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> Abdul Kahar (D), Andi Chairil Furqan (D) Z, Tenripada Tenripada (D) Tadulako University, Palu, Central Sulawesi, Indonesia

THE EFFECT OF BUDGET, AUDIT AND GOVERNMENT PERFORMANCE: EMPIRICAL EVIDENCE FROM INDONESIAN REGIONAL GOVERNMENTS¹

Abstract. The development of public sector accounting was now propelled by stakeholder demands on bureaucratic performance, accountability and transparency, to pay close attention to tax revenues and expenditures with due regard to financial governance through positive auditing results. The Indonesian government enacted a new rule of Government Accounting Standard No. 71 of 2010 which fundamentally changed the form of government accounting books. The impact of these changes on budgeting, auditing and government performance in the early days of their implementation is crucial as a basis for reference for later reforms. This study aims to examine empirically the effect of audit opinion on the performance of Indonesian local governments by considering the mediating effect of revenue and expenditure realisation based on legitimacy and public choice theories. Data from 32 provinces in Indonesia during the 2010-2014 period with a total number of 150 observations (province-years) was analysed by least square regression. The research found that, in line with legitimacy theory, the previous year's audit opinion had a significant and positive effect both directly and indirectly through the realisation of regional expenditure as a mediating variable on the performance of local governments. However, regarding public choice theory, the results must be carefully interpreted as the mediating effect of the realisation of expenditure on how audit opinions affect the performance of the provincial government depending on the measurements used. The result may be used by the government, provincial government, local parliament and the Audit Board of Indonesia in policy setting, supervision and inspection in improving the performance of the provincial government. Audit opinion, in relation to the realisation of government expenditure and its function, indirectly boosts the performance of local government in developing countries.

Keywords: public accounting, auditing, budget, bureaucratic performance, accountability and transparency, public choice theory, audit opinion, governance, regional governments, Indonesia

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ИССЛЕДОВАТЕЛЬСКАЯ СТАТЬЯ

А. Кахар , **А. Ч. Фуркан** Университет Тадулако, г. Палу, Индонезия

Влияние аудиторских проверок на формирование бюджета и эффективность правительства: на примере региональных органов власти Индонезии

Аннотация. Необходимость удовлетворения эффективности, подотчетности и прозрачности финансовых структур привела к развитию системы бухгалтерского учета в государственном секторе. Пристальное внимание уделяется налоговым доходам и расходам, важную роль играют положительные аудиторские заключения. Принятие правительством Индонезии нового правила Государственного стандарта бухгалтерского учета № 71 от 2010 года привело к существенным изменениям в этой сфере. Влияние этих изменений на формирование бюджета, аудит и деятельность правительства предопределит судьбу дальнейших реформ. В настоящем исследовании анализируется влияние результатов аудиторских проверок на деятельность местных органов власти Индонезии. В статье на основе теорий легитимности и общественного выбора исследуется распределение доходов и расходов. Данные по 32 провинциям Индонезии за период 2010—2014 гг. (всего 150 наблюдений) проанализированы при помощи метода регрессии наименьших квадратов. В соответствии с теорией легитимности, результаты аудиторской проверки за предыдущий год оказывают существенное положительное влияние на эффективность местных органов власти, причем это влияние было как прямым, так и косвенным (через опосредующую переменную «реализация региональных расходов»). Что касается теории общественного выбора, подобный косвенный эффект следует интерпретировать с осторожностью в зависимости от используемых показателей. Правительство, органы власти в провинциях, местный парламент и Счетная комиссия Индонезии могут использовать полученные данные при разработке политики надзора и контроля в целях улучшения работы местного правительства. Сделан вывод, что аудит государственных расходов косвенно приводит к повышению эффективности местных органов власти в развивающихся странах.

Ключевые слова: государственный учет, аудит, бюджет, бюрократическая деятельность, подотчетность и прозрачность, теория общественного выбора, аудиторское заключение, управление, региональные органы власти, Индонезия

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1. Introduction

Reforming public sector organisations, especially in government in some countries, is based on the assumption that improving the quality of governance mechanisms and accountability will improve the performance of public sector organisations (Grossi & Steccolini, 2014; Almqvist et al., 2013; Abd Aziz et al., 2015; Adhikari & Gårseth-Nesbakk, 2016; Jahid et al., 2020). In general, financial reports prepared by ministries/agencies and local governments in Indonesia are considered a medium for financial accountability presented in accordance with Government Accounting Standards. However, this audit opinion is used as a medium to propagate government performance to the media and the public. In Indonesia, positive audit results are imaged to create public opinion that government institutions have carried out activities and management in an accountable manner, and are free of corruption. This shows that public opinion can be used as a political tool to gain support and legitimacy from the public and

stakeholders (Adiputra et al., 2018; Furqan et al., 2021). This support is in turn used to make the public more trusting and obedient to pay taxes to improve revenue performance. Gutomo (2015) shows the improvement in the quality of financial reporting by local governments in Indonesia in 2012 compared to that of 2010. Although there is an increase in unqualified opinion from 34 to 67, this number is still relatively small because it is only 16 % of the total reports. This number is far below the number of state institutions and ministries that received ungualified opinions (77 % of the total reports). From the sequence, the provincial government obtained relatively more unqualified opinions (36 %), followed by municipalities (25 %) and district levels (12 %).

