and Communication Centre of the Audit Board of the Republic of Indonesia, which supplied the remaining data. Both methods were executed in May 2021, resulting in the collection of 258 financial reports from 86 ministries and institutions.

The type of data collected for this study was panel data, with the following sample criteria: (1) Indonesian central government agencies that continuously operated and did not undergo liquidation or dissolution during 2017–2019, (2) Indonesian central government agencies that published audited financial statements during 2017–2019, and (3) Financial statements that included ministry-level agencies led by a Minister or Head of State Institution.

To test the proposed hypotheses, the researcher employed a panel regression model as outlined in Equation 1.

\[
OPIN(Y) = \alpha + \beta_1 LEV + \beta_2 LIQ + \beta_3 SOL + \beta_4 REV + \beta_5 EXP + \beta_6 SUR + e
\]  

In this model in Equation 1, several variables are considered. First, \(OPIN(Y)\) stands for the Audit Opinion, categorized as Unqualified = 4, Qualified = 3, Adverse = 2, and Disclaimer = 1, representing different levels of audit opinions. Second, \(LEV(X_1)\) represents
the Leverage Ratio, providing insights into the Debt-equity ratio. Moving on, LIQ \((X_2)\) denotes the Liquidity Ratio, calculated by dividing Current Assets by Current Liabilities, reflecting the organization’s liquidity position. SOL \((X_3)\) signifies the Solvency Ratio, calculated as Total Assets divided by Total Liabilities, offering a measure of financial stability.

Next, REV \((X_4)\) represents the Revenue Effectiveness Ratio, defined as Realized Revenues over Target Revenues, indicating how effectively revenues are generated. EXP \((X_5)\) is the Expenditure Efficiency Ratio, calculated as Expenditure over Budget Allocations, reflecting the efficiency of budget utilization. Finally, SUR \((X_6)\) represents Surplus, determined by Revenue over Expenditure after Operational, Non-Operational, and Extraordinary Activities, indicating financial surplus or deficit. Additionally, ‘e’ represents the error term, accounting for unexplained variations in the model. This equation constitutes the panel regression model employed for the analysis.

RESULTS AND DISCUSSION

This study used a quantitative analytical method with analytical techniques in the form of descriptive statistics, along with regression analysis using panel data and EViews 9 software. Referring to the criteria, only 86 out of 89 agencies met the sample criteria. Three agencies, namely Sidoarjo Mudflow Mitigation Agency, Pancasila Ideology Development Agency, and State Treasurer, were therefore removed from the observation. The reasons for their respective exclusions were liquidation, starting in 2018; being newly established in 2019; and being part of the Ministry of Finance led by a Director General of Treasury. In total, 258 financial reports were obtained from 86 ministries and agencies. After testing for outliers, 224 observations were ultimately used in this study.

Descriptive statistical analysis aims to describe the factors used in this study, meaning it is a useful technique for analysing the data. Table 1 contains a summary of the descriptive statistics.

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.964286</td>
<td>1677.253</td>
<td>0.019220</td>
<td>55.77281</td>
<td>1.71E+09</td>
<td>1.25E+09</td>
<td>-</td>
</tr>
<tr>
<td>Median</td>
<td>4.000000</td>
<td>189.0900</td>
<td>0.005200</td>
<td>5.670000</td>
<td>2.750000</td>
<td>0.940000</td>
<td>-</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.000000</td>
<td>119222.2</td>
<td>0.834100</td>
<td>5627.900</td>
<td>5.31E+10</td>
<td>47.03000</td>
<td>6.05E+13</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.000000</td>
<td>2.200000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.001000</td>
<td>-</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.185992</td>
<td>10299.10</td>
<td>0.061097</td>
<td>387.4143</td>
<td>5.64E+09</td>
<td>3.519880</td>
<td>2.19E+13</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>26.03704</td>
<td>109.9494</td>
<td>143.1430</td>
<td>193.1538</td>
<td>47.98972</td>
<td>139.6783</td>
<td>15.54491</td>
</tr>
<tr>
<td>Jarque-Berra</td>
<td>5887.963</td>
<td>110707.0</td>
<td>187767.1</td>
<td>344293.2</td>
<td>20316.06</td>
<td>179244.6</td>
<td>1809.407</td>
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<tr>
<td>Probability</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
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</tbody>
</table>

Source: Data processed, 2023

The data show that there is a large difference between the minimum and maximum values with a median value greater than the mean value for the audit opinion variable, revenue effectiveness ratio and surplus, thus indicating that the values appearing in most observations are above the central government agencies mean. Inversely, a smaller median than mean value is found for the leverage ratio, liquidity ratio, solvency ratio and...
expenditure efficiency ratio, meaning that the median values that occur in most observations are below the agencies mean. Moving forward, this study proceeds with several crucial steps in its analysis. Firstly, in estimating the regression model, panel data is utilized, employing three distinct approaches: the common effect model, fixed effect model, and random effect model. Each of these models serves as a valuable tool in examining the research hypotheses from different perspectives, offering a comprehensive understanding of the relationships under investigation.

