

THE IMPACT OF ACCRUAL BASIS ACCOUNTING SYSTEM ON THE QUALITY OF FINANCIAL REPORT: AN AUDITOR PERCEPTION

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Abstract

This study examined the impact of accrual basis system implementation on the efficiency and effectiveness of public sector financial reporting. According to the existing theoretical studies, there are different results of accrual basis system implementation in the public sector. This study found an empirical model in the impact of accrual basis system implementation on the efficiency and effectiveness of public sector financial reporting. The research model was analyzed by using Partial Least Square (PLS). It involved 63 internal auditors of Finance and Development Supervisory Agency, Central Java, Indonesia. Based on the analysis, the results showed that the accrual basis implementation has a significant positive effect on the efficiency and or effectiveness of public sector financial reporting.

Keywords: Accrual basis, effectiveness, efficiency, financial reporting, public sector.

Introduction

New Public Management (NPM) is a public sector reformation movement in the early 90s. This movement is motivated by the assumption that public

sector organizations are ineffective and inefficient in organizing its function. On the other hand, there is an assumption that private sector management practice is better. The assumptions encourage the implementation of public sector management reformation. The reformation is

from traditional public administration model towards a modern public management system. The modern system adopts several management techniques and practices applied in the private sector. One of the practices applied is the accrual basis accounting.

The previous studies show that the use of accrual basis in the public sector is still controversial. According to Susan Newberry ; Pallot, (2005); Gårseth-nesbakk, (2011), accrual basis in the public sector has an uncertain effect and it gives immaterial benefits. Likewise, Paulsson, (2006) stated that the accrual basis implementation is less useful for public companies. This is also supported by the research of Aljarde & Julve, (2014). They found that the accrual basis implementation cannot yet be applied effectively in public companies.

Meanwhile, Karunia, Payamta, & Sutaryo, (2019) argued that the accrual basis implementation can improve the quality of public sector financial reporting. Furthermore, according to Olola Olayeye, (2019); Duenya, Upaa, & Tsegba, (2017); Ademola, Adegoke, & Oyeleye, (2017), the accrual basis implementation can improve the efficiency, transparency and accountability of fund management in public sector companies.

Salleh, Aziz, & Bakar, (2014) stated that the reasons for the adoption of accrual basis accounting system is to be the requirement to measure the

performance and effectiveness of fiscal management in financial information. However, many countries are still reluctant to apply accrual basis (Christiaens, Vanhee, Manes-rossi, & Cauwenberge, 2014). Based on the research gap above, it shows the importance of empirical studies in the impact of accrual basis implementation on the effectiveness and efficiency in Indonesia.

Indonesia adheres to a phased model in implementing accrual basis accounting. The implementation is by setting the Government Accounting Standards (GAS). GAS is stipulated in the government regulation number 24 of 2005. It regulates the transition of government basis cash accounting to accrual basis accounting. The regulation was then replaced by government regulation number 71 of 2010. It regulates the accrual basis accounting implementation. Accrual implementation is carried out gradually in order to result system changes efficiently and reduce the risk of failure.

Based on the explanation above, the objectives of this research are as follows: (1) analyzing the impact of accrual basis accounting implementation on the efficiency of government financial reporting and (2) analyzing the impact of accrual basis accounting implementation on the effectiveness of government financial reporting.

Literature Review

Financial reporting is a form of government responsibility. Based on Constitution Number 17 of 2013, the government is required to prepare financial report. Meanwhile, according to Constitution Number 1 of 2014, the government is required to prepare financial reports by using GAS. Accrual basis GAS is regulated and determined by Government Regulation Number 71 of 2010. The government of Indonesia both central and regional begin to implement the full accrual basis in 2015. The accrual basis implementation is a policy that needs to find out the accountability. One of the dimensions in public sector organization accountability is policy accountability.

Mardiasmo, (2002) stated that public sector accountability does not only show the sector expenditure, but it also shows the public sector expenditure efficiently and effectively. Therefore, it is necessary to measure the public sector performance for some purposes. First, it helps to improve the government performance, second, it can be used as a resource allocation and decision making, and third, it is a form of accountability so that it improves the communication institutionally.

Therefore, it can be understood that the implementation of accrual basis government accounting is one of the government policies. This policy needs accuracy which can be found out through the measurement of its

implementation and its impact on the effectiveness and efficiency of financial reporting.