On the other hand, negative assessments can have an impact on public understanding that there are mismanagement and corruption in government. In turn, this will result in decreased public legitimacy and public distrust of transparent tax allocations. This shows that audit opinion has been seen as a source of public legitimacy. and a driving force for improving government performance through tax performance, and allocating expenditures through transparent and accountable means. This suggests that local government initiatives to improve financial and audit performance can have an effect on public trust. Theoretically, previous studies have confirmed that the financial performance and public services of local governments are influenced by the managerial characteristics and initiatives of local government (Andrews & Van de Walle, 2013; Mariyam & Setiyowati, 2021; Rodrigues et al., 2012; Tat-Kei Ho, 2002). In terms of the relationship between local government performance and audit opinion, previous literature confirmed the existence of the mediating effect of expenditure realisation. Birskyte (2019) and Alcañiz (2010) presented empirical results of the relationship between bureaucratic performance and expenditure realisation at the local level. Hence, to broaden the empirical scope the relationship between audit opinion, local government performance and expenditure realisation, this study examines data from 32 provincial-level local governments in Indonesia. Using a province-year and Java and non-Java basis, the sample testing was divided into two groups: one group for the overall test with a total number of observations of 150 (province years), by differentiator of Java and non-Java analytical basis.

2. Literature Review

In general, regarding the relationship of audit opinion and local government performance, previous studies revealed that audit findings are empirically proven to significantly affect the performance and the service quality of sub-national government (Furqan et al., 2020; Abdullah et al., 2020). In the field of public finance, this kind of relationship is an indicator of legitimacy in the public sector, where audit findings become a driving force for local governments to further improve service quality and performance to gain legitimacy and credibility of government management. In general, Suchman (1995) states that organisations will behave and have activities in accordance with stakeholder expectations. Afiah & Azwari (2015) found that the application of public sector financial accounting and supervision had an effect on the financial reports in government sector.

Masdar et al. (2021) revealed that audit opinion of the financial statements is a representation of the achievement of accountability by local government. In Indonesia, there is a difference between financial management performance and general government performance. Audit opinion in this context is related to the performance of financial management as assessed by the Financial Supervisory Agency, while the performance measures in this study refer to the Performance of Government Institution Performance Accountability as assessed by the Ministry of Administrative Reform. Based on this, it can be illustrated that when the audit opinion is higher, both opinion on management or financial reporting, then the performance of government agencies in general will also be higher. Giroux and Shields (1993) found that audit opinion negatively affected local government public spending, which meant that fair opinion without exception was very effective as a control tool in reducing bureaucrats' incentives to do public spending.

H1: There is a positive influence of audit opinion on the government performance at the local level.

Furthermore, legitimacy theory can be used to analyse the relationship between audit opinion and the behaviour of regional government. According to the theory, the organisation will behave and carry out its work according to the stakeholder's wishes to the organisation to gain legitimacy and recognition. The conformity between stakeholder expectations with organisational behaviour and activities will support and increase legitimacy. On the other hand, legitimacy will decrease if there is a mismatch between the two, which affects the decrease in social support and organisational resources. As Gabrini (2013) stated, this in turn will reduce the ability to achieve organisational goals, so that organisations are encouraged to continue to be able to gain and maintain legitimacy by designing and managing institutional aspects.

Recently, the demands of stakeholders and society on the aspects of transparency and accountability are increasingly widespread, including in developing countries (Harun et al., 2019; Rakhman, 2019). To answer this demand, in the context of legitimacy theory, the bureaucracy can carry out activities in an accountable and transparent manner by playing an important role in positive audit opinion (Gray et al., 1995; Pierre et al., 2018). Ferraz and Finan (2008) argue that positive audit opinion determines the legitimacy of local government, and in the election contestation, audit opinion has an influence on the incumbent's electability (Darmastuti & Setyaningrum, 2019; Muhammad et al., 2017). Systematically, the relationship between social legitimacy and government bureaucracy is derived from the perception that a positive audit opinion reflects accountability and transparency in the management of government resources and public sector services. This perception will encourage people to increase support for local government, as the most important aspect of social capital, including support for tax payments. This in turn will increase the achievement of local government revenue performance. This revenue performance is an important indicator in the performance of local government (Furqan et al., 2020). In the context of legitimacy, the bureaucracy can respond to demands for accountability and transparency by obtaining positive audit opinions, and then tactically, increasing the performance of local tax revenues. An increase in local taxes can support local government spending on regional development.

H2: There is a mediating influence of the realisation of local own-source revenue in relationship between audit opinion and the government performance at the local level.

Moreover, from the perspective of public choice theory, in terms of relationship between audit opinion, regional operating expenditure and local government performance, the main role of bureaucrats enforces established rules. In public choice theory, especially regarding the management of local government (Yuliati et al., 2017; Boyne, 1998), the bureaucracy will seek to increase internal capacity to obtain supportive public assessments, which in this context can be done by obtaining a positive audit opinion and through the mediating influence of regional expenditure realisation. Giroux and Shields (1993) stated that there are influences on the quality of government financial reporting, especially audit opinions on budget spending or regional government spending, which they explain is due to quality financial reporting incentives for governments to increase their spending budgets (Lane, 1987; Piano, 2019).

