

**IMPLEMENTATION OF ACCRUAL POLICY, INTERNAL CONTROL SYSTEM  
AND PUBLIC SERVICE INDEX IN CONTROLLING GOVERNMENT FINANCIAL  
MANAGEMENT**

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**ABSTRACT**

The development of the application of accrual accounting has become a global trend but is still not fully embraced by the Indonesian government. The implementation of accrual accounting in government raises many problems. This research is quantitative using the influence test method. The population is the Indonesian government and the sample uses Indonesian regional governments. The aim of this research is to examine whether accrual policies and the maturity of the internal control system and public service index can influence the efficiency of regional government financial control. The results of this research indicate that partially the discretionary accrual variables, both the Jones model approach and the modified Jones model approach, have an effect on the efficiency of local government financial management. Apart from that, the public service index variable also influences the efficiency of local government financial management. Meanwhile, the internal control system maturity variable has no effect on the efficiency of regional government financial control. Simultaneously, the variable discretionary accruals of the Jones model, discretionary accruals of the modified model, and the maturity of the government's internal control system influence the efficiency of financial management. So, to increase the efficiency of financial management, local governments can increase the application of discretionary accruals and pay attention to public services.

**Keywords:** Maturity; Control; Discretion; Accruals; Efficiency

**INTRODUCTION**

The development of the application of cash-based accounting towards accrual-based accounting in the government environment has become a global trend (Mattisson 2004). At the international level, there is the International Public Sector Accounting Standard (IPSAS). IPSAS is a public sector accounting standard adopted by countries in the world today. The Indonesian government has attempted to harmonize IPSAS into Government Accounting Standards (Boolaky, Mirosea, and Omoteso 2020). Government Accounting Standards are used as guidelines in carrying out recording or accounting within the central government and regional governments. Government financial reports are presented based on government

accounting standards (SAP). Accounting policies contain various policies related to the presentation of financial reports. One of the policies regulated is regarding the accrual system. There are two methods for accounting recording systems, namely cash basis and accrual basis (Warren, Reeve, and Duchac 2018). Cash basis recording applies recording based on cash received and cash disbursed (Larson, Sloan, and Zha Giedt 2017). Accrual basis recording applies recording based on economic events that occur (Sutaryo et al. 2022). Implementation of accrual-based accounting in government must be carried out in local governments (Nurdiono and Gamayuni 2018). The accrual content in a report has tiered levels starting from the first level of Mild Accrual, the second level of moderate accrual, the third level of strong accrual, the fourth level of super accrual and the fifth level called radical accrual (Mattisson 2004). Recording transactions during one period provides an overview of the organization's economic activities during that period (Cancellaro 2008). The recorded value resulting from both cash and accrual methods has the potential to be different.

Regional government transactions are increasingly complex and require various appropriate treatments. Accounting for increasingly large and complex government transactions is very important to achieve accountability goals, financial information must be relevant and reliable for users who have sufficient information (Hafseld, Hussein, and Rauzy 2021). Accounting treatment of various government transactions is outlined in accounting policies. The more complex the transaction, the more policies will be needed to regulate it. The more policies that are issued, the more they will come into contact with accounting methods or ways of resolving the problem of handling regional government transactions. In this way, it is possible that the amount of accrual policy content related to various transactions reflected in the account will also be greater.

Accrual transactions can generate greater income, because they provide a more accurate and complete picture of the company's financial performance as well as a better understanding of the overall financial position (James and Ohlson 2014). Likewise, expenses that have not been paid in cash with cash are recorded as debt. This results in greater burdens and obligations. This has the impact that at the end of the period the remainder of the budget calculation will be larger or smaller. The level of accrual that occurs in regional governments turns out to be different. The accrual policy influences the achievement of the remaining balance or budget calculation deficiencies (Rohman, Daud, and Hakiki 2020). Or in other words, this situation has an impact on regional income and regional expenditure which is not real. This has the potential for irregularities to occur when managing accounting numbers. This situation shows that there are variations in the level of accrual content in local governments (Pina, Torres, and Yetano 2009).