Hyndman & Connolly, (2011) argued that in terms of costs and benefits, the accrual accounting implementation will require greater costs. In addition it also requires professionals who have better qualifications than only just present a good financial statement. On the other hand, Blöndal, (2003) stated that there is a gradual change in the method of government accrual accounting implementation. This change can reduce the costs for system changes and minimize the risk of failure.

A research by Olola Olayeye, (2019) shows that the accrual basis implementation can improve the efficiency of fund management in the public sector. Indonesia applies a gradual change in the accounting system to avoid excessive costs and the risk of failure in accrual basis accounting implementation. Based on the above theory, the hypothesis is as follows,

H1: The accrual basis accounting implementation has a positive and significant effect on the efficiency of government financial reporting

According to Study #14 IFAC Public Sector Comitè, Accrual basis accounting gives benefits in measuring the performance, efficiency and achieving the government objectives Sector, (2003). Supporting this statement,

Pinnuck & Potter, (2009) argued that the accrual basis allows the government to find out the government income in one period and can estimate the cash flows in the future. According to Bruns, (2013), it is proven that the accrual basis can comply expectations in term of financial transparency, public services cost identification, and output-based allocation efficiency. These expectations are in line with the benefits of accrual basis. According to Salleh et al., (2014), the benefits of accrual basis are; 1) accrual basis shows the government entity to fund the government's activities based on available cash, 2) accrual basis allows users to evaluate the ability of government entity to fund the government's activities based on its liabilities, 3) accrual basis shows the financial position and its changes, 4) accrual basis can be the opportunity to prove the government entity's success in managing its resources, 5) accrual basis is useful to evaluate performance in terms of cost, efficiency and effectiveness. Thus the hypothesis is as follows.

H2: The accrual basis accounting implementation has a positive and significant effect on the effectiveness of financial reporting.

Research Method

The populations of this study were auditors of Finance and Development Supervisory Agency (BPKP), Central Java, Indonesia. This research employed accidental sampling technique and determined the sample based on chance. The profile of government

internal auditor was obtained through observation. Meanwhile, the variables were obtained by distributing questionnaires which contain questions / statements according to variables indicator.

Measuring Tools

This study used measurement instruments that have been used in previous studies. All questionnaire items were measured by four-point Likert scale. The respondents were asked to indicate their level of compliance with each statement, ranging from 1 (strongly disagree) to 4 (strongly agree).

The Accrual Basis Accounting Implementation in accordance with GAS

The accrual basis accounting implementation aims to acknowledge and record transactions (both cash and non-cash). According to GAS, this variable is the form of accrual basis implementation on each element of financial reporting. Based on the research of Fuad; and Kusuma Y, M, (2013), the elements that must be fulfilled in accrual basis government financial reporting are based on government regulation number 71 of 2010 about GAS. According to this regulation, accrual basis implementation must include recognition, measurement and presentation. Meanwhile, the elements are: Assets, Liabilities, Equity, Income from Budget Realization Report, Expenditures, Transfers, Financing, Over Budget Balance, Income of Operational Report, Expenses and Cash Flow. Those elements are used as indicators in

measuring the level of accrual basis accounting implementation.

The Efficiency of Financial Reporting

According to (Rusmita, 2019), the efficiency of financial reporting is the utilization of public sector organization resources by using minimal costs in financial reporting activities. It aims to measure the level of financial reporting efficiency by using organizational resources as the indicator variable. The indicator variables include human resources, financial resources, infrastructure and technology.

The Effectiveness of Financial Reporting

The effectiveness of financial reporting is related to objectives achievement in financial reporting activities. The effectiveness of financial reporting is measured by using the indicator variable in form of public sector financial statements objectives. According to Mardiasmo, (2002) the indicator variables consist of (1) compliance and stewardship; (2) accountability and retrospective reporting; (3) planning and authorization information; (4) viability; and (5) public relation; (6) source of fact and figure.

Based on the hypotheses that have been developed in the literature review and the variable indicators based on previous researchers, the empirical model of this study is presented in Figure 1.

Analysis Technique

The analysis technique used in this study is partial least square (PLS). Partial least square is a multivariate statistical technique that allows response variables and explanatory variables at the same time. Some evaluations of this measurement model were conducted in order to see the feasibility in this study. The feasibility is very important for the next testing phase. The evaluations of this measurement model are: (a) Factor Loading; (b) Validity Test; (c) Reliability Test. The criteria of the evaluations include; 1) The R² of the endogenous variables are 0.60 for the good category; 0.3 for the moderate category and 0.19 for the weak category, 2) F² for effect size, if the value of F² is more than 0.35, then the indicator of the latent variable has a great influence on the latent variable, 3) The relevance of the prediction is known by the blindfolding procedure. The criterion is; if the Q² value is above zero then it gives a good relevance prediction.

