Determinants of Local Government Accountability:
Evidence from Central Java Province, Indonesia

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ABSTRACT

This research aims to examine the factors that determine local government accountability as a dependent variable measured by the audit opinion of the financial statements. Specifically, the focus of this research was based on a local government located in Central Java, Indonesia, where the determinants include several variables, such as management control systems, economic growth, local government size, complexity, fiscal decentralization, human development index, and the population. Meanwhile, 138 financial statements were used in this research, which were provided by the local governments in Central Java province during the 2015-2018 observation. Regression is used to test the effect of determinant variables on local government accountability and the result of the statistical test shows that local government size, economic growth, and fiscal decentralization have a significant effect on local government accountability. While the total assets and economic growth have a positive effect on accountability, fiscal decentralization has a negative effect. Management control systems, human development index, and complexity, on the other hand, have no significant effect on accountability. Therefore, this research concludes that it is important to consider these determinant variables for local government accountability.

Keywords: local government, accountability, local own revenue, fiscal decentralization, complexity.

1. INTRODUCTION

This research examines the factors that affect local government accountability. Specifically, this study examines the financial and non-financial factors that affect the accountability of level II local governments in the Central Java Province in Indonesia. The local government accountability receives a lot of attention from the government through the Performance Accountability System for Government Agencies entrenched in the Presidential Regulation of Indonesia No.29/2014. Over time, the government has continued to encourage agencies and local governments to increase accountability in financial management as this would assist to achieve their goals.

Kluvers (2003) examined accountability in government agencies in Victoria in Australia by using a questionnaire to determine the perceptions of supervisors and managers on accountability and performance. In general, the results show that the supervisors and managers are aware of the importance of accountability in achieving better performance. Devas and Grant (2003) also emphasized the importance of a community in maintaining local government accountability. This therefore suggests that the complexity and size of a community can affect accountability.

This accountability is closely related to decentralization, a process that allows the central government hand over some regional management matters to the local governments. Therefore, local governments have both the authority and the obligation to implement decentralization. Yilmaz, Beris, and Serrano-Berthet (2010) and Yilmaz and Venugopal (2013) revealed the close relationship between decentralization and accountability while Lele (2019) and Saputra and Setiawan (2021) showed the importance of accountability in the context of decentralization in Indonesia.

Accountability is necessary for the implementation of government management processes. For this reason, this research examines the factors that influence local government accountability. The variables to be tested include management control systems, economic growth, local government size, complexity, fiscal decentralization, human development index, and

population. On that note, the question of this research is whether the internal control system, economic growth, local government size, complexity, fiscal decentralization, human development index, and population size affect local government accountability.

1.1. Weaknesses of the Internal Control System and Local Government Accountability

Accountability, in this context, is defined as taking responsibility for public fund management (Hendratmi, 2017). One form of local government accountability involves using a financial reporting mechanism to create financial statements. It can then be concluded that the quality of the financial statements is one of the benchmarks for determining the level of local government accountability. One way to determine that quality is to get the audit opinion of the Supreme Audit Agency (BPK).

One of the criteria needed to determine the Supreme Audit Agency's audit opinion on local government financial statements is the internal control system. If the internal control system is weak, the local government will be unable to supervise effectively, and this would affect the Supreme Audit Agency's audit opinion. A research conducted by Hamidayanti and Wardani (2019) showed that the weaknesses of the internal control system have a negative effect on local government accountability as proxied by audit opinion.

H1: Internal Control System Weakness Affects Local Government Accountability.

1.2. Human Development Index and Local Government Accountability

The community has an important role to play in the supervisory function of a government's administration. When a well-developed community performs their supervisory functions, better local government accountability is built (Wahyudin et al, 2018). One of the indicators used to measure the level of a community's development is the human development index (HDI). Broadly speaking, this index consists of three main dimensions: the level of education, health, and income.

Wahyudin et al (2018) described the effect of the human development index on local government accountability and the results show that the human development index affects local government accountability positively.

H2: Human Development Index Affects Local Government Accountability.

1.3. Population and Local Government Accountability

Communities also play an important role in creating transparency and accountability. Regions with a large population are typically pressured by the community to make a full disclosure (Utami and Sulardi, 2019). If a significant percentage of the population participates in supervising the implementation of local government accountability policies, better accountability will be created. Utami and Sulardi (2019), Princess (2015), and Hendriyani and Tahar (2015) showed that population has a positive effect on the disclosure of local government financial statements and since full disclosure is a form of transparency and accountability, it can be concluded that population is a factor in determining transparency and accountability.