Likewise, audit opinion has become a control for the behaviour of local governments to always spend effectively and efficiently (Giroux & Shields, 1993; Schneider & Damanpour, 2002). This means that better financial reporting results in the increasing financing plan allocated for pension funds. Audit opinion can influence the achievement of regional expenditures, because audit opinions can encourage the realisation of expenditure as an indicator of performance appraisal in local governments.

H3: There is a mediating influence of the realisation of operating expenditure in relationship between audit opinion and the government performance at the local level.

3. Method

The data source of this research is the audit report data from the Audit Board of Indonesia on financial statements obtained from the Audit Board of Indonesia, the evaluation data on the implementation of the Government Agency Performance Accountability System (Sistem Akuntabilitas Kinerja Instansi Pemerintah/SAKIP, henceforth cited as SAKIP) obtained from the Ministry of Administrative Reform and Bureaucratic Reform, budget data and revenue realisation and regional expenditure obtained from the Ministry of Finance, and human development index data from the Central Bureau of Statistics. The research period is from 2010 to 2014 both for the sample of the provincial government as a whole and only for the sample of provincial governments which are outside Java.

Table 1 panel A shows an overview of the research sample. The initial sample includes data from 34 provinces for the period 2010–2014 or around 170 observations (province-year), but as the criteria for using the sample are determined, 12 observations who do not have SAKIP data and 3 observations that do not have complete financial report data are omitted from the sample. Meanwhile, especially for Special Capital Region of Jakarta, the data consists of 5 observations stated outliers. Data from Jakarta are outlier

Table 1

Overview of Research Samples

	-					
Panel A (Sample determination)	Observation (province- year)	Number of Provinces				
Provincial Data in Indonesia (2010-2014)	170	34				
Have no SAKIP score	(12)	—				
Have no complete financial report data	(3)	_				
Jakarta Province (outlier data)	(5)	_				
Number of Final Samples	150	32				
Panel B (Sample Description)	Observation (province- year)	Percent (%)				
Based on the year of observation	on					
2010	28	18.67				
2011	29	19.33				
2012	32	21.33				
2013	31	20.67				
2014	30	20.00				
The final sample is based on the year of observation	150	100,00				
By Island						
Java Island	20	13.33				
Outside of Java Island	130	86.67				
Final sample by island	150	100,00				

Source: Data processed, 2020.

data because when compared to other provinces, especially during the observation period, the total assets of Jakarta reached an average of 56.33 % of the accumulated total assets of all provincial governments (not including North Kalimantan Province). In other words, the amount of assets of Jakarta is greater than the accumulation of total assets in 32 other provinces. Therefore, the final number of samples in this study were 150 observations (province-year) in 32 provinces in Indonesia.

To provide a description of the sample used, sample groupings were carried out based on 2010– 2014 observations and islands with 28–32 observations annually. Meanwhile, based on the island location of the province, it can be seen that as much as 86.67 % of the total sample or 130 observations (province-year) came from local government data outside Java, while only 13.33 % (20 observations-province-years) came from local government data in Java. Moreover, the formula used in this study are:

$$PERF_{it} = \beta_0 + \beta_1 OPINI_{it-1} + \beta_2 REV_{it} + \beta_3 OPER_{it} + \beta_4 ASSET_{it} + \beta_5 HDI_{it} + \beta_6 ISLAND_{it} + \varepsilon_{it}.$$
 (1)

$$REV_{it} = \alpha_0 + \alpha_1 OPINI_{it-1} + \alpha_2 ASSET_{it} + UDI = ICI + ND$$

$$+ \alpha_3 H D I_{it} + \alpha_3 I S L A I D_{it} + \varepsilon_{it}.$$

$$OPER_{it} = \alpha_0 + \alpha_1 OPINI_{it-1} + \alpha_2 A SSET_{it} +$$

$$(2)$$

$$+ \alpha_3 HDI_{it} + \alpha_3 ISLAND_{it} + \varepsilon_{it}.$$
 (3)

PERF as an endogenous variable in this study refers to the evaluation value of the accountability system in year t. This value shows the performance of the bureaucracy at the local level, and is proxied by the score from the SAKIP assessment. As stipulated in Minister of Administrative Reform and Bureaucratic Reform No. 20 of 2013 concerning Amendments to Annex Minister of Administrative Reform and Bureaucratic Reform No. 25 of 2012 concerning the Implementation Guidelines for Evaluating the Performance of Government Institutions Accountability. In the evaluation of SAKIP implementation, there are five components: performance planning, performance measurement, performance reporting, internal evaluation, performance achievement as the appraisal.