Following the estimation process, the study undertakes two significant tests, namely the Chow test and the Hausman test. These tests are pivotal in determining the most appropriate and robust estimation model for the analysis. The Chow test assesses structural stability within the model, while the Hausman test aids in selecting between fixed and random effect models, ensuring the chosen model aligns optimally with the research objectives and data characteristics. These steps collectively contribute to the rigor and validity of the study's findings and conclusions.

Table 2 contains a comparison of the three regression model estimation approaches, namely the common effect model (on the left), the fixed effect model (in the center), and the random effect model (on the right).

### Table 2. (a, b, c) Comparison of regression model estimation approaches

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3.982954</td>
<td>0.0153332</td>
<td>259.7858</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>3.08E-07</td>
<td>1.20E-06</td>
<td>0.258146</td>
<td>0.7965</td>
</tr>
<tr>
<td>X2</td>
<td>0.088260</td>
<td>0.201603</td>
<td>0.437793</td>
<td>0.6620</td>
</tr>
<tr>
<td>X3</td>
<td>8.07E-06</td>
<td>3.18E-05</td>
<td>0.253922</td>
<td>0.7998</td>
</tr>
<tr>
<td>X4</td>
<td>-5.84E-12</td>
<td>2.19E-12</td>
<td>-2.671595</td>
<td>0.0081</td>
</tr>
<tr>
<td>X5</td>
<td>0.000491</td>
<td>0.003490</td>
<td>0.140616</td>
<td>0.8883</td>
</tr>
<tr>
<td>X6</td>
<td>1.42E-15</td>
<td>5.63E-16</td>
<td>2.525799</td>
<td>0.0123</td>
</tr>
</tbody>
</table>

R-squared: 0.056555
Adjusted R-squared: 0.030469
S.E. of regression: 0.0047204
Mean dependent var: 3.964286
S.D. dependent var: 0.023315
Akaike info criterion: 7.278002
Schwarz criterion: 65.95822
Hannan-Quinn criterion: 2.168032
Durbin-Watson stat: 2.525799

### Table 2a.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3.973038</td>
<td>0.0153332</td>
<td>259.7858</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>6.40E-07</td>
<td>1.20E-06</td>
<td>0.258146</td>
<td>0.7965</td>
</tr>
<tr>
<td>X2</td>
<td>0.031193</td>
<td>0.235484</td>
<td>0.132465</td>
<td>0.8948</td>
</tr>
<tr>
<td>X3</td>
<td>6.28E-05</td>
<td>3.55E-05</td>
<td>2.332929</td>
<td>0.0210</td>
</tr>
<tr>
<td>X4</td>
<td>-1.58E-11</td>
<td>3.66E-12</td>
<td>-4.316349</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

R-squared: 0.056555
Adjusted R-squared: 0.030469
S.E. of regression: 0.0047204
Mean dependent var: 3.964286
S.D. dependent var: 0.023315
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Schwarz criterion: 65.95822
Hannan-Quinn criterion: 2.168032
Durbin-Watson stat: 2.525799
Table 2c.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>3.19E-07</td>
<td>1.15E-06</td>
<td>0.278248</td>
<td>0.7811</td>
</tr>
<tr>
<td>X2</td>
<td>0.078166</td>
<td>0.193875</td>
<td>0.403178</td>
<td>0.6872</td>
</tr>
<tr>
<td>X3</td>
<td>2.28E-05</td>
<td>3.03E-05</td>
<td>0.751588</td>
<td>0.4531</td>
</tr>
<tr>
<td>X4</td>
<td>-6.78E-12</td>
<td>2.21E-12</td>
<td>-3.070883</td>
<td>0.0024</td>
</tr>
<tr>
<td>X5</td>
<td>0.000397</td>
<td>0.003324</td>
<td>0.119442</td>
<td>0.9050</td>
</tr>
<tr>
<td>X6</td>
<td>1.38E-15</td>
<td>5.92E-16</td>
<td>2.333137</td>
<td>0.0206</td>
</tr>
<tr>
<td>C</td>
<td>3.983706</td>
<td>0.015882</td>
<td>250.8331</td>
<td>0.0000</td>
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</table>

Effect Specification

<table>
<thead>
<tr>
<th>Cross-Section Fixed (dummy variables)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean dependent var</td>
</tr>
<tr>
<td>S.D. dependent var</td>
</tr>
<tr>
<td>Akaike info criterion</td>
</tr>
<tr>
<td>Schwarz criterion</td>
</tr>
<tr>
<td>Hannan-Quinn criterion</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