H3: Population Affects Local Government Accountability

1.4. Local Government Size and Local Government Accountability

A large local government will be more pressured to make full disclosure to prove their transparency and accountability (Setyaningrum and Syafitri, 2012). They also tend to have better internal control functions (Nuraeni, 2014) which helps them create better accountability. The results showed that the size of the local government has a positive effect on accountability as proxied by the Supreme Audit Agency's audit opinion on financial statements (Pratiwi and Aryani, 2016)

H4: Local Government Size Affects Local Government Accountability

2. RESEARCH METHOD

The population in this research comprises of all the district and city governments in Central Java Province. Purposive sampling was used to determine the sample used. Furthermore, the sample is 138 district and city government observations conducted between 2015 to 2020. Secondary data obtained from the Regional Government Financial Reports (LKPD) and the Central Statistics Agency (BPS) is also used.

The dependent variable is the local government's accountability which is represented by the audit opinion issued by the Financial Supervisory Agency (BPK). The independent variables include the weaknesses of the internal control system, the human development index, the population, and the size of the local government. This research also uses control variables, such as economic growth, local government complexity, and fiscal decentralization (local government independence ratio).

The operational definitions of the dependent, independent, and control variables used in this research are described in the following table:

Table 1. Variable Operation

Variable	Description	Measurement	Data Source	Reference Journal
Dependent Variable				
APD	Local Government Accountability	Audit Opinion, dummy variable. Value 1 if obtain an Unqualified opinion, and 0 if obtain an opinion other than Unqualified Opinion.	Local Government Financial Statement (LKPD)	Fontanella Rossieta (201
Independent Variable				
ICW t-1	Weaknesses of Internal Control System	The number of Internal Control System Weaknesses in the previous year.	Semester Examination Results Summary (IHPS) - Supreme Audit Agency Indonesia	Putri Mahmud (20 Rachmawati (2016)
IPM	Human Development Index	Human Development Index Value.	Central Statistics Agency (BPS)	Wahyudin e (2018)
TP	Total population	LN of the total population.	Central Statistics Agency (BPS)	(Utami Sulardi, 2019)
ASSET	Local Government Size	LN of total assets.	Local Government Financial Statements (LKPD)	Setyaningrum and Sy (2012); Putri Mahmud (201
Control Variable				
EC t-1	Economic growth	The value of the previous year's economic growth.	Central Statistics Agency (BPS)	Muhtar et (2017)
COMPLEX	Complexity	Number of Regional Government Work Units (SKPD).	Local Government Financial Statements (LKPD)	Putri Mahmud (201
FD	Fiscal Decentralization	$DF = \dfrac{Locally - generated\ revenue}{Total\ revenue}$	Local Government Financial Statements (LKPD)	Fontanella Rossieta (201

2.1. Data Analysis

The analysis used to test the hypothesis is logistic regression. The regression models in this research are:

$$LN\left(\frac{\widehat{P}}{1-\widehat{P}}\right) = \beta_0 + \beta_1 ICWt - 1 + \beta_2 IPM + \beta_3 TP$$
$$+ \beta_4 ASSET + \beta_5 ECt - 1$$
$$+ \beta_6 COMPLEX + \beta_7 FD$$
$$+ e \qquad (1)$$

3. RESULTS AND DISCUSSION

Table 2. Descriptive Statistics

	ICW t-1	IPM	TP	ASSET	EC t-1	COMPLEX	FD
Mean	11.46	70.94	13.67	28.84	5.04	70.68	0.17
Median	10.00	70.06	13.76	28.74	4.95	54.00	0.15
Maximum	66.00	82.72	14.50	31.06	5.98	261.00	0.45
Minimum	3.00	63.18	11.70	28.11	4.33	26.00	0.09
Std. Dev.	6.74	4.53	0.61	0.50	0.36	42.23	0.06
Skewness	4.24	0.84	-1.58	2.30	0.87	2.14	2.05
Kurtosis	32.55	3.18	5.34	10.62	3.35	7.16	8.36
Observations	138.00	138.00	138.00	138.00	138.00	138.00	138.00

Based on the results of the Dependent Variable Frequencies analysis, there are 25 samples of district and city governments without WTP opinions while there are 113 districts and city governments that received WTP opinions during the 2015 to 2018 observation period.