OPINION is the audit opinion set by the Audit Board of Indonesia based on the results of the examination of the previous year's Local Government Financial Reports (Laporan Keuangan Pemerintah Daerah/LKPD, henceforth cited as LKPD) (t - 1). It is categorically measured: "5" for Unqualified Opinion, "4" for Unqualified Opinions with Explanatory Paragraphs, "3" for Qualified Opinions, "2" for Adverse Opinions, and "1" for

Disclaimer Opinions. Determination of opinion by the Audit Board of Indonesia as stipulated in Law No. 15 of 2004 concerning Examination of Management and Responsibility of State Finance is based on the following criteria: (1) Compliance with Government Accounting Standards (SAP); (2) Adequacy of disclosures; (3) Compliance with laws and regulations, and (4) Effectiveness of the Government Internal Control System (SPIP).

REV (regional revenue) refers to the amount of regional own-source revenue, which is measured using two approaches, namely (i) ln *x* of the absolute value of total income in a year (*t*); and (ii) the ratio between the local income which is assessed with the percentage, compared to the total regional income year *t*. As stipulated in Government Regulation No. 71 of 2010 concerning Government Accounting Standards, which are included in the category of Regional Original Revenue for the Provincial Government are regional tax revenues, regional restitution, results of separated regional wealth management and other legitimate regional revenues.

OPER refers to the operational expenditure of local government. To measure this variable, two approaches are used: 1) $\ln x$ of the absolute value of operating expenditure in a year (*t*); (ii) the ratio between total expenditure and operating expenditure. As stipulated in Government Regulation No. 71 of 2010 concerning Government Accounting Standards, which are included in the Regional operating expenditure category for the Provincial Government are personnel expenditure, goods, interest, subsidies, grants and social assistance. Unlike the tangible capital expenditure component, the operating expenditure component is more intangible, so that its realisation has a higher discretion compared to the realisation of capital expenditure.

Finally, there are several control variables used in this study. First, ASSET which refers to the total assets owned by a local government tested in this study. This variable is measured by $\ln x$ from the absolute value of total assets of a local government in a year (*t*). Second, Human Development Index (HDI), which is assessed by the HDI score obtained by a local government in a certain year (*t*). Third, *ISLAND*, to determine the geographic location of a local government which is divided into 2 groups by the dummy indicator: "1" for provinces outside Java and "0" is another.

4. Results

The statistical output showed the descriptive statistics of variables used in this study. The analysis showed complete descriptive statistics of variables in this study which are presented in Table 2 and Table 3.

Table 2 describes the descriptive statistics for the overall sample, while Table 3 illustrates the comparison of descriptive statistics for the sample of provinces in Java (as many as 20 observations) and provinces outside Java (as many as 130 observations). For the overall sample, the mean performance of the provincial government in Indonesia during the observation period (2010–2014) was only 53.336 or in the sufficient category, with opinions which on average were in the qualified opinion category (mean of 3.266). This indicates that there is a positive relationship between audit opinion and the performance of the Provincial Government.

This indication is more consistent when compared between the sample of provinces in Java and outside Java as seen in Table 3. In the sample of provinces in Java, both the mean performance and the mean of opinions are higher than the sample of provinces outside Java, which based on the results of different tests using the *t*-test, the mean difference was significant at the 1 percent significance level. In addition, based on the *t*-test almost all the mean variables in this study (except P_OPER) had significant differences between the sample provinces in Java and outside Java. Therefore, the sample differences between provinces on the island of Java and outside the island of Java are controlled by the *ISLAND* variable, which is measured as previously explained (Table 2).

The statistical output showed that the operating expenditure percentage variable (P_OPER), all of these research variables are significantly correlated to the Regional government performance variable, as well as the audit opinion variable, are positively affect the regional own-source revenue variable both in absolute value (N_REV) and percentage (P_REV) and operating expenditure variables, specifically using absolute value measurements (N_OPER). This also indicates that regional own-source revenues and expenditure are influenced by audit opinion. In addition, *ISLAND*

Table 2

Sample Overall = 150 Observations (province-year)							
Information	Mean	Standard Deviation	Min	Max			
PERFORMANCE	53.336	10.733	23.01	76.36			
OPINION	3.266	1.133	1	5			
N_TREV [©]	4,627.67	4,242.05	593.39	22,310.95			
N_REV [©]	2,180.55	2,831.22	114.31	15,038.15			
P_REV	41.104	18.363	4.19	77.42			
N_EXP°	4,497.70	4,137.71	567.07	20,797.98			
N_OPER [©]	2,898.64	2,692.90	366.77	13,976.51			
P_OPER	65.281	10.046	40.11	84.37			
N_ASSET [®]	10,342.98	8,314.72	962.16	36,937.17			
HDI	71.664	3.586	56.75	77.37			
ISLAND	0.866	0.341	0	1			

Descriptive Statistics of Variables

Source: Data processed, 2020.

