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Factors Affecting Central Government's Performance Accountability in Indonesia

I Gede Ari Erawan ¹✉, Fadillah Putra ², I Gede Eko Putra Sri Sentanu ³¹Faculty of Administrative Science, Brawijaya University, Jl. MT. Haryono 163, Malang, Indonesia

✉ gde.ari.erawan@gmail.com



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Abstract: The literature regarding the correlation of central government spending on performance accountability and the benefits of BSC implementation on the government's performance reporting practices are rarely discussed, especially in developing countries. Consequently, this paper aims to examine the effects of expenditure budget and BSC implementation on the Indonesian central government's performance accountability. This research employs panel data analysis using secondary data from the central government's assessment. The findings confirm that central government expenditure and BSC implementation significantly and positively affect performance accountability. Specifically, ministries/agencies working in financial services have higher performance accountability than ministries/agencies in politics, laws, and security affairs. Additionally, the results show that the better the education level of employees, the better performance accountability. By determining the factors that positively influence performance accountability, the central government can formulate specific policies to improve its performance.

Keywords: performance accountability; Indonesian central government; budget expenditure; balanced scorecard; public administration

1. Introduction

Indonesia's awareness of performance accountability arose in 1999 when Indonesia became a democracy. The democratization has brought substantial change in the accessibility of public services (Putra & Aminuddin, 2020). In 1999, President B. J. Habibie issued a presidential instruction about the Performance Accountability Report of State Apparatus, which required government organizations to report financial and non-financial performances (Akbar et al., 2012). Since then, Indonesia's implementation performance accountability system has evolved, followed by policy regulation and government organization structure reforms. This reform was heavily influenced by the New Public Management (NPM) movement, emphasizing openness, transparency, and accountability (Tjiptoherijanto, 2015). According to the Government Organization Performance Accountability System (SAKIP) decree (2014), performance accountability is a form of commitment from the government to account for the success and failure of the implementation of their programs and activities mandated by the stakeholders to achieve the organization's mission. However, although the government has implemented performance accountability measures for more than a decade, the Indonesian government organization's performance accountability is still poor due to a lack of commitment from the executive level and inadequate human resources in implementing a performance accountability system (The Ministry of State Apparatus Empowerment and Bureaucracy Reform [MoSABR], n.d.). Moreover, according to an assessment by MoSABR in 2019, there are differences in scores in terms of the quality of performance accountability between ministries/agencies, indicating that their capabilities to implement performance accountability are unequal.

Several studies addressing performance accountability in the public sector have mainly focused on government budget and performance measurement. In terms of expenditure budget, the literature (Allen et al., 2003; Bräutigam, 2004; Gollwitzer et al., 2010) suggests that the expenditure budget correlates with the government's accountability. However, in low-income countries that heavily rely on foreign aid, performance transparency and accountability do not seem to prioritize (Gollwitzer et al., 2010). Furthermore, Canagarajah and Ye (2001) found an insignificant relationship between the pattern of government expenditure and health outcomes in Ghana. These findings imply that the expenditure budget is related to government accountability in developed countries with more comprehensive public management.

Studies on the Indonesian government have obtained varying results Eckardt (2008) and Wardhani et al. (2017) confirmed that expenditure budget positively affects the government's performance accountability. In contrast, Triyulianto (2018) argued that expenditure budget does not significantly correlate to performance accountability. However, these studies only address the effect of expenditure budget on performance accountability in the local government's context. In contrast, research regarding the effectiveness of the expenditure budget on the central government's performance accountability is limited, despite the increase in said budget by 24.23% from 2016 to 2019 (Ministry of Finance, 2019). The Indonesian central government reformed its budget system to catch up with the performance-based reforms, from a single unified budget to performance-based budgeting (PBB) (Lee Rhodes et al., 2012). PBB forces government agencies to link their performance objectives with financial resources; thus, the expenditure budget efficiently supports organizational goals. However, transparency and scrutiny must support the PBB itself to enhance accountability. Various studies (Brinkerhoff & Wetterberg, 2013; Sentanu et al., 2018) have highlighted the significance of transparency, scrutiny, and budget auditing in enhancing accountability and reducing corruption. Additionally, Schaeffer and Yilmaz (2008) pointed out that financial scrutiny and accessible budget information contribute to government accountability.