Result and Discussions

Sample Description

The total populations were 173 auditors of Finance and Development Supervisory Agency (BPKP), Central Java. The samples of this study were 63 auditors. The respondents can be described by the age, tenure, and position.

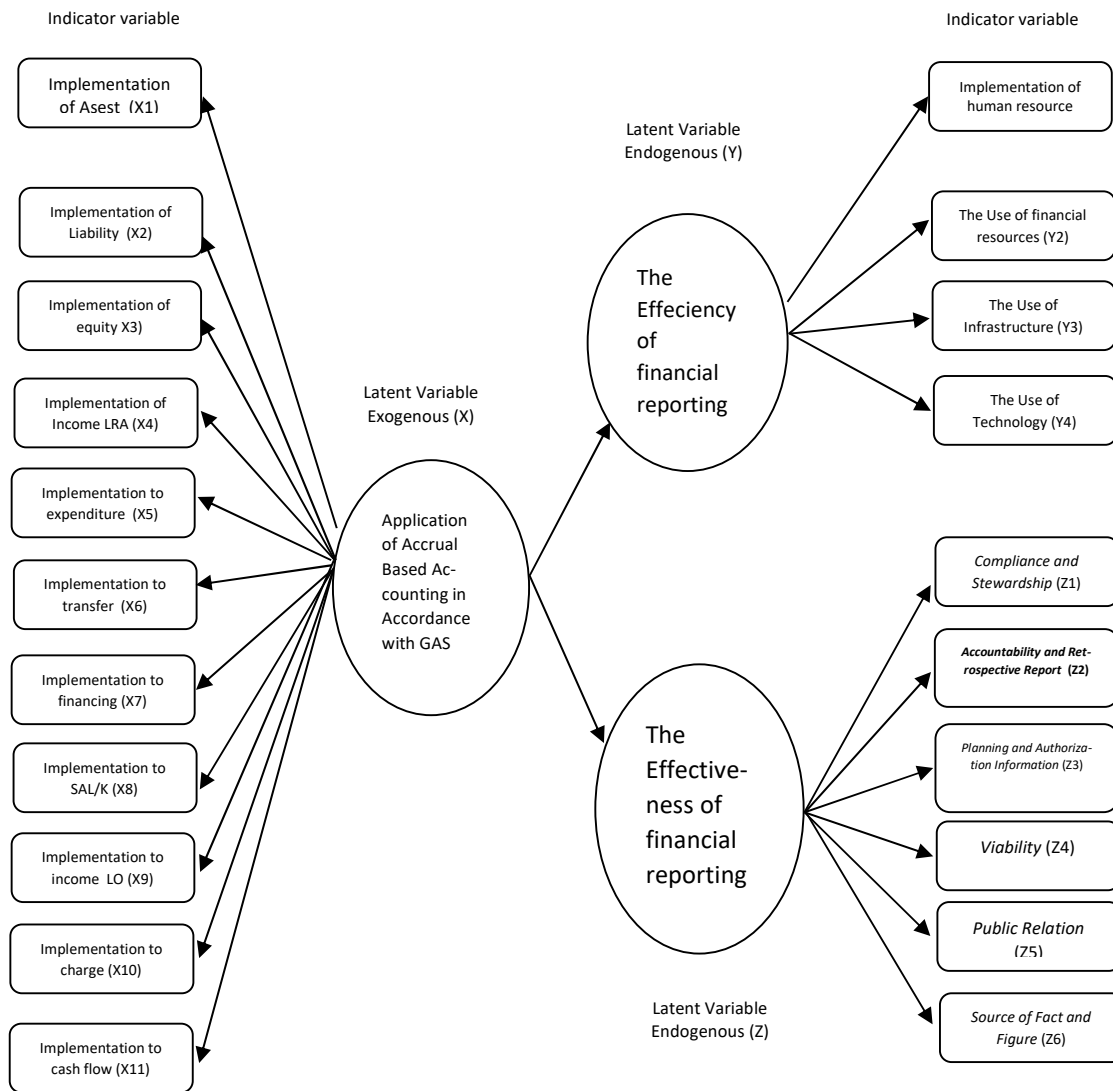


Figure 1. Research Model

Based on Table 1, it shows that the majority of respondents have a productive age of 41 to 50 years old or the percentage is 52.38%. This indicates that the respondents have a very optimistic age range. As the result, they believe that the accrual basis implementation will have an impact on the efficiency and

effectiveness of financial statements in public companies.