Comparison of the samples of provinces in Java & provinces outside Java

	Provincial Samples in Java 20 Observations							Difference in		
Information	(province-year)				Observations (province-year)				Mean	
	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max	t-stat	diff > 0
Performance	61.954	9.156	44.87	76.36	52.010	10.365	23.01	70.97	4.051***	0.000
Opinion	4.1	0.852	3	5	3.138	1.118	1	5	3.678***	0.000
N_TREV [©]	10,964.14	6,628.99	1,374.20	22,310.95	3,652.83	2,670.21	593.39	11,904.24	8.840***	0.000
N_REV^{\odot}	7,265.76	4,494.36	740.20	145,315.25	1,398.22	1,287.43	114.31	6,663.11	12.16***	0.000
P_REV	63.492	10.167	46.233	77.423	37.659	16.869	4.19	77.1	6.652***	0.000
N_EXP^{\odot}	10,625.07	6,383.84	1,354.59	20,797.98	3,555.03	2,656.35	567.07	13,780.24	8.724***	0.000
N_OPER [©]	6,649.80	4,274.58	1,013.76	13,976.51	2,321.54	1,779.77	366.77	8,437.52	7.974***	0.000
P_OPER	63.345	8.475	47.35	74.839	65.579	10.263	40.11	84.37	-0.926	0.822
N_ASSET^{\odot}	20,812.15	10,283.48	4,925.00	36,937.17	8,732.34	6,683.60	962.16	30,089.70	6.940***	0.000
HDI	73.173	2.617	68.14	77.37	71.432	3.666	56.75	77.36	2.041**	0.021

Source: Data processed, 2020.

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Table 3

Variable Correlation Analysis									
Variable	PERF	OPINI	P_REV	LnREV	P_OPER	Ln_OPER	Ln_ASSET	HDI	ISLAND
PERFORM	1.000								
OPINION	0.474^{***}	1.000							
OFINION	(0.000)								
P REV	0.454***	0.325***	1.000						
	(0.000)	(0.000)							
LnREV	0.603***	0.371***	0.806***	1.000					
	(0.000)	(0.000)	(0.000)						
P OPER	0.002	0.010	-0.413***	-0.309***	1.000				
	(0.977)	(0.897)	(0.000)	(0.000)	1.000				
LnOPER	0.411***	0.204^{**}	0.310***	0.778^{***}	0.066	1.000			
LIIOI LK	(0.000)	(0.012)	(0.000)	(0.000)	(0.420)	1.000			
LnASSET	0.389***	0.145^{*}	0.392***	0.803***	-0.224^{***}	0.877***	1.000		
LIIASSET	(0.000)	(0.076)	(0.000)	(0.000)	(0.005)	(0.000)	1.000		
HDI	0.198**	0.193**	0.289***	0.203**	-0.198**	-0.048	0.040	1.000	
1101	(0.015)	(0.017)	(0.000)	(0.012)	(0.014)	(0.558)	(0.625)		
ISLAND	-0.316***	-0.289***	-0.479***	-0.524^{***}	0.075	-0.434***	-0.401***	-0.1655**	1.000
	(0.000)	(0.000	(0.000)	(0.000)	(0.355)	(0.000)	(0.000)	(0.043)	1.000

Variable Correlation Analysis

Table 4

***, **, * = *P*-value significant at 1 %, 5 %, 10 %. Source: Data processed, 2020.

was also found to be negatively correlated with all variables except for the operating expenditure (P_OPER). This supports the results of the variable description analysis previously explained, that besides the percentage of operating expenditure, there were significant differences in all research variables, which more specifically result from correlation testing.

Further analysis was conducted to examine the hypothesis testing. In this study, H1 predicts that audit opinions positively influence the government performance, while H2 predicts that audit opinions positively affect the regional government performance. There is also a mediating influence of the achievement of the realisation of own-source revenue, while H3 predicts that audit opinions affect the performance of local government and mediated by achieving realisation of regional operating expenditure. The results of hypothesis testing are presented in Table 5.

The results showed the variation of 17.57 percent with sig. of 0.01. The output also posed that directly the audit opinion has a positive and significant effect on the performance of the provincial government with a coefficient of 3.066 at the significance level of 1 %. These results indicate that the data used in this study supports H1. In addition, the results of this direct test also show that regional own-source revenues and regional operating expenses each are significantly related with the performance of the provincial government with coefficients of 0.188 and 0.220.

Table 5

Variable	C :	Direct Influence	Indirect Effects				
variable	Sign	(PERF)	P_REV	P_OPER	PERF		
Intercept		-28.862 (0.148)	-73.590**** (0.007)	132.205*** (0.000)	-33.586 (0.617)		
OPINION	+	3.066*** (0.000)	2.674** (0.017)	0.677 (0.315)	-		
P_REV	+	0.188*** (0.002)	-	_	1.186*** (0.000)		
P_OPER	+/(-)	0.220** (0.013)	-	-	0.811 (0.200)		
Ln_ASSET	+	3.581*** (0.000)	5.333**** (0.000)	-2.938*** (0.000)	_		
HDI	+	0.236 (0.259)	1.011**** (0.003)	-0.586*** (0.004)	-0.425 (0.319)		
ISLAND	+	1.276 (0.647)	-16.328*** (0.000)	-0.983 (0.677)	18.136** (0.015)		
Number of Observation	150	150	150 150				
Prob. > <i>F</i> /chi2	0.000***	0.000***	0.000*** 0.000***				
Adj. R-Squared	_	33.24	6.90 –				
Wald Chi2	17.57	-	- 33.00				

Hypothesis Testing Results

***, **, * = *P*-value significant at 1 %, 5 %, 10 %. Source: Data processed, 2020. The testing showed the mediating effect of the realisation of own-source revenue in relationship between audit opinion and the performance (Table 4). This is similar to the results of previous tests by using direct effect analysis showing that realisation of revenue is significantly related on the performance of the provincial government with a coefficient of 1.186. This shows that the data used in this study supports H2, which means that every increase in audit by 1 point will cause an increase in regional own-source revenue realisation of 2.674 %, and when the realisation of regional own-source revenue increases by 1 %, it can improve the provincial government's performance by 1.186.