In addition, this paper also touches upon a performance management tool, the balanced scorecard (BSC), which several Indonesian government organizations have

implemented to improve their performance accountability (Erawan, 2019). Various studies have argued that the BSC improves public organizations' accountability (Griffiths, 2003; Niven, 2012; Northcott & Ma'amora Taulapapa, 2012). According to Niven (2012), the implementation of the BSC in the public sector sphere has evolved, and innovative managers are discovering new ways to utilize this management tool; this aligns with Griffiths' (2003) finding that the BSC can be used to enhance public organizations' transparency and accountability. This finding also resonates with Northcott and Ma'amora Taulapapa's (2012) conclusions that the BSC is helpful to report a statement of service performance of the local government. Nevertheless, these studies do not specifically examine the significance of BSC in improving government accountability. Additionally, the benefits of BSC implementation on performance reporting practices in the public sector are rarely discussed, especially in developing countries.

Moreover, this research also examines other organizational factors, including the types of ministries/agencies' service, an affiliation of the ministers/chief of the agencies, the structure of the organizations, and the education level of employees. For example, Suharyanto et al. (2018) found that better employee education will improve performance accountability. Furthermore, since NPM is driven by the concept of economic rationalism (Hood, 1995); thus, the ministry/agency that works in economic services is supposed to have better performance accountability. Hood (1991) suggested that NPM also promotes the private-sector style of management practice rather than military-style 'public service ethic'; consequently, it indicates ministries/agencies lead by professionals may have better performance accountability than military-based ministries/agencies.

Since there are gaps in the quality of performance accountability system among ministries/agencies based on MoSABR's assessment; this research aims to investigate the factors affecting the quality of performance accountability in the Indonesian central government, focusing on the ministries/agencies' total expenditure budget, BSC implementation, and other organizational factors such as employee education and service types. The literature regarding the Indonesian government's performance accountability mainly addresses the problem in local governments (Ahyaruddin & Akbar, 2018; Eckardt, 2008; Riantiarno & Azlina, 2011; Suharyanto et al., 2018; Tahir et al., 2016; Triyulianto, 2018). Therefore, this research examines the factors affecting the performance accountability system in the Indonesia Central government, specifically using panel data analysis (random effect model) from 78 ministries/agencies. Consequently, this study also provides recommendations to the Indonesian government for improving the central government's performance accountability system.

2. Methods

This research employs panel data analysis to examine the factors that significantly affect performance accountability. By employing panel data, the research is able to examine the dynamic of changes within short time period through repeated observations of cross-sections (Yaffee, 2003). In addition, Gujarati (2004) also pointed out that Panel data allows more informative data, more variability, more degrees of freedom and less collinearity. Since this research studies the factors that significantly influence performance accountability by analyzing the data from government ministries/agencies within certain period of time; therefore, panel data analysis is a suitable model for this research. The variables of the research are secondary data, derived from the ministries and agencies, such as MoSABR' assessment reports, National Civil Service Agency's reports and ministries/agencies' performance reports. Additionally, the data are also retrieved from central government regulations regarding performance accountability system, ministries/agencies' websites, and relevant news article. Due to limited data, this study focuses on the performance accountability of 78 ministries and agencies from 2017 to 2019.

2.1. Dependent Variables

The scores of ministries/agencies' performance accountability system (SAKIP) act as a dependent variable. According to MoSABR, the accumulated score is categorized into seven groups.