Table 1. Sample Description

<i>No</i>	<i>Age</i>	<i>Frequency</i>	<i>(%)</i>
1	≤20	0	0
2	21 - 30	7	11,11
3	31 - 40	6	9,52
4	41 - 50	33	52,38
5	>50	17	26,99
<i>Total</i>		63	100
<i>No</i>	<i>Years of service</i>	<i>Frequency</i>	<i>(%)</i>
1	≤5	1	1,59
2	6 - 15	9	14,29
3	16 - 25	32	50,79
4	26 - 35	21	33,33
5	>36	0	0
<i>Total</i>		63	100
<i>No</i>	<i>Position of Auditor</i>	<i>Frequency</i>	<i>(%)</i>
1	Executing	1	1.59
2	Advanced Implementers	5	7.94
3	Supervisor	13	20.63
4	First	4	6.35
5	Young	26	41.27
6	Middle	14	22.22
7	Main	0	0
<i>Total</i>		63	100

Moreover, the descriptive data on table 1 about the respondent's experience in conducting the examination also shows that the majority of respondents have enough experiences. It is proven by those who have experience, are auditors in the range of 16 to 25 years old or the percentage is 50.79%. This respondent data proves that accrual basis implementation gives impact on the efficiency and effectiveness of financial statements in public companies.

However, if the respondent is seen from the position or career level, the majority of respondents are still in the position of young auditors with 41.27%. The young auditors are mostly above 41 years old. Although they belong as junior auditor, but they believe that the accrual basis implementation will have an impact on the efficiency and effectiveness of financial statements in public companies.

The Evaluation of Measurement Model

Based on the questionnaire data which were processed by using

SmartPLS V.3 application, the results are as shown in Figure 2.

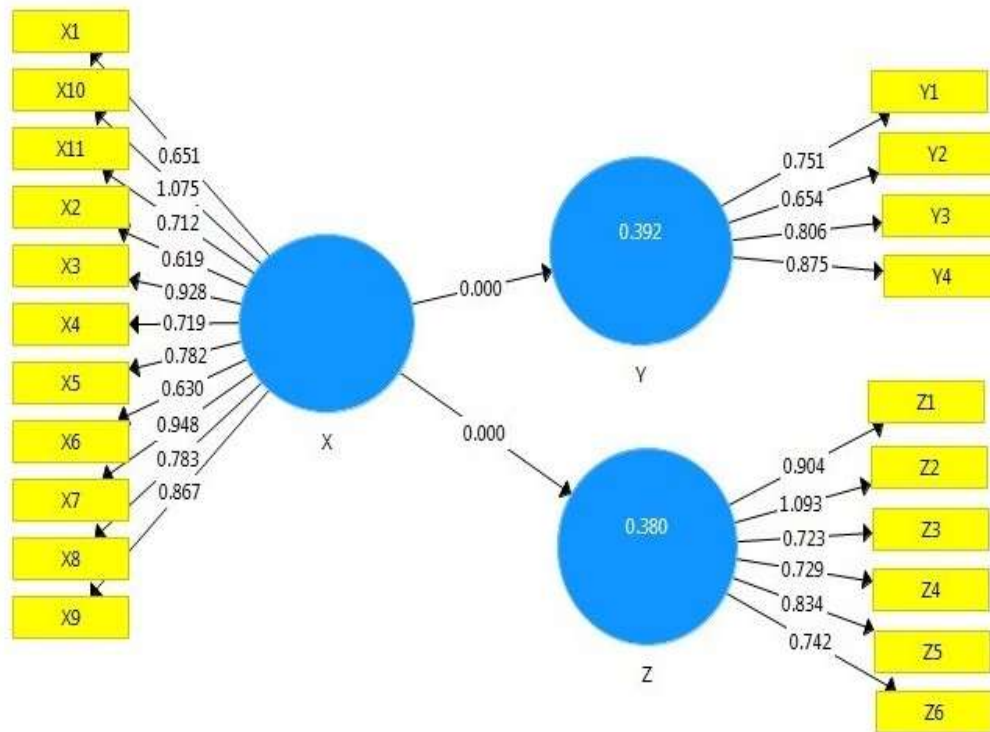


Figure 2. Empirical Model

The evaluations of model measurement consist of: factor loading, validity test, and reliability test. The description of each model evaluation is explained below.

- Factor Loading

The results of data analysis show that all indicators have a loading factor above 0.5 so that all indicators used in this study are quite good.

