The Effort to Realize Government Effectiveness through Implementation of Fully Accrual Accounting and Control Against Corruption

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Abstract

Introduction/Main Objectives: *This study aims to analyze how far the influence of the implementation of the accrual accounting public sector on the Government and control of corruption could increase government effectiveness.* ***Background Problems:*** *This means that countries that fully adopted accrual accounting and had control of corruption (a high Corruption Perception Index score) tend to have better government effectiveness, and vice versa.* ***Research Methods:*** *Using cross-country data for 2020 with a final sample of 194 countries.* ***Finding/Results:*** *This study shows that the accrual accounting public sector and the Corruption Perception Index (CPI) positively affect government effectiveness.* ***Conclusion:*** *Therefore, to increase government effectiveness, it was necessary to make effective law enforcement and control strategies to prevent corruption.*

Keywords: Accrual Accounting; Corruption Perception Index; Government Effectiveness

JEL Classification: M40, M41

INTRODUCTION

Sustainable development goals (SDGs) or sustainable development is one of the essential keywords that underlie the framework for government development worldwide today. It started with the emergence of awareness that natural resources on earth not only belong to the current generation but need to be conserved to ensure the fulfilment of future needs without compromising the fulfilment of current needs. (United, 2014). All countries use sustainable development as development jargon carried out by the Government by reviewing various multidimensional aspects. Through the United Nations, the SDGs were declared on September 25, 2015. The SDGs, as a whole, were the successors to the millennium of sustainable development worldwide. The SDGs form the backdrop for minimizing and phasing out micro and macroeconomic factors that hinder economic, societal and environmental development. The goal of the 16th SDGs was to strive to encourage peaceful and inclusive societies to achieve sustainable development, to provide universal access to justice, and to strengthen institutions that promote good governance and anti-corruption.

In this regard, research had been developed that analyzed the extent to which the accrual basis applies to governments worldwide and how the corruption perception index could increase government effectiveness. Several previous studied by Brewer et al. (2008), Zouaoui (2017), Nakmahachalasint & Narktabtee (2019), Furqan et al. (2020), Chen & Aklikokou (2021) showed that to achieve public service quality and government effectiveness, it was necessary to apply accrual accounting, strengthen audit function, develop e-government and control corruption. However, until now, these studies still needed to focus more on the level of government effectiveness in measuring the application of the accrual basis and corruption perception index as control in Government. Research conducted by Brewer et al. (2008) only discussed the Effectiveness of existing governments

in Asia both regionally and across sub-regions, which were influenced by factors of accountability and voice, control of corruption, wealth and income. Therefore, this research was conducted to analyze the elements related to implementing public sector accrual accounting and the corruption perception index as a benchmark for achieving government effectiveness.

The influence of accrual accounting in the public sector and controlling corruption on government effectiveness were interrelated. Accrual accounting was necessary to ensure good governance by promoting transparency and accountability in managing public resources and eradicating corruption (Mbelwa, 2015). Government effectiveness could also protect the people from violence, ensure the honesty and competence of its bureaucracy, and enable the provision and maintenance of infrastructure that allows the exchange of goods and delivery of services (Lewi, 2006). (World Bank, 2018) defined government effectiveness as the perceived quality of public services and independence from political pressures. Brewer et al. (2008) utilized World Bank Governance indicators to explore the relationship between accountability, corruption, and government effectiveness in Asian countries, covering the period from 1996 to 2005.

The question to be answered in this research was whether a government that fully adopts accrual accounting and has a corruption perception index affects the Effectiveness of a government in the world. This study aimed to obtain empirical evidence regarding the effect of implementing the accrual accounting public sector and the corruption perception index on government effectiveness. In addition, the results of this study were expected to provide information and develop knowledge about Effectiveness in a government where perceptions use a scale of 0-100 as a measure.