Table 1. Score Categorization

Score	Categories	Definition
> 90–100	AA	Very excellent
> 80–90	A	Excellent
> 70–80	BB	Very good
> 60–70	B	Good
> 50–60	CC	Fair
> 30–50	C	Poor
0–30	D	Very poor

Source: Ministry of Home Affairs Personnel Bureau, November 2020

2.2. Independent Variables

Furthermore, the independent variables can be described as follows:

- The total expenditure budget of each ministry/agency (in Rupiah) is taken from financial notes of the 2021 state budget. This variable is used to test whether expenditure budget/budget spending significantly influences the performance accountability system.
- Ministries/agencies performance management tool, which is categorized whether ministries/agencies use BSC as their performance management tool or do not use any performance management tool. The data are acquired from each ministry/agency performance report and regulations. This variable examines whether BSC implementation significantly affects the performance accountability system.

In addition, this research also accommodates organizational factors as independent variables, including:

- The type of ministries/agencies' services is categorized into three categories: 1. Politics, laws, and securities; 2. Human development and culture; 3. Economic, adapted from financial notes of 2015 state budget. This variable examines whether different types of services significantly affect the performance accountability system.
- The structure of the ministries/agencies, which is categorized into two groups: 1. non-vertical organizations, the ministries/agencies that do not have any branches in provinces/districts; and 2. Vertical organizations, the ministries/agencies that have components in provinces/districts. This variable aims to assess whether the structure of the organizations significantly influence the performance accountability system.
- The affiliation/background of each minister and chief of the agency is classified into four categories: 1. Military/police; 2. Professional/entrepreneur; 3. Politician; and 4. Technocrat. The data are retrieved from each ministry/agency website and news websites. This variable is used to examine whether the background of each minister significantly affect the performance accountability system.
- The education percentage is the percentage of employees who have vocational degrees, graduate and post-graduate degrees for each ministry/agency. The data are retrieved from National Civil Service Agency. This variable is applied to test whether the education level considerably impacts the performance accountability system.

2.3. Empirical Model

Based on the Chow test, Hausmann test, and Breusch-Pagan LM test, the best-suited model for this research is the random effect model, as follows:

$$Y_{it} = \alpha_i + \beta_1 \ln_budg_{it} + \beta_2 tool_n_{it} + \beta_3 serv_n_{it} + \beta_4 struct_n_{it} + \beta_5 affil_n_{it} + \beta_6 edu_percent_{it} + \mu_{it} + \varepsilon_{it}$$

where:

Y_{it}	= the score of the performance accountability system, i = entity, and t =time
α_i	= the unknown intercept for each entity
β	= the coefficient for each independent variable
\ln_budg	= Natural logarithm of the total expenditure budget
$tool_n$	= The performance management tool
$serv_n$	= The type of organization's service
$struct_n$	= The structure of the organization
$affil_n$	= The affiliation of each minister and chief of the agency
$edu_percent$	= The education percentage
μ_{it}	= between entity error
ε_{it}	= within entity error