The internal control system is always updated to obtain a better system that is able to minimize various forms of fraud. A mature and effective internal control system is essential for any government agency to ensure proper safeguarding of public funds. Internal controls have the invaluable function of ensuring that government funds are managed and spent appropriately, in accordance with clear budget directions from the governing board. The more mature a government's internal control system is, the better it will be at preventing fraud and abuse, reducing the possibility of errors and waste, and ensuring reliable financial reporting, compliance with laws, regulations, and policies, as well as economical, effective, and efficient operations (OECD 2017). Research on discretionary accruals in relation to

government financial efficiency in local government environments, both provincial, district and city, is still very rare, especially in Indonesia. Researchers want to examine whether discretionary accruals, accrual levels, and maturity of the internal control system have an influence on local government management efforts to exercise control over regional income and expenditure.

## LITERATURE REVIEW

Cash accounting is undoubtedly a useful tool for recording, and reporting, how well a public sector entity is able to match its expenditure with cash inflows over a given period (Eulner and Waldbauer 2022). However, we use accruals in this research as an independent variable because of the importance of accruals in government today. Our research measures management of accounting numbers with several variables contained in several equations that have been found by previous researchers. So that we can measure management accounting numbers, it is necessary to distinguish variables. First, accruals from the normal activities of an entity (called expected accruals ). These accruals result from local government management activities that are not distorted by accounting number management practices. Second, accruals from accounting number management practices (called abnormal accruals) (Mohammed 2022). Abnormal accruals (ABNACCR) are accrual values in which there are discretionary accrual practices of local government management. Because abnormal accruals are variable *unobserve*, we calculate it using the abnormal accrual formula which is the difference between total accruals (ACCR) and expected accruals (EXPACCR) which is notated as follows:

$$ABNACCR_{jt} = ACCR_{jt} - EXPACCR_{jt}$$

or

$$EXPACCR_{jt} = ACCR_{jt} - ABNACCR_{jt} \quad \text{Equality ..... (1)}$$

Where:

ABNACCR = Abnormal accrual

ACCR = total accruals (ACCR),

(EXPACCR) = expected accrual

j = denotes observation entity j

t = year t

Total accruals can be measured using items on the balance sheet or items on the cash flow statement. The equation above uses balance sheet data. This has weaknesses as stated by previous researchers, namely Hribar and Collins. Hribar and Collins found that the frequency and magnitude of errors were caused by using accrual-based balance sheet data to calculate accrual values, so they suggested using accruals taken or using data in other financial reports, namely cash flow reports (Hribar and Collins 2002).

Therefore, we measure the total accruals from the cash flow statement as follows:

$$ACCR_{jt} = -TWO + COFO_{jt}$$

or

$$ACCR_{jt} = COFO_{jt} - Dy_{jt} \quad \text{Equality ..... (2)}$$

Where;

BOTH = Surplus (Deficit) for regional government j in year t

COFO<sub>jt</sub> = net cash outflow from operating activities of regional government j in year t.

Expected accrual (EXPACCR) is an estimate of accrual that uses variance *cross-sectional* from the Jones model and the modified Jones model (Bora 2023). This model has been widely used and tested for the private sector (Quy and Nhan 2017). From the private sector, they have also been used by Leone and Van Horn to detect management accounting numbers in US non-profit hospitals (Leone, A.J.; Van Horn 2005) using the following equation:

$$\frac{ACCR_{jt}}{TA_{jt-1}} = \frac{1}{TA_{jt-1}} + \beta_1 \left( \frac{REV_{jt}}{TA_{jt-1}} \right) + \beta_2 \left( \frac{PPE}{TA_{jt-1}} \right) + B_{jt} \text{ or}$$

$$B_{jt} = \frac{ACCR_{jt}}{TA_{jt-1}} - \left[ \frac{1}{TA_{jt-1}} + \beta_1 \left( \frac{REV_{jt}}{TA_{jt-1}} \right) + \beta_2 \left( \frac{PPE}{TA_{jt-1}} \right) \right] \quad \text{Equality ..... (3)}$$

Where,

$B_{jt}$  = Level Discretionary accruals at agency j year t

$ACCR_{jt}$  = Total accruals for local government j in year t

$REV_{jt}$  = Change in income from local government services j in year t,

$PPE$  = Gross tangible fixed assets for local government j in year t, and

$TA_{jt-1}$  = Total assets for local government j in year t

$REV_{jt}$  is used as a control for the normal level of accrual working capital related to revenue from services, and  $PPE$  is a control variable for the normal level of amortization and accrual depreciation expense. This is in line or consistent with previous literature, and to reduce estimation problems, all variables are scaled by *make the asset*.