Based on the data used by researchers were data from the World Bank, International Federation of Accountants, Transparency International and Human Development Report, which consists of more than 100 countries during 2020 with a final sample of 194 observations; some of the findings and contributions from this research could be described as follows. **First**, the application of accrual accounting in the public sector positively affects government effectiveness. This research aligns with Brusca et al. (2016), which stated that the accrual accounting public sector provides better information about government assets, liabilities, income, and expenses. The Government tent to increase its Effectiveness because the country could provide information related to its financial reports transparently and with accountability. **Second**, the corruption perception index had a positive effect on government effectiveness. This shows that a country that could create a government that was clean and free from corruption has a high level of welfare so that the Government could run effectively. This aligns with research (Lambsdorf, 2007), which explained how a country controls corruption through prevention, detection and prosecution to strengthen an effective government system. The existence of a positive influence in this study showed how important it was to maintain the Effectiveness of a government by paying attention to these two variables. Therefore, the higher the transparency by implementing public sector accrual accounting and the lower the level of corruption, the more influential the Government would be.

The limitations of this study were that it only uses data for one year, 2020, and only analyzes government effectiveness. Moreover, the variables analyzed were limited to implementing the accrual accounting public sector and the corruption perception index. The remainder of this article would be divided into four sections: the second section would discuss the literature review and the basis for developing hypotheses, the third section would discuss the research methods used, the fourth section would discuss the results of hypothesis testing, and finally, the fifth section would discuss the conclusions and implications of the research, as well as limitations and suggestions for further research.

There were many types of services provided by the Government, especially those placed in the context of public policy, which were distributive, redistributive and repulsive (Nugroho, 2023). Policies were general statements that guide decisions whose function was to mark the surrounding environment and provide material guarantees that these decisions would align with the objectives to be achieved. Public policy was the attitude of the Government to do or not do something in response to problems that arise in society. Therefore (Dunn, 2003) stated that the policy process has four stages: agenda setting, policy formulation, policy adoption or legitimacy and policy assessment or

evaluation.

At this time, government effectiveness was still a particular concern for the Government. Effectiveness measures the output quality and how well the policy achieves the desired goals (Kim & Voorhees, 2011). Government effectiveness said that national income was the only determinant of government effectiveness (Garcia-Sanchez. et al., 2013). This refers to the quality of public services, policy formulation and implementation, and the level of public service delivery without undue political pressure (World Bank, 2019). Based on the description above, government effectiveness was a measure that could be used to see the extent to which the quality of public services was high and how well existing policies in the Government achieve their goals.

Applying Accrual Accounting in the Public Sector could increase government transparency and accountability. According Akai & Sakata (2002) stated that the accrual accounting public sector enables more accurate and detailed financial information, making it easier to monitor and evaluate government performance. With transparent and accountable information, the public could more easily understand government financial management and oversee the use of public budgets. Over a decade, the demand for accountability in the public sector had increased significantly, requiring governments worldwide to use accrual accounting for budgeting and financial reports (Champoux, 2006).

Based on the description above, applying the accrual basis of the public sector could improve government transparency and accountability. When adopted, the accrual basis of accounting was more comprehensive in capturing transitions and would better reflect a government's performance and financial position.

Accrual accounting was as helpful for governments as the private sector; it could provide more information and lead to better decision-making (Hyndman & Connolly, 2011). The application of the accrual basis of the public sector could improve government financial management. Brusca I & Montesinos (2013) It was stated that accrual accounting in the public sector provides better information about government assets, liabilities, revenues, and expenses. This enables better decision-making in financial management, such as efficient and effective resource allocation. Thus, the application of the accrual basis in the public sector could increase the Effectiveness of government financial management.

There was a unified global effort to reform public sector accounting under New Public Management (NPM). Accrual accounting was now an intrinsic part of liberal democratic governance, despite sharp criticisms raised by critical accounting scholars (Carnegie. G, Wolnizer, 1999). Weak government accounting practices exacerbate public corruption experienced by many developing countries (Cohen et al., 2015). Criticism of government accounting stems from its failure to meet user needs. For example, the breakdown of macroeconomic management, its inadequacy in detecting fraudulent activity, and the hiding of corruption scandals (Neu et al., 2013). This was on the advice of the International Federation of Accountants (IFAC) and the Chartered Institute of Public Finance and Accountancy (CIPFA), which issued an international framework for public governance. It establishes the importance of accrual accounting in the public sector and argues that better financial reporting was essential for reducing public corruption (Ace, 2014). The international media has covered the role of accounting in the context of corruption (Lehman & Thome, 2015). However, the obstacles experienced in the transition process to accrual accounting were Lack of incentives, management culture, accounting manuals, and failure to understand accrual information. (Nakmahachalasint & Narktabtee, 2019).