In addition to the audit opinion, assets and HDI are empirically proven to have a positive influence on regional own-source revenue. Meanwhile, the location of the province (*ISLAND*) has a negative effect on regional own-source revenue. This means that with the addition of assets of 1 % and HDI of 1 point, it can increase the regional own-source revenue by 5.333 % and 1.011 %, respectively. Meanwhile, among the 32 provinces which were the sample of the study, the regional own-source revenue of the provinces outside Java Island was lower by 16.328 % compared to the regional own-source source revenue of the provinces in Java.

5. Discussion

The development of public sector accounting in Indonesia was now propelled by stakeholder demands on bureaucratic performance, accountability and transparency, to pay close attention to tax revenues and expenditures with due regard to financial governance through positive auditing results. The findings support legitimacy theory as explained by Chae et al. (2020), and can provide additional empirical evidence related to the audit function in producing legitimacy. In addition, the results of this study can also provide a more complete explanation of the positive relationship between government performance and audit opinion and the positive effect of regional ownsource revenue realisation on the performance of local government as the results of research by Fakhimuddin (2018). The findings underlined that the audit opinion of the provincial government financial statements (LKPD) has been used by the community as a basis in giving its legitimacy to the provincial government. When the provincial government can guarantee that overall regional financial management and reporting has been done fairly, it can increase public trust in the government and cause an increase in the resources to be transferred by the community through payment of regional own-source revenue, which by increasing the realisation of regional own-source revenue, both in the form of percentages and in absolute value, can ultimately improve the performance achieved by the provincial government in Indonesia as a whole, as also presented by previous findings in developing countries (Power, 2003; Wardhani et al., 2017).

Testing of the mediating effect revealed an insignificant effect of audit opinion on the realisation of operating expenditure. Furthermore, operating expenditure has an insignificant effect on the performance of the provincial government. The findings showed the influence of audit opinion on the performance of the provincial government which is mediated by the realisation of regional own-source revenues and realisation of regional operating expenditures. It is also found that the island variable has a positive effect on performance, which can mean that the performance of the provincial government outside Java on average has a higher performance score compared to the performance score of the provincial government in Java.

6. Conclusion

The findings showed that the audit opinion directly has a positive and significant effect on the performance of the provincial government. Particularly, regional own-source revenues and regional operating expenses have a positive and significant influence on the performance. For the control variable, it is empirically proven that only assets have a positive and significant effect on the performance.

The findings also reveal that indirectly, audit opinion has a positive and significant effect on the realisation of regional own-source revenue. For the control variable, it is found that assets and HDI have a positive effect on the realisation of regional own-source revenue. The analysis also showed the comparison between provinces in Java and outside Java in terms of own-source revenue, demonstrating that regional own-source revenue of the provinces outside Java Island was lower by 16.328 % compared to the regional ownsource revenue of the provinces in Java.

Theoretically, the findings were in line with legitimacy theory on how local governments are more likely to use the previous year's audit opinion to enhance the performance of local governments both directly and indirectly through the realisation of regional own-source revenue as a mediation. However, regarding public choice theory, the results must be carefully interpreted as the effect of mediation on the realisation of spending on how audit opinions affect the performance of the provincial government depending on the measurements used. The important implication of the research is that the audit opinion on the previous year's LKPD and the achievement of the provincial government budget realisation should be given attention in order to improve the performance of the provincial government. Practically, the findings suggest that the improvement of the performance of the provincial government must begin with efforts to increase the quality of financial reporting which is characterised by the achievement of quality audit opinion (e.g. unqualified opinion). Thus, both the provincial government and local parliament must always strive to improve management and reporting quality regional finance and get a better audit opinion, because a better opinion can increase the legitimacy of the community towards the provincial government, so that it can improve the ability of the provincial government to collect regional own-source revenue and at the same time improve its performance.