We also estimate expected accruals using a modified Jones model (Costa and Soares 2022). This model is a control model for earnings management due to abnormal increases in income, with the assumption that all changes in local government services that are credit or payable (thus giving rise to receivables for the local government) are due to this earnings management (accounting figures). The equation used as a modified form of the Jones equation is as follows:

$$\frac{ACCR_{jt}}{TA_{jt-1}} = \beta_0 \left( \frac{1}{TA_{jt-1}} \right) + \beta_1 \left( \frac{REV_{jt}}{TA_{jt-1}} - \frac{AR_{jt}}{TA_{jt-1}} \right) + \beta_2 \left( \frac{PPE}{TA_{jt-1}} \right) + B_{jt} \text{ or}$$

$$B_{jt} = \frac{ACCR_{jt}}{TA_{jt-1}} - \left[ \beta_0 \left( \frac{1}{TA_{jt-1}} \right) + \beta_1 \left( \frac{REV_{jt}}{TA_{jt-1}} - \frac{AR_{jt}}{TA_{jt-1}} \right) + \beta_2 \left( \frac{PPE}{TA_{jt-1}} \right) \right] \quad \text{Equality ..... (4)}$$

Where;

$AR_{jt}$  = Change in receivables (debtors) for regional government j in year t.

The expected accruals of each local entity are obtained from the estimation model (equations [3] and [4]). Finally, abnormal accruals ( $ABACCR_{jt}$ ) are calculated as in equation [1]. Abnormal accruals are positive (implying local government management uses a discretionary accrual strategy) which causes income to increase, while abnormal accruals are negative (implying local government management uses a discretionary accrual strategy) which causes income to decrease. To test earnings management, regardless of whether the local entity follows a strategy of increasing earnings or decreasing earnings, we use absolute abnormal accruals (Takahashi and Feng 2019).

The maturity of the government's internal control system is the level of improvement in the government's internal control system in achieving control objectives, including effective and efficient activities, increasing the reliability of financial reporting, securing the management of state assets, and compliance with regulations (BPKP 2016). The maturity

measure of the government's internal control system can be categorized into several levels, namely Level 0 (None) with a score  $<1$ , Level 1 (Initial) with a score between 1 and  $<2$ , Level 2 (Developed) with a score from 2 to  $<3$ , Level 3 (Determined) with scores from 3 to  $<4$ , Level 4 (Managed and Measured) with scores between 4 and  $<4.5$ , and Level 5 (Optimal) with scores between 4.5 and 5 (Rahmasari and Setiawan 2022). Therefore, organizations with lower (higher) internal control maturity are less (more) likely to achieve their goals. Local governments that have realized that their plans can succeed in achieving their organizational goals and exhibit a better show of accountability.

The public service index is an index number produced which is a composite of various data, both primary and secondary data as well as objective and perception data. The public service index uses nominal values with a range of 0.1 (failed), 1.01 -1.50 (very poor), 1.51 – 2 (poor), 2.01 – 2.50 (fairly DC), 2, 51 – 3 (fair), 3.01 – 3.50 (good DC), 3.51 – 4.00 (good), 4.01 – 4.50 (good), 4.01 – 4.50 (Very Good and 4.51 – 5.0 ) (Excellent Service) (Kemenpan RB 2017) .

The research design used is an influence test relationship between the independent variable and the dependent variable. The independent variables used are the maturity of the government's internal control system, the public service index and discretionary accruals with the Jones model and discretionary accruals with the modified model. Meanwhile, the dependent variable is the efficiency of local government financial management.

The dependent variable used in this research is government financial efficiency. Regional budget management efficiency is a comparison that shows how much efficiency the implementation of an activity/project has by comparing output and input. The efficiency formula that will be discussed is the ratio of realized expenditure (spending) as regional input to total regional income as output (Hariani and Febriyastuti 2020). The regional efficiency ratio is a comparison between the amount of costs incurred to obtain income and the actual income received (Sartika 2019). Based on what Sartika said, it can be concluded that government performance is said to be efficient if the ratio is less than 100%, in other words the smaller the percentage, the more efficient it will be. The Efficiency Ratio can also be said to be a comparison between the costs incurred (input) and the realized income received (Output) (Narb'on-Perpi~n'a and Witte 2018). Regional Financial Efficiency Ratio criteria are also taken from Minister of Home Affairs Decree No. 690,900,327 of 1996 concerning Guidelines for Financial Performance Assessment. The following is table 2. which describes the criteria for the Regional Financial Efficiency Ratio. Rating Range less than 60% (very efficient), 60% – 80% (Efficient), 80% – 90% (Quite Efficient), 90% – 100% (Less efficient), 100% and above (inefficient). The relationship between the independent variable and the dependent variable can be seen in the graph produced by Smartpls (Figure 1).