The comparison in Table 2 reveals that the adjusted R2 values from the regression results are 3.3% for the common effect model, 19.66% for the fixed effect model, and 3.3% for the random effect model. Consequently, the fixed effect model demonstrates the highest adjusted R2 value in the regression analysis. The subsequent step involves applying the Chow test and the Hausman test to select the appropriate estimation model. The Chow test was utilized to determine the better-fitting model between the common effect model and the fixed effect model. The following hypotheses were used in the Chow test: if the probability value is greater than the alpha value, Ho is accepted, and the common effect model is employed as the estimation model. Conversely, if the probability value is less than the alpha value, Ho is rejected, and the fixed effect model is used as the estimation model. Table 3 shows the results of the Chow test.
Table 3 Chow Test Result

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Statistics</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>1.606404</td>
<td>(74.143)</td>
<td>0.0081</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>135.524163</td>
<td>74</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

The results in Table 3 indicate that the obtained probability value is less than 5%. Therefore, the model that fulfills the hypothesis for the method selection is the fixed effect model.

Subsequently, the Hausman test was performed to determine the preferable model between the fixed effect model and the random effect model. The following hypotheses were applied in the Hausman test: if the probability value exceeds the alpha value, Ho is accepted, and the random effect model serves as the estimation model. Conversely, if the probability value is less than the alpha value, Ho is rejected, and the fixed effect model is utilized as the estimation model. Table 4. shows the results of the Hausman test.

Table 4 Hausman Test Result

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-sq. Statistic</th>
<th>Chi-sq d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>22.572697</td>
<td>6</td>
<td>0.0010</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Based on the results in Table 4., the probability value obtained is smaller than 5%, which means the model that meets the hypothesis for the method to be used is the fixed effect model. Thus, both the Chow and Hausman tests reach the same conclusion, namely that the fixed effect model is the best method.

The regression results in this study were analyzed by testing for the best model to use in accordance with the criteria and then explaining the results of the regression. The effect of the independent variables on the dependent variable can be determined through panel data regression analysis, namely by entering the value of the panel data regression analysis results into the regression using the fixed effect model. The multicollinearity and heteroscedasticity tests were used as the classical assumption tests in this study. The former did not indicate a high correlation to each independent variable, which means the model is free from multicollinearity. All the independent variables used were also free from heteroscedasticity. The best estimation model is used to draw conclusions from several tests such as the following t and F tests.
The equation formulated in this research model is presented as Equation 2.

$$\text{OPIN} = 3.973038 + 6.40 \times 10^{-7} \text{LEV} + 0.031193 \text{LIQ} + 8.28 \times 10^{-5} \text{SOL} - 1.58 \times 10^{-11} \text{REV} + 8.53 \times 10^{-5} \text{EXP} - 1.42 \times 10^{-15} \text{SUR} + \varepsilon$$ (2)

The constant value and the fact that independent variables such as the expenditure efficiency ratio (X5) and the solvency ratio (X3) have the highest and positive coefficient scores indicates that these are the main drivers of an increase in the audit opinion value. Thus, it can be said that these factors contributed the most to the unqualified audit opinions issued to central government agencies. Other factors such as the revenue effectiveness ratio (X4) and surplus (X6) have negative coefficient values, thus indicating that these variables do not influence the issuance of an unqualified audit opinion.

The F-statistic result shows a value of less than 5%, which means the regression model in this study is appropriate for use as the prediction model. Of the six independent variables tested in the t-test, only the solvency ratio (X3) and revenue effectiveness ratio (X4) are found to have a significant effect on the audit opinion with a probability value below 5%. Meanwhile, the other four independent variables, namely the leverage ratio (X1), liquidity ratio (X2), expenditure efficiency ratio (X5) and surplus (X6), have no significant effect on audit opinion. Furthermore, the adjusted R2 value of 19.66% indicates that the audit opinion can be explained by the independent variable in this study to the extent of that percentage value.

Referring to the statistical results above, the following discussion points are explained. The first hypothesis showing that the leverage ratio has no significant effect on the issuance of an unqualified audit opinion. This indicates that the leverage ratio is attributable to the very small amount of debt to total assets of agencies. The central government agencies hold a very large amount of equity relative to total assets, which indicates they are in a strong position to pay off their small debt obligations. The second hypothesis shows that the liquidity ratio has no significant effect on the issuance of an unqualified audit opinion. This is due to the varying amounts of current assets held by agencies and the low value of their short-term debts to the providers of goods and services, as well as to building constructors. Thus, the variation in the liquidity ratio from low to high indicates that this is not a factor in the determination of an unqualified audit opinion. The third hypothesis, which is significant, indicates that the solvency ratio can be viewed as a consideration when issuing an unqualified audit opinion.