3. Results and Discussion

3.1. Statistics Descriptive

Table 2. Classification of the Number of ASN by Position

No.	Ministries/Agencies	Performance Accountability Scores		
		2017	2019	Growth
1	Maritime Security Coordinating Board	31.23	50.48	61.64%
2	Creative Economy Agency	55.43	69.69	25.73%
3	Supreme Court	64.69	73.84	14.14%
4	Ministry of Land and Spatial Planning	61.50	68.82	11.90%
5	National Committee of Human Rights	56.46	62.19	10.15%
6	National Service Civil Agency	60.01	66.09	10.13%
7	Attorney General	62.11	67.86	9.26%
8	Ministry of Transportation	68.66	74.80	8.94%
9	Maritime Coordinating Ministry	63.54	68.59	7.95%
10	National Library	62.94	67.62	7.44%
11	Secretary-General of People's Representative Council	60.31	64.60	7.11%
12	Ministry of Justice and Human Rights	71.64	76.71	7.08%
13	Ministry of State-Owned Enterprises	68.99	73.72	6.86%
14	Ministry of Social Services	65.80	70.12	6.57%
15	Cabinet Secretariat	68.63	73.08	6.48%
16	State Ministry for Development Planning	76.29	81.19	6.42%
17	State Cryptography Agency	60.24	64.05	6.32%
18	Coordinating Ministry for Human development	70.18	74.48	6.13%
19	Ministry of Youth and Sports Affairs	62.58	66.21	5.80%
20	National Agency of Drug and Food Control	74.37	78.60	5.69%
21	Ministry of Energy and Mineral Resources	72.10	76.10	5.55%
22	National Defense Council	61.24	64.58	5.45%
23	Secretary-General of Regional Representative Council	60.18	63.46	5.45%
24	National Search and Rescue Agency	68.05	71.17	4.58%
25	Indonesian National Police	72.11	75.41	4.58%
26	National Population and Family Planning Board	63.37	66.17	4.42%

No.	Ministries/Agencies	Performance Accountability Scores		
		2017	2019	Growth
27	State Administration Agency	70.98	74.03	4.30%
28	Ministry of Finance	84.54	88.13	4.25%
29	Ministry of Environment and Forestry	67.08	69.86	4.14%
30	Secretariat General of People's Consultative Assembly	60.07	62.41	3.90%
31	Coordinating Ministry for Economic Affairs	66.24	68.76	3.80%
32	Ministry of Manpower	63.66	66.05	3.75%
33	Meteorology, Climatology, and Geophysical Agency	70.03	72.51	3.54%
34	Ministry of Cooperatives and SMEs	62.98	65.10	3.37%
35	Ministry of Women Empowerment and Child Protection	62.32	64.25	3.10%
36	National Agency for Disaster Counter measure	68.80	70.92	3.08%
37	National Defense Institute	60.24	62.02	2.95%
38	Election Supervisory Agency	60.63	62.37	2.87%
39	National Public Procurement Agency	61.95	63.65	2.74%
40	Geospatial Information Agency	63.60	65.19	2.50%
41	Ministry of Health	75.60	77.38	2.35%
42	National Standardization Body	66.88	68.43	2.32%
43	Ministry of Village, Development of Disadvantaged Regions and Transmigration	61.87	63.30	2.31%
44	National Archives of Indonesia	66.27	67.80	2.31%
45	Ministry of Tourism	75.87	77.58	2.25%
46	Ministry of Industry	76.32	78.04	2.25%
47	National Narcotics Agency	62.59	64.00	2.25%
48	Ministry of Agriculture	72.46	74.05	2.19%
49	General Elections Commission	63.41	64.75	2.11%
50	Financial Audit Board	81.43	83.15	2.11%
51	National Agency of Placement and Protection of Indonesian Manpower	67.02	68.40	2.06%
52	Nuclear Energy Regulatory Agency	70.47	71.84	1.94%
53	Ministry of Home Affairs	71.97	73.30	1.85%
54	Ministry of Public Works and Public Housing	71.60	72.90	1.82%
55	Ministry of Trade	73.04	74.34	1.78%
56	Ministry of State Secretariat	74.91	76.24	1.78%
57	Financial Transaction Reports and Analysis Center	75.59	76.86	1.68%
58	Corruption Eradication Commission	80.30	81.64	1.67%
59	Judicial Commission	65.29	66.34	1.61%
60	Agency of Technology Application	71.78	72.92	1.59%
61	Investment Coordinating Board	73.67	74.83	1.57%
62	National Government Internal Auditor	78.13	79.19	1.36%
63	Indonesian Institute of Sciences	72.33	73.31	1.35%
64	Central Bureau of Statistic	74.96	75.90	1.25%
65	National Institute of Aeronautics and Space	73.36	74.24	1.20%
66	Coordinating Ministry for Political, Legal and Security	69.04	69.74	1.01%