- Validity Test

- ✓ Average Variance Extracted (AVE)

The results of the processed data show that the AVE value on variable X is 0.647, variable Y is 0.602 and variable Z is 0.719. Each AVE value is greater than 0.5 so that the discriminant validity of

the research model is good.

✓ The Discriminant validity

The square root value of AVE must be greater than the correlation value (R) among latent variables. It is a requirement of good discriminant validity. The results of processed data shows the square root AVE of each variable is 0.80 for variable X, 0.77 for variable Y and 0.84 for variable Z. Meanwhile the correlation value (R) can be calculated from square root R square.

• Reliability Test

✓ Composite Reliability

The results of processed data show that the composite reliability value for variable X is 0.951, variable Y is 0.857, variable Z is 0.937. It shows that the values are above 0.6. So it can be concluded that internal consistency of each variable in this study is good.

✓ Cronbach's Alpha

The results of data analysis show that the Cronbach alpha values for all variables are as

follows: the value for variable X is 0.953, the value for variable Y is 0.853 and the value for variable Z is 0.939. The minimum value for alpha is 0.6. Thus, all variable values are greater than 0.6, which means that these variables have ideal reliability.

The Evaluation of Structural Model

The evaluations of structural model include: R Square (R²), effect size and relevance of prediction. The descriptions of each model evaluation are explained Table 2.

• R Square

According to table 2, it can be seen that the value of R² in the relationship of variable X with variable Y and the relationship of variable X with variable Z are 0.392 and 0.380. It shows that the model used in this study is moderate or enough.

• Effect Size

The f square value in table 2 shows a value of 0.645 for variable X on Y and 0.612 for variable X on Z. Each f square value

Table 2. R Square, f Square and q Square

	<i>R Square</i>	<i>f Square</i>	<i>q Value</i>
Y	0,392		
Z	0,380		
X → Y		0,645	
X → Z		0,612	
X			0,601
Y			0,466
Z			0,665

Table 3. t-test

	<i>T Statistics</i>	<i>P Values</i>	<i>Conclusion</i>
X → Y	7,917	0,000	Accepted
X → Z	6,363	0,000	Accepted

is above 0.35, which indicates the indicator variable.

- Relevance of Prediction

The q2 value in table 2 shows the value for variable X is 0.601, variable Y is 0.466 and variable Z is 0.665. The three values of q2 are greater than zero, so this research model has a good prediction of relevance.

Hypothesis Testing

The Relationship Between The Implementation of Accrual Basis Accounting Systems with The Efficiency of Financial Reporting

The results of the processed data in table 3 show that the t count for variable X on Y is 7,917. Based on the t table with a degree of freedom (df) 61 and the expected accuracy (level of confident) of

0.9, the t table value is 1.295. These results indicate that t count is > than the t table (7.917 > 1.295). So it can be concluded that the variable X influences the variable Y. In addition, if the p-value of variable X on Y is 0,000 smaller with a significance level of $\alpha = 0.1$ ($0.1 \geq 0,000$) then Ho is rejected and Ha is accepted. This means that the variable X affects Y.

Based on the results of the test above it can be concluded that the hypothesis developed in this study which states; the accrual basis accounting implementation has a positive and significant effect on the efficiency of government financial reporting is accepted. This indicates that the implementation of accrual basis accounting can improve the efficiency of local government financial reporting.

The Relationship Between The Accrual Basis Accounting System with the Effectiveness of Financial Reporting

The results of processed data in table 3 show that the calculated variable X on Z is 6.363. Based on the t table with a degree of freedom (df) 61 and the expected accuracy (level of confidence) 0.9, the t table value is 1.295. These results indicate that the value of t count is > than the t table ($6.363 > 1.295$). Thus the variable X influences the variable Z. Meanwhile the p-value of X on Z is 0,000 less than the value of $\alpha = 0.05$ ($0.05 \geq 0,000$), so that H_0 is rejected and H_a is accepted. This shows that the variable X has a significant effect on variable Z.

Based on the test results, it can be concluded that the accrual basis accounting implementation has a positive and significant effect on the effectiveness of local government financial reporting. This indicates that the accrual basis accounting implementation can increase the effectiveness of local government financial reporting.