The positive relationship means that the more solvent the entity in paying the short-term and long-term obligations, the more chance for government agencies to get unqualified audit opinion. The data obtained from all agencies indicate that a low solvency ratio arises because they do not need to seek debt to finance their operational activities. This is due to the availability of the State Revenue and Expenditure Budget as their main source of funding, along with Non-Tax State Revenue as a complementary source, albeit

<table>
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<tr>
<td>C</td>
<td>3.973038</td>
<td>0.023315</td>
<td>170.4035</td>
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<td>X1</td>
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<td>1.38E-06</td>
<td>4.65277</td>
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<td>X2</td>
<td>0.031193</td>
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<td>0.8948</td>
</tr>
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<tr>
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<td>-4.316349</td>
<td>0.0000</td>
</tr>
<tr>
<td>X5</td>
<td>8.53E-05</td>
<td>0.003872</td>
<td>0.02029</td>
<td>0.9825</td>
</tr>
<tr>
<td>X6</td>
<td>1.42E-15</td>
<td>2.17E-15</td>
<td>-0.654320</td>
<td>0.5140</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023
with a lower value. The adequacy of this budget means there is no pressure to pay obligations, whether short-term or long-term.

Moreover, the fourth hypothesis, which is also significant, indicates that the revenue effectiveness ratio is an important factor for the Audit Board of the Republic of Indonesia in releasing an unqualified audit opinion. The revenue effectiveness ratio shows the realization of revenue in the forms of state funds allocated and non-tax state revenue more than the targeted revenue. The fulfillment of that revenue is thus regarded as an achievement in collecting revenues. However, the statistical results show inversely. This means most of the government agencies generated lower revenue than the targeted and they received unqualified audit opinions from the Audit Board of the Republic of Indonesia. The fifth hypothesis shows no significant effect and thus indicates that expenditure efficiency is not the main factor in issuing an unqualified audit opinion. As a result, implementing a pre-determined activity program, in terms of realizing its utilization for the benefit of the public, is a higher priority than focusing on expenditure efficiency.

The sixth hypothesis shows no significant effect, thus indicating that budget surplus is not a consideration in issuing an unqualified audit opinion. This is understandable because agencies, as central government entities, differ from local government entities that seek a surplus. Only a few agencies generate a surplus from their activities. These include the Ministry of Information, Energy and Mineral Resources, and the Ministry of Finance, which focuses on increasing state revenues. Other agencies focus on program spending to fulfill basic needs. These include the Ministry of Education and Culture and the Ministry of Public Works and Housing. Other agencies are not directed to achieve Non-Tax State Revenue. These include non-ministerial institutions, namely the People's Consultative Assembly and the People's Representative Council (PRC).

CONCLUSION

In conclusion, this study sought to identify the factors influencing the issuance of audit opinions on agencies’ financial statements, examining variables such as the solvency ratio, leverage ratio, liquidity ratio, revenue effectiveness ratio, expenditure efficiency ratio, and surplus. The findings revealed that only two variables, namely the solvency ratio and revenue effectiveness ratio, exert significant effects on the audit opinion decision.

The contribution of this study lies in shedding light on the specific financial factors that impact the audit opinion process for government agencies. It provides valuable insights for agencies, emphasizing the importance of maintaining favorable financial liquidity ratios and achieving revenue targets to ensure a positive audit opinion. Additionally, the study carries implications for the Public Report Committee (PRC), highlighting their role in holding agencies accountable for budget management through the audit report.

However, it is important to acknowledge the limitations of this research. Future studies can further explore additional variables and expand the sample size to enhance the comprehensiveness of the findings. Additionally, the practical implication of this study underscores the significance of financial management for agencies, which can guide policy and decision-making. On a theoretical level, this research contributes to the understanding of the audit opinion process within the context of government agencies.
RECOMMENDATION

This study provides the following recommendations for subsequent studies: (1) Add other variables such as internal control systems, compliance with laws and regulations, the previous year’s audit opinion, and follow-up recommendations on agencies’ examination results. (2) Add other variables such as good governance, namely bureaucratic reform through fundamental changes in various aspects. The implementation of bureaucratic reform and the realization of an integrity zone as a joint commitment by government officials may encourage the issuance of an unqualified audit opinion.

REFERENCES


Government Regulation 17/2017 concerning Harmonization of National Development Planning and Budgeting.


Law of Republic Indonesia Number 17/2003 concerning State Finance.

Law of Republic Indonesia Number 1/2004 concerning State Treasury.

Law of Republic Indonesia Number 15/2004 concerning Audit of State Management and Finance Responsibility.