Through the rhetorical appeal of accrual accounting, it claims that fraud and corruption in the public sector could be reduced if the Government implements them correctly. Thus, applying accrual accounting could assist and strengthen efforts to eradicate corruption within government departments and institutions. However, as suggested below by professional institutions, accrual accounting was only one mechanism. From several previous studies, no research specifically explains how the effect of implementing public sector accrual accounting could make a government-run effective.

H1: Application of Accrual Accounting positively affects Government Effectiveness

The Corruption Perceptions Index published by Transparency International was considered the most widely used index in measuring corruption, although some researchers describe it as a subjective index (Razafindrakoto & Roubaud, 2010). Corruption could undermine the integrity of

government institutions, affect public services, and hinder development. Corruption control could also support the adoption of a public sector accrual basis. Olken (2012) stated that reasonable corruption control would minimize the potential for financial misuse and increase public trust in the Government. This would support the smooth implementation of the accrual basis of the public sector by encouraging integrity and accountability in government financial management. Based on the description above, the corruption perception index was a survey conducted to see the level of public perception or opinion regarding corruption in public and political positions in a government.

According to TI, Corruption perceived by individuals or companies relates to high-risk practices such as bribery to run a business, obtain contracts, or obtain day-to-day government documents (Andersen, 2009). Corruption refers to the abuse of public power for personal gain, which could undermine the integrity of government institutions and hinder the economic progress of a country. Hodge et al. (2011) explore the path between current corruption and growth, where corruption hurts economic growth. Ajie and Wokekoro (2015) study the impact of corruption on Nigeria's sustainable growth. They examine the overall impact of corruption on economic performance and its consequences for national development.

Adhikari P. et al. (2013) compare perceptions of corruption levels among developing regions and examine the relationship between corruption perception index, geography and human development in cross-sectional data from 170 countries in 2013, where the research results show that Asia was more corrupt than Latin America and the Caribbean while all were the most corrupt in the world. Blackburn (2012) argues that corruption and development have a negative two-way causal relationship. He estimates the ranking of corruption in various countries using data from 1980-1999 and 2001-2004, which corroborates that higher levels of corruption in developing countries were caused by the rich. They explained that corruption causes inefficiencies in the economy, which means that per capita income was negatively correlated with corruption.

H2: The Corruption Perception Index has a positive effect on Government Effectiveness

RESEARCH METHOD

The data used in this study was sourced from the World Bank, International Federation of Accountants (IFAC) and Transparency International (TI), totalling 214 countries in 2020. The sample selection used a purposive sampling technique because five countries do not have a government effectiveness rank, and 15 countries do not adopt accrual accounting. So, with no data available, the final sample size was set at 194 observations or around 90.23%, consisting of 53 countries on the African continent, 38 countries on the American continent, 44 countries on the Asian continent, one country on the Australian continent, 44 countries on the European continent, and 14 countries on the continent of Oceania. All data used in this study comes from the World Bank for Government Effectiveness rank data, International Federation of Accountants (IFAC) for Accrual Accounting Public Sector, Transparency International for Corruption Perception Index score data and the Human Development Report for Human Development Index.