References

Abd Aziz, M. A., Ab Rahman, H., Alam, M. M. & Said, J. (2015). Enhancement of the accountability of public sectors through integrity system, internal control system and leadership practices: A review study. *Procedia Economics and Finance, 28,* 163-169. DOI: https://doi.org/10.1016/S2212-5671(15)01096-5

Abdullah, M. I., Furqan, A. C., Yamin, N. Y. & Oktora, F. E. (2020). Incentive function of audit opinion for the increase of regional operational expenditure and own-source revenues through sensitivity analysis in Indonesia. *Research in World Economy* 11(1), 20-27. DOI: https://doi.org/10.5430/rwe.v11n1p20

Adhikari, P. & Gårseth-Nesbakk, L. (2016). Implementing public sector accruals in OECD member states: Major issues and challenges. *Accounting Forum*, *40*(2), 125-142. DOI: https://doi.org/10.1016/j.accfor.2016.02.001

Adiputra, I. M. P., Utama, S. & Rossieta, H. (2018). Transparency of local government in Indonesia. *Asian Journal of Accounting Research*, *3*(1), 123-138. DOI: https://doi.org/10.1108/AJAR-07-2018-0019

Afiah, N. N. & Azwari, P. C. (2015). The effect of the implementation of government internal control system (GICS) on the quality of financial reporting of the local government and its impact on the principles of good governance: A research in district, city, and provincial government in South Sumatera. *Procedia-Social and Behavioral Sciences, 211*, 811-818. DOI: https://doi.org/10.1016/j.sbspro.2015.11.172

Alcañiz, I. (2010). Bureaucratic networks and government spending: a network analysis of nuclear cooperation in Latin America. *Latin American Research Review*, 45(1), 148-172. DOI: https://doi.org/10.1353/lar.0.0128

Almqvist, R., Grossi, G., van Helden, J. & Reichard, C. (2013). Public sector governance and accountability. *Critical Perspectives on Accounting*, 24(7-8), 479-487. DOI: https://doi.org/10.1016/j.cpa.2012.11.005

Andrews, R. & Van de Walle, S. (2013). New public management and citizens' perceptions of local service efficiency, responsiveness, equity and effectiveness. *Public Management Review*, *15(5)*, 762-783. DOI: https://doi.org/10.1080/147 19037.2012.725757

Birskyte, L. (2019). Determinants of budget transparency in Lithuanian municipalities. *Public Performance & Management Review*, 42(3), 707-731. DOI: https://doi.org/10.1080/15309576.2018.1507915

Boyne, G. A. (1998). Public choice theory and local government. Macmillan, Basingstoke.

Chae, S. J., Nakano, M. & Fujitani, R. (2020). Financial reporting opacity, audit quality and crash risk: evidence from Japan. *The Journal of Asian Finance, Economics, and Business, 7(1),* 9-17.

Darmastuti, D. & Setyaningrum, D. (2019). The Effect of Discretionary Spending on Incumbent Victories in Elections. *Humanities & Social Sciences Reviews*, 7(4), 685-693. DOI: https://doi.org/10.18510/hssr.2019.7488

Fakhimuddin, M. (2018). Reconsidering Accounting Information Systems: Effective Formulations for Company's Internal Control. *Arthatama Journal of Business Management and Accounting*, 2(1), 26-34. Retrieved from: https://arthatamajournal.co.id/index.php/home/article/view/14/9 (Date of access: 16.01.2019)

Ferraz, C. & Finan, F. (2008). Exposing corrupt politicians: the effects of Brazil's publicly released audits on electoral outcomes. *The Quarterly Journal of Economics*, *123*(2), 703-745. DOI: https://doi.org/10.1162/qjec.2008.123.2.703

Furqan, A. C., Wardhani, R., Martani, D. & Setyaningrum, D. (2021). Financial reporting, public services and local executives' re-electability in Indonesia. *Cogent Business & Management*, *8*(1), 1939229.

Furqan, A. C., Wardhani, R., Martani, D. & Setyaningrum, D. (2020). The effect of audit findings and audit recommendation follow-up on the financial report and public service quality in Indonesia. *International Journal of Public Sector Management*, *33*(*5*), 535-559. DOI: https://doi.org/10.1108/IJPSM-06-2019-0173

Gabrini, C. J. (2013). *The effect of internal audit on governance: Maintaining legitimacy of local government.* Dissertation. The Florida State University. Retrieved from: https://diginole.lib.fsu.edu/islandora/object/fsu:183720/data-stream/PDF/view (Date of access: 16.09.2018)

Giroux, G. & Shields, D. (1993). Accounting controls and bureaucratic strategies in municipal government. *Journal of Accounting and Public Policy*, *12*(3), 239-262. DOI: https://doi.org/10.1016/0278-4254(93)90029-B

Gray, R., Kouhy, R. & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal, 8(2),* 47-77. DOI: https://doi. org/10.1108/09513579206376147

Grossi, G. & Steccolini, I. (2014). Guest editorial: Accounting for public governance. *Qualitative Research in Accounting & Management, 11(2), 86-91. DOI: https://doi.org/10.1108/QRAM-04-2014-0031*

Gutomo, K. (2015). *Berburu Opini WTP [Hunting for Unqualified Opinion]*. Jakarta: Financial and Development Supervisory Agency. Retrieved from: http://www.bpkp.go.id/%20jateng/konten/1910/berburu-opini-wtp.bpkp (In Ind.)

Harun, H., Mir, M., Carter, D. & An, Y. (2019). Examining the unintended outcomes of NPM reforms in Indonesia. *Public Money & Management, 39(2),* 86-94. DOI: https://doi.org/10.1080/09540962.2019.1580892

Jahid, M. A., Rashid, M. H. U., Hossain, S. Z., Haryono, S. & Jatmiko, B. (2020). Impact of Corporate Governance Mechanisms on Corporate Social Responsibility Disclosure of Publicly-Listed Banks in Bangladesh. *The Journal of Asian Finance, Economics, and Business*, 7(6), 61-71.