Discussion

The Effect of the Accrual Basis Accounting System Implementation on Financial Reporting Efficiency

Based on the hypothesis testing, it can be concluded that the accrual basis implementation has a positive and significant effect on the efficiency of financial

reporting. The efficiency of financial reporting is inseparable from the gradual system change method implemented by the Indonesian government. The efficiency of financial reporting is greatly influenced by the support of government organizations. The support is the adequate utilization of organizational resources in form of human, financial, infrastructure and technology resources. However, the efficiency of financial reporting is an indicator that shows the utilization of human resources is still below average of other indicators.

The implementation of accrual basis can be improved by placing personnel in accordance with their competencies. The accrual basis system implementation is needed by personnel who understands the field of accounting. The provision and proper use of the budget can improve the efficiency of financial reporting. In addition, the provision of application system that can be easily used by personnel to support financial reporting efficiency is needed. The determination of regulations and accounting policies in each government include; capitalization policies, depreciation and amortization policies (including the selection of inventory recording methods).

The Effect of the Accrual Basis Accounting System Implementation on the Financial Reporting Effectiveness

Based on the hypothesis testing, the correlation testing and significance testing, it can be concluded that the accrual basis accounting implementation

has a strong and significant effect on the effectiveness of financial reporting. The things that need to be considered for the reporting effectiveness according to this research are clear, that there are two indicators that have scores below the average. The indicators are viability and source of fact and figure. This condition allows the government to further maximize the use of financial statements as a source of decision making.

The expectations of financial statements users, regarding the government sustainability in providing public goods / services in the future, are still low compared to other indicators. It is because the Indonesia government only implements the accrual basis in its report without using the information to accrue budgeting. In addition, indicators of source of fact and figures is below the average of other indicators. It indicates that the reliability of the figures in the financial statements still needs to be improved so that the financial statements will better reflect the actual financial condition of the government.

Conclusions, Limitations, Suggestions and Implications

Conclusions

Based on the discussion above, it can be taken several research conclusions as follows:

- 1) The accrual basis accounting system implementation has a significant positive effect on the efficiency of financial reporting.

- 2) The accrual basis accounting system implementation has a significant positive effect on the effectiveness of financial reporting.

Based on respondents' answer, it can be concluded that local government of Central Java has applied accrual basis accounting on every element of the government's financial statements. The government has optimized the organization's resources in term of financial reporting efficiency and has utilized financial statements according to its purpose.

Limitations

This study has several limitations. First, the government actually implemented the full accrual basis in 2015. At the time of this research, the government was still in the process of implementing the accrual basis. Therefore the effectiveness of financial reporting objectives could not be reliably measured. Perception testing is very much determined by the respondent's understanding and each respondent has a different understanding of accrual basis accounting, efficiency and effectiveness of financial reporting.

Second, the method of data collection through surveys used a questionnaire so that the actual knowledge of respondents regarding accrual accounting is limited. Questionnaires were only given to internal auditors who are basically not involved in carrying out accrual basis accounting directly. The scope of internal auditors in Finance and

Development Supervisory Agency (BPKP), Central Java does not provide a comprehensive view regarding the accrual basis implementation of Indonesia government. For these conditions, the results of this study can not be generalized to a broader scope.

Suggestions

In order to maximize the accrual basis accounting implementation, there are several indicators that need government attention. The indicators are the application of LO (operational report) revenue and the application of expenses. In applying accrual basis accounting, it should be regulated in accounting policies and selected methods based on best practice without reducing the reliability of financial statements.

The government should pay attention to the optimal use of organizational resources for achieving financial reporting efficiency. The organization's resources include human resources, finance, infrastructure and technology. Based on the results of this study, the use of human resources is a matter that really needs attention. The placement of competent and expert human resources in their fields, as well as increasing the capacity and contribution of human resources will increase the level of financial reporting efficiency.

On the other hand, the efficiency and the effectiveness of financial reporting also still needs to be improved. This

improvement is especially in the purpose of financial statements used as a guarantee that the government is able to provide public goods / services in the future. The accrual basis accounting implementation should give a view of the government regarding financial resources in the future. In addition it also should reflect the financial obligations that must be paid in the future. Based on the view of future revenues and expenses, the government can estimate and predict public expenditure budgets for services in the future. In addition, the purpose of financial reporting as a source of fact and figure needs to be improved. It is because the financial statements do not merely present figures but also can provide an unbiased view of the government's financial condition. According to the financial statements that illustrate the facts of financial conditions, the government can be more precise in making decisions and policies for financial management.

Implications

This research has implications for the enrichment of public sector accounting theory related to the accrual basis implementation in regional government offices in Indonesia. The results of this study provide empirical evidence for the importance in implementing the accrual basis to the efficiency and effectiveness of local government financial reports.

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