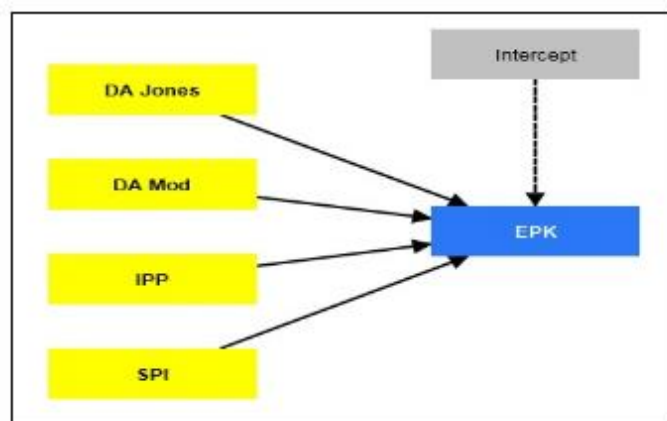


Figure 1. Research Design

## METHOD

This research uses quantitative methods. The data analysis technique uses testing the influence of multiple regression equations which are composed of the existing independent and dependent variables. Data was obtained from official sources, the Ministry of Finance of the Republic of Indonesia and various other sources. Data was collected and summarized using a spreadsheet and processed using the Smart PLS version 4 tool.

The data used is secondary data. The data collected comes from budget report data, regional government financial reports, Performance Reports and regional government LAKIP. Budget reports include budget realization reports and changes reports. Excess budget remaining. (LP-SAL). The financial reports used include balance sheets, changes in equity reports, operational reports and cash flow reports. This research has an Indonesian government population. The samples taken were regional governments in the Republic of Indonesia. There are 542 regional governments consisting of 38 provincial governments, 406 district governments and 98 city governments. After examining the completeness of the data, the population was left with 309 regional governments that could be processed. This is because not all regional governments have complete data.

The variables used in this research are the independent variables accrual level, discretionary accruals, system maturity and one dependent variable, namely local government financial efficiency. The independent variable uses a nominal scale unit of measurement, as well as the dependent variable also uses a nominal scale type of measurement unit.

The operational independent variables that we use come from several previous research equations, namely using two models, including the Jones model and modified Jones. We use existing variables in the model. Among the operational variables that we use in this research include total accruals (ACCR), total accruals are the value of the difference between the net cash flow from regional government operational activities in a certain year period and the surplus or deficit (Chouaibi, Harres, and Ben Brahim 2018). Net Cash Flow Operation (COFO) is the net cash value of cash flows from certain regional government operational activities and in a certain year (Vinet and Zhedanov 2014). Remaining More (less) (Dy) is the difference between income and expenses on local government. Accrual level is the level of application of accruals in a regional government financial report.

Classic assumption tests include multi collinearity tests, heteroscedasticity tests, and residual normality tests. By using a confidence level of 95% or using a significance level of 5% ( $\alpha = 0.05$ ), the data processing results show that the VIF value of each variable tested is less than 10. The VIF value of DA Jones is 4.085, the VIF value of the SPI variable of 1.112, the VIF value of the IPP variable is 1.117 and the VIF value of the Modified DA variable is 4.089. Because the VIF value is smaller than 10.00, it can be interpreted that there is no multi collinearity between the independent variables in the regression model.

## RESULT AND DISCUSSION

The results of data processing obtained results in the form of a regression equation. The regression equation must be tested to ensure that the equation has constant, unbiased, and precise results in making estimates. Based on the table *Standard Coefficient* then obtained the regression equation  $Y = 1.001 - 0.006X_1 - 0.501X_2 - 0.009X_3 + 0.521X_4 + e$ . To carry out testing heteroskedasticity then we look at the results of the calculation with 95% confidence level or using a significance level of 5% ( $\alpha$  value = 0.05) using the test Breusch-Pagan Test obtained a P value of 0.000. The P value resulting from the calculation is 0.045 < 0.05 (Table 3). This shows that heteroscedasticity does not occur. To carry out a normality test in SMARTPLS version 4, use the residual value using a histogram graph (Figure 2).