Lane, J. E. (Ed.). (1987). Bureaucracy and public choice. London: Sage.

Mariyam, S. & Setiyowati, S. (2021). Legality of Artificial Intelligence (AI) Technology in Public Service Transformation: Possibilities and Challenges. *Lex Publica*, *8*(2), 75-88. DOI: https://doi.org/10.58829/lp.8.2.2021.75-88

Masdar, R., Furqan, A. C., Masruddin, M. & Meldawaty, L. (2021). The role of transparency and professional assistance in regional financial management in the Indonesian regional governments. *Journal of Public Affairs*, *21*(3), e2666. DOI: https://doi.org/10.1002/pa.2666

Muhammad, R., Mediaty, Indirijawati, A. & Suleman, S. H. (2017). The effect of information content of the welfare of on incumbents' reelection. *The Business & Management Review*, *9*(2), 130-135. Retrieved from: https://cberuk.com/cdn/ conference proceedings/conference 72534.pdf

Piano, E. E. (2019). State capacity and public choice: a critical survey. *Public Choice*, *178(1)*, 289-309. DOI: https://doi.org/10.1007/s11127-018-00631-x

Pierre, J., Peters, B. G. & de Fine Licht, J. (2018). Is auditing the new evaluation? Can it be? Should it be? *International Journal of Public Sector Management*, *31(6)*, 726-739. DOI: https://doi.org/10.1108/IJPSM-08-2017-0219

Power, M. K. (2003). Auditing and the production of legitimacy. *Accounting, organizations and society, 28(4),* 379-394. DOI: https://doi.org/10.1016/S0361-3682(01)00047-2

Rakhman, F. (2019). Budget implementation in a risky environment: evidence from the Indonesian public sector. *Asian Review of Accounting*, *27*(*2*), 162-176. DOI: https://doi.org/10.1108/ARA-01-2018-0020

Rodrigues, M., Tavares, A. F. & Araújo, J. F. (2012). Municipal service delivery: The role of transaction costs in the choice between alternative governance mechanisms. *Local Government Studies*, *38(5)*, 615-638. DOI: https://doi.org/10. 1080/03003930.2012.666211

Schneider, M. & Damanpour, F. (2002). Public choice economics and public pension plan funding: An empirical test. *Administration & Society, 34(1),* 57-86. DOI: https://doi.org/10.1177/0095399702034001005

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review, 20(3), 571-610. DOI: https://doi.org/10.5465/amr.1995.9508080331*

Tat-Kei Ho, A. (2002). Reinventing local governments and the e-government initiative. *Public administration review, 62(4),* 434-444. DOI: https://doi.org/10.1111/0033-3352.00197

Wardhani, R., Rossieta, H. & Martani, D. (2017). Good governance and the impact of government spending on performance of local government in Indonesia. *International Journal of Public Sector Performance Management*, *3(1)*, 77-102. DOI: https://doi.org/10.1504/IJPSPM.2017.082503

Yuliati, R., Raharjo, S. S. & Siswantoro, D. (2017). Accountability and Incumbent Re-election in Indonesian Local Government. *International Research Journal of Business Studies*, *9*(*3*), 157-168. DOI: https://doi.org/10.21632/ir-jbs.9.3.157-168.

About the authors

Abdul Kahar — Senior Lecturer in Accounting, Faculty of Economics and Business, Tadulako University; https://orcid.org/0000-0002-4236-8845 (9, Soekarno-Hatta St., Palu, Central Sulawesi, 94148, Indonesia).

Andi Chairil Furqan — Lecturer in Accounting, Faculty of Economics and Business, Tadulako University; https://orcid.org/0000-0001-8382-8695 (9, Soekarno-Hatta St., Palu, Central Sulawesi, 94148, Indonesia; e-mail: furqan.tadulako@ gmail.com).

Tenripada Tenripada — Lecturer in Accounting, Faculty of Economics and Business, Tadulako University; https://orcid.org/0000-0002-2485-5359 (9, Soekarno-Hatta St., Palu, Central Sulawesi, 94148, Indonesia).

Информация об авторах

Кахар Абдул — старший преподаватель, факультет экономики и бизнеса, Университет Тадулако; https://orcid. org/0000-0002-4236-8845 (Индонезия, 94148, Сулавеси, г. Палу, ул. Сукарно-Хатта, 9).

Фуркан Анди Чайрил — преподаватель, факультет экономики и бизнеса, Университет Тадулако; https://orcid. org/0000-0001-8382-8695 (Индонезия, 94148, Сулавеси, г. Палу, ул. Сукарно-Хатта, 9; e-mail: furqan.tadulako@gmail. com).

Тенрипада Тенрипада — преподаватель, факультет экономики и бизнеса Университета Тадулако; https://orcid. org/0000-0002-2485-5359 (Индонезия, 94148, Сулавеси, г. Палу, ул. Сукарно-Хатта, 9).

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