No.	Ministries/Agencies	Performance Accountability Scores		
		2017	2019	Growth
67	Ministry of Research, Technology and Higher Education	72.91	73.62	0.97%
68	Constitutional Court	73.26	73.93	0.91%
69	Ministry of Communication and Information Technology	66.44	66.99	0.83%
70	Ministry of Religious Affairs	70.04	70.52	0.69%
71	Ministry of State Apparatus Empowerment and Bureaucracy Reform	80.18	80.68	0.62%
72	Ministry of Foreign Affairs	75.94	76.03	0.12%
73	Ministry of Education and Culture	75.94	75.93	-0.01%
74	Ministry of Defense	65.38	65.22	-0.24%
75	National Agency for Combating Terrorism	60.83	60.61	-0.36%
76	Ministry of Marine Affairs and Fisheries	82.45	82.04	-0.50%
77	National Nuclear Energy Agency	75.59	73.68	-2.53%
78	Indonesian Ombudsman	68.62	60.08	-12.45%

Source: Compiled by the author from MoSABR

The MoSABR assessment report shows that from 2017 to 2019, the ministries/agencies' performance accountabilities mostly show an increasing trend, as shown in Table 2. From the total of seventy-eight ministries/agencies, seventy-two ministries/agencies (92.31%) have growth in performance accountabilities, while the other six ministries/agencies (7.69%) experience decreasing performance accountabilities. The number of ministries/agencies with rank "A" also increased, from five to six ministries/agencies. It suggests that the overall ministries/agencies' performance accountabilities are improving. The Ministry of Finance earned the highest score in 2019, by 88.13 (A). On the other hand, the Maritime Security and Coordinating Board had the lowest score in 2017, by 31.23 (C). Additionally, the mean performance accountability score is 69.49. Even though the overall score is improving yet, no ministry/agency achieves the highest-ranking (AA).

Table 3. Expenditure Budget's Growth (in Billion Rupiah)

No	Ministries/Agencies ¹	2017	2019	Growth
Top 5				
1	Ministry of Social Services	17,164.6	57,726.6	236.31%
2	Election Supervisory Agency	1,980.1	6,403.4	223.39%
3	General Elections Commission	5,423.7	17,432.3	221.41%
4	National Agency for Disaster Countermeasure	2,644.4	8,079.9	205.55%
5	Cabinet Secretariat	210.7	387.5	83.91%
Bottom 5				
1	Maritime Security Coordinating Board of the Republic of Indonesia	720.6	424.1	-41.15%
2	National Agency for Combating Terrorism	715.9	387.5	-45.87%
3	State Ministry for Development Planning	2,993.2	1,580.2	-47.21%
4	Ministry of Youth and Sports Affairs	3,954.6	2,051.2	-48.13%
5	National Defense Council	159.8	49.3	-69.15%

Source: Compiled by the author from Financial Notes of 2021 State Budget

The Ministry of Defense has the highest expenditure budget at Rp117.22 billion; contrarily, National Defense Council receives the smallest spending at Rp40.70 billion. In addition, from 2017 to 2019, 56 ministries/agencies (71.79%) have a growing expenditure budget, while 22 ministries/agencies (28.21%) experience decreasing budgets. The highest surge occurred in the Ministry of Social Services (236.31%), Election Supervisory Agency (223.37%), and General Elections Commission (221.41%). The significant increase in the Ministry of Social Services due to the rise in the Poverty Management Program's budget, while the substantial surge in Election Supervisory Agency and General Elections Commissions aimed to support Indonesia's general election in 2019 (Indonesian Government, 2018).

3.2. The Result of Random Effect Regression

Before conducting the random effect GLS regression, this research first conducts the correlation test for all the independent variables to examine no multicollinearity in the model. Several studies suggested that if the coefficient correlation is above 0.7, a strong correlation will lead to unreliable independent variables. The result shows that there was no variable that had a correlation coefficient above 0.7; therefore, all the independent variables were not correlated.