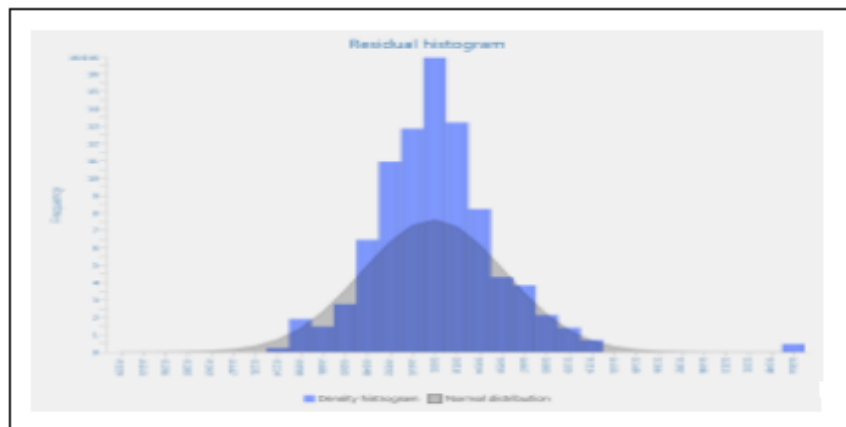


Figure 2. Data Normality

To carry out hypothesis testing, partial and simultaneous calculations of the relationship between the dependent variable and the independent variable are carried out. Partial test results for each variable DA Jones, SPI, IPP, DA. The results of testing variables  $X_1$  (SPI),  $X_2$  (IPP),  $X_3$  (DA Jones),  $X_4$  (DA Mod) against  $Y$  (Financial Management Efficiency) can be seen from the P value in the coefficient table. The P value of variables  $X_1$  (SPI),  $X_2$  (IPP),  $X_3$  (DA Jones),  $X_4$  (DA Mod) is compared with the value of 0.05 (DF). If it is bigger then it has no effect but if it is smaller then the independent variable has an effect on the dependent variable.

The results of data processing show that the SPI variable has a positive effect on the efficiency of local government financial management. These results can be seen from the results of calculating the P value (Table 1). The P value is 0.461 > 0.05 so that SPI is declared to have no effect on the effectiveness of financial management. This is not in line with research conducted in Spain that the internal control system influences budget realization (spending efficiency) (Moreno-Enguix, Gras-Gil, and Hernández-Fernández

2017). However, the results of this research are in line with research in Indonesia which states that the internal control system has no effect on financial management due to information asymmetry caused by agency problems (Prasetyaningsih, Yuhalfiyah, and Susanto 2014).

Tabel 1. Coeficient Summary

| Item       | Unstandardize<br>d coefficients | Standardize<br>d<br>coefficients | SE    | T value | P value | 2.5 %  | 97.5<br>% |
|------------|---------------------------------|----------------------------------|-------|---------|---------|--------|-----------|
| SPI        | -0,006                          | -0,043                           | 0,008 | 0,738   | 0,461   | -0,021 | 0,009     |
| IT'S JON   | -0,501                          | -2,230                           | 0,253 | 1,980   | 0,049   | -0,999 | -0,003    |
| IPP        | -0,009                          | -0,124                           | 0,004 | 2,104   | 0,036   | -0,017 | -0,001    |
| YES<br>WAY | 0,521                           | 2,358                            | 0,249 | 2,092   | 0,037   | 0,031  | 1,011     |
| Intercept  | 1,001                           | 0,000                            | 0,023 | 43,588  | 0,000   | 0,956  | 1,046     |

The public service index variable influences the efficiency of financial management, this can be seen from the P value. The P value is  $0.036 > 0.05$  so that IPP is declared to have an effect on the effectiveness of financial management. These results are not in line with research on Spanish local government which states that both the form of public service delivery (Public service index) and functional decentralization and externalization have a negative impact on local government efficiency (Cuadrado-Ballesteros, García-Sánchez, and Prado-Lorenzo 2013). However, these results are in line with research on regional governments in Spain which states that the efficiency of public services is an important aspect to improve in Spanish local governments, by focusing public services.