Table 3. Logistics Regression Results

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-30.75	10.23	-3.00	0.00
ICW t-1	0.04	0.03	1.18	0.24
IPM	-0.07	0.09	-0.84	0.40
TP	-0.61	0.42	-1.47	0.14
ASSET	1.32	0.53	2.50	0.01
EC t-1	1.60	0.76	2.10	0.04
COMPLEX	0.00	0.00	0.35	0.73
FD	-7.97	3.66	-2.18	0.03
McFadden R-squared	0.15	Mean dependent var		0.82
S.D. dependent var	0.39	S.E. of regression		0.36
Akaike info criterion	0.92	Sum squared resid		16.85
Schwarz criterion	1.09	Log likelihood		-55.42
Hannan-Quinn criter.	0.99	Deviance		110.85
Restr. deviance	130.59	Restr. log likelihood		-65.29
LR statistic	19.74	Avg. log likelihood		-0.40
Prob (LR statistic)	0.01			
Obs with Dep=0	25.00	Total obs		138.00
Obs with Dep=1	113.00			

3.1. Descriptive statistics

Table 4. Dependent Variable Frequencies

Dep. Value	Count	Percent	Cumulative Count	Cumulative Percent
0.00	25.00	18.12	25.00	18.12
1.00	113.00	81.88	138.00	100.00
Description: 1 = WTP; 0 = Apart from WTP				

3.2. Hosmer and Lemeshow Test

Hosmer and Lemeshow is a Goodness of Fit test (GoF) that is used to determine the correctness of the model. It is appropriate only if there is no significant difference between the model and the observed value.

Table 5. Hosmer and Lemeshow Test

H-L Statistic	10.725	Prob. Chi-Sq (8)	0.218
Andrews Statistic	31.899	Prob. Chi-Sq (10)	0.000

The significant value of the Hosmer and Lemeshow Test is 0.218 (> 0.05), therefore it rejects H1. This indicates that the model can be accepted, and the hypothesis can be tested because there is no significant difference between the model and the observed values.

3.3. Overall Model Test (Overall Model Fit Test)

This test value can be seen on the LR Statistics item or the p-value on the Prob item (LR statistic). Furthermore, the p-value of 0.006158 is smaller than the test significance level of 0.05, with a 95% confidence level. Therefore, it can be concluded that the hypothesized model fits the data.

3.4. Coefficient of Determination

The R-squared value in this model is 0.151167, meaning that 15.12% of the variation in local government accountability can be explained by variables in the model, while the remaining 84.88% can be explained by others outside the research model.

3.5. Partial Test

Based on Table 3, the independent variable that affects accountability is the local government size variable (ASSET), while the internal control system weakness variable (ICW t-1), human development index (IPM), and population (TP) have no effect. This is known from the probability value of the local government size variable (ASSET) which is less than 0.05, while the other three independent variables show a probability value of more than 0.05. The following Table 6 is a summary of hypothesis testing:

Table 6. Summary of Hypothesis

Hypothesis	Variable	Result
Hypothesis 1	ICW t-1	Rejected
Hypothesis 2	IPM	Rejected
Hypothesis 3	TP	Rejected
Hypothesis 4	ASSET	Accepted

The results on the control variables show that regional economic growth (EC t-1) and fiscal decentralization (FD) affect local government accountability, while complexity has no effects. Furthermore, the weakness of the internal control system does not affect the local government accountability. These results do not support the conclusions Hamidayanti and Wardani (2019) made in their study.

The human development index show no effect, which contradicts the findings of Utami and Sulardi (2019), Princess (2015), and Hendriyani and Tahar (2019). (2015). In line with the human development index, the population also shows no effect on local government accountability. This is consistent with the findings of Akbar and Djazuli's study (2015) but it contradicts Pratiwi and Aryani's findings (2016).

Based on the results of the human development index and population, it is concluded that the level of participation and public awareness of local government accountability is still low. This produces a lack of encouragement and pressure on the local government regarding the implementation of better accountability. Furthermore, the local government size has an effect on the local government accountability. This is in line with Pratiwi and Aryani (2016) which showed that large local governments tend to have a better internal control systems and adequate resources to encourage the creation of better local government accountability.

4. CONCLUSION

This research examines the factors that affect local government accountability by using a sample of district and city governments in Central Java. The results of the hypothesis show that the variables of internal control system weakness, human development index, and population do not affect the local government accountability. However, the variable of local government size affects local government accountability, which means the fourth hypothesis (H4) is accepted. The limitation faced was a limited access to financial statements as many district and city governments do not publish the statements on their websites.

For further research, the effect of the human development index, as determined by its three main dimensions (the level of education, health, and income), should be tested. This would reveal which dimensions of the human development index affect local government accountability.

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