Table 4. The Random Effect Regression Result

Variables	Coefficient (Standard Error)
ln_budg	0.9732603*** (0.366924)
tool_n BSC	2.173803 ** (1.053223)
serv_n Human development and culture	2.324848 (1.704739)
Economy	3.837009 ** (1.799191)
struct_n Vertical	0.9442475 (1.514256)
affil_n Professional/Entrepreneur	0.859773 (1.586774)
Politician	0.5873595 (1.122693)
Technocrat	-0.0210779 (1.14496)
edu_per	7.484058 *** (3.631919)
Prob>chi2	0.0004
Rho	0.88152764
Nu of obs	234
Nu of groups	78

Notes:

significance at 95% and 90%, * significance at 99%, 95% and 90%

The result presented in Table 4 suggests that four variables have positive and significant effects on performance accountability: 1. Total expenditure budget; 2. Performance management tool; 3. The type of organization's services; and 4. Employees' education. Table 4 also shows that Prob>chi2 was 0.0004, indicating that the model is fit. Moreover, Rho was 0.8815, which defines that 88,15% of the variation in performance accountabilities is related to the panel's differences; the error term explains the other 11.85%.

3.3. The Effect of Total Expenditure Budget

According to the random effect GLS regression's result, the total expenditure budget has a positive impact on performance accountability with the significance level (α) under 1%. Moreover, every 1% of the additional expenditure budget will increase performance accountability by 0.009733 (0.9733/100), in a condition that all other variables are constant. This outcome aligns with the finding from Wardhani et al. (2017) and Eckardt (2008) that studied the case of local government. Consequently, with this finding, it can be inferred that the total expenditure budget positively affects both central and local governments' performance accountabilities. This outcome indicates that the ministries/agencies become more aware of accountability when the central government mandates larger budgets. The high-expenditure ministries/agencies become more responsible for accountability in spending their budget; therefore, they practice more robust scrutiny and a comprehensive auditing process (Brinkerhoff & Wetterberg, 2013).

The Ministry of Social Services, which has the highest budget growth, encounters a significant increase in performance accountability by 6.57%, consequently improving its ranking from "B" to "BB." In addition, National Agency for Disaster Countermeasure also levels up its ranking (from "B" to "BB"), at the same time experiencing a substantial budget growth of 205.55%. Contrarily, the State Ministry for Development Planning experiences a significant budget drop of 47.21%. Yet, its performance accountability improved by 6.42%, followed by ranking's improvement (from "BB" to "A"). According to the State Ministry for Development Planning's performance report, in 2017, the central government provided an extensive budget to carry out special assignments from the president Jokowi, such as coordinating the implementation of Sustainable Development Goals (SDGs) and conducting a study of Indonesia capital relocation (State Ministry for Development Planning/National Development Planning Agency, 2018). Consequently, in the following years, its usual budgets declined significantly.

Moreover, several ministries have decreased performance accountability, despite increasing expenditure budgets. For instance, the Ombudsman report shows a significant performance accountability drop at 12.45%, despite an increasing budget, by 28.70%. Based on the Ombudsman's 2019 performance report, the declining performance accountability may be due to decreased organizational achievement (Ombudsman, 2020). Therefore, not all ministries efficiently and effectively exercise their expenditure budgets to prompt performance accountability. The data suggest that ministries in financial services are more efficient in their budget spending, enhancing their performance accountability. This finding aligns with Wardhani et al.'s (2017) finding that ministry spending is efficient in improving performance accountability in a particular area, which in this case is economic service.

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3.4. The Effect of BSC Implementation

The regression output confirms that BSC implementation positively and significantly affects performance accountability, with the significance level (α) under 5%. With all other variables being constant, the ministries/agencies that adopt BSC tends to

experience increasing performance accountability by 2.17 times compared the ministries/agencies that do not adopt BSC. This finding supports the arguments from Griffiths (2003) and Northcott and Ma'amora Taulapapa (2012) that BSC implementation is useful to improve government performance accountability. The data illustrate that 24 ministries/agencies (30.77%) have adopted the BSC. The majority of ministries with BSC are from the economic services due to the characteristic of economic ministries that uphold efficiency and effectiveness, which are also supported by BSC implementation.