The discretionary accrual variable influences the efficiency of financial management. This is proven from the results of calculating the P Value. The P value is  $0.049 < 0.005$  so that Discretionary accruals (Jones Model) have a positive effect on the effectiveness of financial management. The accrual discretionary variable (modified model) also influences the efficiency of financial management. The P value is  $0.037 > 0.05$  so that discretionary accruals (modified model) have a positive effect on the effectiveness of financial management. These results are in line with research conducted in local governments in Australia. The results provide support for the different views on political, commercial and social pressure factors based on the size of local government and locality leading different users of the application of certain accrual accounts to be able to manage revenues (Pilcher 2011).

Assessment of simultaneous test results uses the P value from the anova table. If the P value of regression is less than 0.05, it will indicate that the independent variables, both Jones Model Accrual, Internal Control System maturity, Public Service Index and Modified Accrual Discretion, can simultaneously be said to influence Financial Management Efficiency. If the opposite happens, it can be said to have no effect. The calculation results show that the P value regression is  $0.000 < 0.05$ . This shows that the variables X, X2, X3 and X4 simultaneously influence the effectiveness of financial management (Table 2). These results are in line with research on discretionary accruals in Australia which states the influence of accruals in the realm of high-risk public policy making, in this case financial



management (efficiency) (Drew 2018). Apart from that, in European countries It appears that the spread of accrual accounting lies in part in that the dual system implemented in Continental European countries answered the democratic demands of citizens for greater responsiveness, transparency and accountability, while the traditional system with budget reports was maintained to monitor compliance with legality and to administrative decision making purposes (Pina, Torres, and Yetano 2009). The internal control system is one of the important tools used in the realization of new public management or financial management objectives (KÜÇÜKAYCAN and AĞDENİZ 2021) [34]

A clear relationship has not been found between the way public services are delivered and the efficiency of Regional Government. The study was only carried out in one or two services and/or in one particular year, so the real impact is difficult to generalize [31]. Research results in OECD countries state that local governments appear to be less efficient in managing the execution process, experiencing longer delays than the central government. This phenomenon is even more severe for small cities (Guccio, Calogero and Pignataro 2009).

Tabel 2. Summary Anova

| Item       | Sum square | df  | Mean square | F     | P value |
|------------|------------|-----|-------------|-------|---------|
| Total      | 0,901      | 309 | 0,000       | 0,000 | 0,000   |
| Error      | 0,854      | 305 | 0,003       | 0,000 | 0,000   |
| Regression | 0,048      | 4   | 0,012       | 4,251 | 0,000   |

## CONCLUSION

Data processing is carried out in two ways, namely partial and simultaneous. The partial test is an individual test of the independent variable against the dependent variable. Apart from that, a simultant test is carried out to test the independent variables together against the dependent variable. The partial test results show that the maturity of the control system has no effect on the efficiency of local government financial management. Meanwhile, accrual policies, both the Jones model and the modified model, influence the efficiency of local government financial management.

The government has established policies in the form of regulations to implement the accrual-based accounting recording method. Along with government regulations, efforts to implement regional government accounting records have a positive influence on the efficiency of regional government financial management. The accrual policy provides space for government management in financial management.

The government always improves services to the community. The government provides services in various aspects such as education, health, population administration and others. A good public service index indicates good financial capabilities in government financial management. The better public services will be supported by better financial management capabilities.

A good internal control system will support efforts to prevent fraud in various local government activities. The more mature the internal control system is, the more it will support the efficiency of local government financial management. However, the research

results show that the quality of the internal control system has no effect on the efficiency of regional government financial management.

### Implications, Limitations And Sugestions

The implication of the results of this research is that government accrual policies must be developed and directed at a wider variety of regional government financial elements. This is important because the higher the accrual content shows the higher authority of local government management in controlling government financial reports. The higher the accrual level, the more it shows the quality of local government financial reports.

The government's public services to the community must be further improved. Good services reflect the regional government's ability to prepare the technical and financial aspects of implementing regional government programs and activities. Successful implementation of programs and activities means better regional government performance. The better the performance of development implementation, the better the regional government's ability to manage its resources.

This research still has limitations in the use of limited independent variables. In the future, it is hoped that a wider range of independent variables can be used. Variables that can be considered for use in future research include the regional competitiveness index. This will show the region's ability to compete with other regional governments.

In the end, it is hoped that the implementation of accrual-based accounting and better public services in the government will become policies that can influence broader aspects of people's lives because of the power held by the government (Sylvia et al. 2018).