To answer problems research and at the same time test the hypothesis, the empirical model in this study was as follows:

$GErank_t = \beta 0_t + \beta_1 Acc_t + \beta_2 CPI_t + \beta_3 HDI_t + e_t$…………….……………..…(1)   An overview of the operationalization of the variables in equation (1) above could be seen in table 1 below :

Table 1. Operational Variables

Variable	Operational Definition	Data Source
Acc	Accrual accounting public sector measured with a value of 1-4. Score 1 for countries that don't apply a cash basis or accrual basis, score 2 for countries that apply a cas basis, score 3 for countries that apply an accrual basis but have not fully implemented it, and score 4 for countries that have adopted accruals in full.	International Federation of Accountants
CPI	Corruption Perception Index measured with a score of 0-100. 0 for countries with high level of corruption and 100 for countries with low level of corruption.	Transperancy International
GE	Government effectiveness measured with a 0-100 percentile rank. 0 for countries with low levels of effectiveness and 100 for countries with high level	World Bank
HDI	A composite index that measures average achievement in three basic dimensions of human development- long and healthy life, knowledge, and a decent standard of living measured in the categories of very high, high, medium, and low. More than or equal to 80 for very high, 70-79 high, 60-69 medium, and less than 60 is low	Human Development Report

Source: Processed by researchers (2023)

RESULT AND DISCUSSION

A complete description of the variable descriptive statistics in this study could be seen in Table 2 below:

Table 2. Descriptive Statistics

Variable	Obs	Means	Std. Dev	Min	Mix
GE Rank	194	49.63	28.63	0.48	100
Accrual	194	2.60	1.05	1	4
CPI Score	194	38.52	22.88	0	88
HDI Rank	194	0.67	0.23	0	0.95

Number of observations = 194

Explanation of operational variables in table 1

Source: Secondary data, output STATA14 (Processed by researchers, 2023)

Table 2 describes descriptive statistics for all variables analyzed in this study. The mean of the movement variable was 49.63, which was not close to 100 of the GE percentile ranking, so it could be interpreted that countries with poor government effectiveness dominate the countries sampled in this study. The mean accrual variable shows a value of 2.60, so it could be interpreted that the countries sampled in this study still need to fully implement accrual accounting in the public sector in their Government. The mean CPI score variable shows a value of 38.52, so it could be interpreted that the countries sampled in this study were not entirely free from corruption.

Table 3. Variable Correlation Analysis

	GE Rank	Accrual	CPI Score	HDI Rank
GE Rank	1.000			
Accrual	-0.008	1.000		
	0.958			
CPI Score	0.496***	0.306**	1.000	
	0.000	0.043		
HDI Rank	0.416**	-0.066	0.507***	1.000
	0.004	0.668	0.000	

Number of Observations = 194

Explanation of variable operationalization in table 1

*** = P-Value Significant 1%.

Table 3 describes the results of the correlation analysis of the main variables in this study, namely accruals as a measure of countries that have fully adopted accrual accounting, cpi score as a measure of the extent of control over corruption in a government and drank as a measure of human quality of life has a positive and significant correlation of rank as a measure of government effectiveness.

This study's hypothesis testing used multiple linear regression methods with the STATA-14 software program. The test results were in Table 4. In general, the results of multiple linear regression testing show that the R-square is 0.39; this research model could explain that 39 per cent of the variations in the Government Effectiveness percentile ranking in countries in the world with a significant level (statistic F value) of 1% and a mean VIF of 1.52, so it could not be said that this research does not have Multicollinearity problems and could be reliably used to explain variations in government effectiveness.

Table 4. Hypothesis Testing Results

$$\text{GErank}_t = \beta0_t + \beta_1\,accrual_t + \beta_2\,cpiscore_t + \beta_3\,hdirank_t$$

	Expected sign	**GE**
_CONS		4.732
		0.432
Accrual	H1: (+)	4.170***
		0.011
CPI Score	H2: (+)	0.571***
		0.000
HDI Rank	H3: (+)	17.766**
		0.049
Prob > F		0.000
R-Square		0.391
Obs		194
Mean VIF		1.52
Information:		
Explanation of operationalization of variables in table 1		
*** = p-value significant 1%		

Source: Secondary data, STATA-14 Output (Processed, 2023)

Table 4 shows that public sector accrual accounting positively influences government effectiveness in world governments, with a coefficient of 4.17 and a significance level of 1.%. This shows that the data used in this study supports H_1. Furthermore, Table 3 shows that corruption control positively influences government effectiveness, with a coefficient of 0.57 at a significance level of 1%. This indicated that the data used in this study supports H_2, which states that increasing the corruption perception index could increase the Effectiveness of the Government in that country.

The First finding, it was concluded that accrual accounting was essential in the public sector; on this basis, Moslemi et al. (2012) argue that accrual accounting helps the Government to have a good picture of performance because the income earned and expenses incurred were clearly stated during the period. In addition, accrual accounting improves planning and decisions. Ouda (2004) observes that accrual accounting leads to more detailed information for government legislators and other interested parties that help evaluate their performance and promote sustainable development. If sustainable development was to be achieved, then from the earliest stages of human development, it must recognize its environment in order to maintain its usefulness (Nnachi, 2009). Corruption, untimely preparation of financial reports, fraudulent financial practices, Lack of adequate accrual

information and absence of qualified and competent financial operators were financial problems in the public sector that result when humans try to fix their value. Humans must carefully handle this problem through quality education and workshops to sustain development. Therefore, if the Government implements the accrual accounting of the public sector, it would be able to increase its Effectiveness by paying attention to the quality of human life.

The Second finding broadly supports previous research, especially that conducted by Brewer, G., Choi, Y., & Walker, RM (2007), which states that government effectiveness could increase when a country could control its corruption and the public has voice channels and accountability. These findings imply that government effectiveness was enhanced when corruption was controlled, and citizens have a voice and accountability channel. So, to create government effectiveness, a country must be free from corruption because corruption hinders its economy and impacts its economic slowdown, increasing poverty and inequality in income.

Some of the research above shows that many factors could be used to measure the Effectiveness of Government, and these need to be analyzed in this study. In line with previous studies, government effectiveness emerges as an undeniable development strategy to address several social, political, economic and geographical disparities in countries with Effectiveness that fall into the low and middle class. Based on the results of this study, when a government has fully adopted accrual accounting and could control its corruption, it was inevitable that an increase would follow in government effectiveness.

CONCLUSION

This study aims to analyze the effect of implementing public sector accrual accounting in full and controlling high corruption, which tends to have better government effectiveness. In addition, this research was also expected to be a benchmark for government performance and increase the role of Government in improving the quality of life of people in a country. Based on the results of the testing and discussion in this study, the complete application of accrual accounting has a positive effect on the Effectiveness of governments worldwide. The more complete the adoption of public sector accrual accounting in a country, the more it would impact and increase the Effectiveness of Government in the world's governments. Also, high corruption control affects the Effectiveness of the Government in the world's Government. The stronger the control of corruption in a country, the more influential the Government would be in the world's governments. Therefore, to increase the achievement of the SDGs in a country, it was necessary to create an effective state government which is supported by strengthening the quality of financial reporting, especially by using the full accrual accounting method, as well as the Government's commitment and concrete steps in fighting corruption in the country.

The implication of the results of this study was the need to implement accrual-based government financial reporting fully. The Government was expected to evaluate financial reports and performance. In addition, to increase government effectiveness, law enforcement efforts and control strategies need to be maximized to prevent corruption. Evaluation of the quality of government performance in the world needs to be done to measure the extent to which the Government was effective and efficient in supporting increased Effectiveness.

This study only uses data for one year, namely 2020 and only analyzes it1 of the 17 targets of the Global Sustainable Development Goals (SDGs) was eradicating corruption or SDGs 16. In addition, the variables analyzed in this study were limited to social and legal factors, resulting in low variation in achieving the SDGs, which could be explained in this study.

It was hoped that further research would develop this more comprehensively through more in-

depth research on other factors that influence Government Effectiveness. Because the influence of the variables in this study was only 39%, the remaining 61% were other factors that could affect Government Effectiveness. Examples include Good Governance, which includes social, economic and cultural factors. In addition, future researchers were also expected to be able to analyze government effectiveness in achieving the SDGs as a sustainable development goal.

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