### REFERENCE

- Boolaky, Pran Krishansing, Nitri Mirosea, and Kamil Omoteso. 2020. "The Adoption of IPSAS (Accrual Accounting) in Indonesian Local Government: A Neo-Institutional Perspective." *International Journal of Public Administration* 43(14): 1252–65. <https://doi.org/10.1080/01900692.2019.1669047>.
- Bora, Nimisha. 2023. "Do Accrual Models Effectively Detect Earnings Management? A Study in the Indian Context." *Interantional Journal of Scientific Research in Engineering and Management* 07(02): 1–22.
- BPKP. 2016. "PeraturanKeputusan-Kepala-BPKP-Tahun-2016-PERKA-Nomor-14-Th-2016.Pdf." : 1–4.
- Cancellaro, Francesco. 2008. "The Accounting System of Central State Administrations." *IFIP International Federation for Information Processing* 280: 41–46.
- Chouaibi, Jamel, Moez Harres, and Najet Ben Brahim. 2018. "The Effect of Board Director's Characteristics on Real Earnings Management: Tunisian-Listed Firms." *Journal of the Knowledge Economy* 9(3): 999–1013. <http://dx.doi.org/10.1007/s13132-016-0387-3>.
- Costa, Cristiano Machado, and José Mauro Madeiros Velôso Soares. 2022. "Standard Jones and Modified Jones: An Earnings Management Tutorial." *Revista de Administracao Contemporanea* 26(2): 1–13.
- Cuadrado-Ballesteros, Beatriz, Isabel María García-Sánchez, and José Manuel Prado-Lorenzo. 2013. "Effect of Modes of Public Services Delivery on the Efficiency of Local Governments: A Two-Stage Approach." *Utilities Policy* 26: 23–35. <http://dx.doi.org/10.1016/j.jup.2013.04.005>.

- Drew, Joseph. 2018. "Playing for Keeps: Local Government Distortion of Depreciation Accruals in Response to High-Stakes Public Policy-Making." *Public Money and Management* 38(1): 57–64. <https://www.tandfonline.com/doi/full/10.1080/09540962.2017.1389542>.
- Eulner, Viola, and Gillian Waldbauer. 2022. "Cash versus Accrual Accounting for the Public Sector—EPSAS." *Public Money and Management* 42(6): 463–66.
- Guccio, Calogero and Pignataro, Giacomo and Rizzo. 2009. "Munich Personal RePEc Archive The Performance of Local Government in the Execution of Public Works." *Munich Personal RePEc Archive* (16094). <https://mpa.ub.uni-muenchen.de/16094/%0A>.
- Hafseld, Kristin Helene J., Bassam Hussein, and Antoine B. Rauzy. 2021. "An Attempt to Understand Complexity in a Government Digital Transformation Project." *International Journal of Information Systems and Project Management* 9(3): 70–91.
- Hariani, Ermatry, and Retno Febriyastuti. 2020. "The Effect of Fiscal Stress, Original Local Government Revenue and Capital Expenditures on Efficiency Ratio of Government Independence Performance." *Jurnal Ekonomi dan Studi Pembangunan* 12(1): 18–25.
- Hribar, Paul, and Daniel W. Collins. 2002. "Errors in Estimating Accruals: Implications for Empirical Research." *Journal of Accounting Research* 40(1): 105–34.
- James, A, and James A Ohlson. 2014. "Accruals: An Overview." *China Journal of Accounting Research, ISSN 1755-3091, Elsevier, Amsterdam, Vol. 7, Is: 65–80*. <https://doi.org/10.1016/j.cjar.2014.03.003>.
- Kemenpan RB. 2017. "Peraturan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Republik Indonesia Nomor 17 Tahun 2017 Tentang Pedoman Penilaian Kinerja Unit Penyelenggara Pelayanan Publik." *Kemenpan RB*: 61. [https://jdih.menpan.go.id/data\\_puu/final%2017.pdf](https://jdih.menpan.go.id/data_puu/final%2017.pdf).
- KÜÇÜKAYCAN, Durdane, and Şafak AĞDENİZ. 2021. "Türk Kamu Mali Yönetiminde İç Kontrol Sisteminin Belirleyicilerinin Araştırılması: Büyükşehir Belediyeleri Örneği." *Anadolu Üniversitesi Sosyal Bilimler Dergisi* 21(3): 827–50.
- Larson, Chad R., Richard G. Sloan, and Jenny Zha Giedt. 2017. "Defining, Measuring and Modeling Accruals: A Guide for Researchers." *SSRN Electronic Journal*.
- Leone, A.J.; Van Horn, R.L. 2005. "How Do Nonprofit Hospitals Manage Earnings?" *Journal of Health Economics*, 24:4: 815.
- Mattisson, Ola. 2004. "RAPPORT Accounting Innovations in the Public Sector A Comparative Analysis of the Accrual Accounting Reform Process in the Swedish and Finnish Local Governments Paper to Be Presented at the 27 Th Annual Congress of the European Accounting Association , 1-" (155).
- Mohammed, Rebaz Mohammed Hussein. 2022. "Accrual Accounting Basis and Cash Flow Future Predictions." *Journal of Global Economics and Business* 3(10): 121–33.
- Moreno-Enguix, María del Rocío, Ester Gras-Gil, and Joaquín Hernández-Fernández. 2017. "An Explanation of Management of Local Governments in Spain Based on the Structure of the Internal Control System." *Annals of Economics and Finance* 18(2): 393–410.
- Narb'on-Perpi'n'a, Isabel, and and Kristof De Witte. 2018. "Int Trans Operational Res - 2017 - Narb N-Perpi.Pdf." : 431–68.
- Nurdiono, N, and R R Gamayuni. 2018. "The Effect of Internal Auditor Competency on Internal Audit Quality and Its Implication on the Accountability of Local Government." ... *Research Studies Journal*. <http://repository.lppm.unila.ac.id/12823/>.
- OECD. 2017. "Control Interno y Gestión de Riesgos Para La Integridad Pública En Oriente Medio y Norte de África." *OECD Public Governance Reviews*. <https://www.oecd.org/gov/ethics/corruption-risks-internal-control-mena.pdf>.
- Pilcher, Robyn. 2011. "Local Governmental Management of Discretionary and Specific

- Accruals.” *International Journal of Accounting, Auditing and Performance Evaluation* 7(1–2): 32–60.
- Pina, Vicente, Lourdes Torres, and Ana Yetano. 2009. 18 *European Accounting Review* *Accrual Accounting in EU Local Governments: One Method, Several Approaches*.
- Prasetyaningsih, Erny, Gufratul Yuhalfiyah, and Heri Susanto. 2014. “Internal Control System Weakness and Non-Compliance to the Provision of Legislation in Practicing Audit of Local Government in Indonesia.” *Open Journal of Political Science* 04(04): 257–64.
- Quy, Vo Thi, and Duong Trong Nhan. 2017. “Detecting Earning Management of Companies Listing on HOSE.” *Asian Journal of Social Sciences and Management Studies* 4(2): 82–87.
- Rahmasari, Arttika, and Doddy Setiawan. 2022. “Maturity of Internal Control System, the Capability of Internal Auditors, and Performance Accountability in Local Governments.” *Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara* 8(2): 159–76.
- Rohman, Abdul, Rochmawati Daud, and Arista Hakiki. 2020. “Effects of Accrual Discretion, Accrual Levels, Opinions and Political Factors on the Management of SILPA of Local Governments (Efforts to Detect the Management of SILPA Approach Zero).” 142(*Seabc* 2019): 249–56.
- Sartika, N. 2019. “Analisis Rasio Keuangan Daerah Untuk Menilai Kinerja Keuangan Daerah Kabupaten Bulukumba.” *Jurnal Inovasi Bisnis* 7: 147–153. <https://doi.org/10.47221/tangible.v5i1.103>.
- Sutaryo, Sutaryo, Salawati Sahari, Shahrudin Jakpar, and Sophee Sulong Balia. 2022. “Internal Audit Function, Political Characteristics, and Compliance with Government Accrual-Based Accounting Standards in Indonesian Local Government.” *Contaduría y Administración* 68(1): 368.
- Sylvia, Eko Ganis Sukoharsono, Yeney Widya Prihatiningtias, and Roekhuddin. 2018. “Public Interest and Accrual Accounting: Are They Aligned?” *Journal of Accounting and Organizational Change* 14(4): 366–80.
- Takahashi, Ryota, and Ling Feng. 2019. “A Study on the Detectability of Earnings Management via a Normal Accrual Prediction Model.” *Innovation and Supply Chain Management* 13(4): 41–49.
- Vinet, Luc, and Alexei Zhedanov. 2014. 44 *Mc graww Hill Financial Statement Analisis*.
- Warren, Carl S`, James M Reeve, and Jonathan E Duchac. 2018. *Accounting 27 Edition*. 27th ed. Boston , USA: Cengage Learning.