Table 5. Top Ten Performance Accountability Rankings and Types of Performance Management Tool

No	Ministries/Agencies	Performance Accountability's Scores		Performance Management Tool
		2017	2019	
1	Ministry of Finance	84.54	88.13	BSC
2	Financial Audit Board	81.43	83.15	BSC
3	Ministry of Marine Affairs and Fisheries	82.45	82.04	BSC
4	Corruption Eradication Commission	80.30	81.64	BSC
5	State Ministry for Development Planning/ National Development Planning Agency	76.29	81.19	None
6	Ministry of State Apparatus Empowerment and Bureaucracy Reform	80.18	80.68	None
7	National Government Internal Auditor	78.13	79.19	BSC
8	National Agency of Drug and Food Control	74.37	78.60	BSC
9	Ministry of Industry	76.32	78.04	BSC
10	Ministry of Tourism	75.87	77.58	BSC

Source: Compiled by the author from MoSABR, and ministries/agencies' performance report

Table 5 displays that 80% of ministries/agencies in the top 10 performance accountability ranking implement BSC—the Ministry of Finance, Financial Audit Board, and ministry of Marine Affairs and fisheries are consistently in the top three. According to the Ministry of Finance's performance reports and the Financial Audit Board's performance reports, both have implemented BSC for more than ten years, leading to more advanced performance accountability. Since most of the ministries/agencies with BSC already have relatively high-performance accountability or are already in the maturity stage, they do not encounter an extensive growth in performance accountability. In contrast, the Ministry of Marine Affairs and Fisheries shows shrinking growth. However, the score drop does not affect the ministry's performance accountability ranking.

3.5. The Effect of Organizational Factors

Regarding regression output, ministries/agencies' service types significantly influence performance accountability, with the significance level (α) under 5%. In addition, the ministries/agencies that work in economic matters tend to have higher performance accountability by 3.84, compared to the ministries/agencies that work in politics, laws, and security affairs, under all other variables being constant. In addition, Table 6 illustrates that about 70% of ministries/agencies, in the top ten performance accountabilities, work in economic affairs. Therefore, it can be inferred that the ministries/agencies that work in economic matters tend to have greater performance accountability. This outcome correlates with an argument from Hood (1995) that economic rationalism promotes NPM, which encourage accountability practices.

The regression output demonstrates that the employees' education level significantly and positively influences performance accountability under 5% significance level, supporting Suharyanto et al. (2018) finding. Specifically, every 1%

Table 6. Top Ten Performance Accountability's Rankings and Service Types

No	Ministries/Agencies	Performance Accountability's Scores		Service Types
		2017	2018	
1	Ministry of Finance	84.54	88.13	Economy
2	Financial Audit Board	81.43	83.15	Economy
3	Ministry of Marine Affairs and Fisheries	82.45	82.04	Economy
4	Corruption Eradication Commission	80.30	81.64	Politics, laws and securities
5	State Ministry for Development Planning/ National Development Planning Agency	76.29	81.19	Economy
6	Ministry of State Apparatus Empowerment and Bureaucracy Reform	80.18	80.68	Politics, laws and securities
7	National Government Internal Auditor	78.13	79.19	Economy
8	National Agency of Drug and Food Control	74.37	78.60	Human development and culture
9	Ministry of Industry	76.32	78.04	Economy
10	Ministry of Tourism	75.87	77.58	Economy

Source: Compiled by the author from MoSABR

of additional employees that receive tertiary education will increase performance accountability by 7.48%. Furthermore, Table 7 categorizes employee education into five categories, based on the percentage of vocational and university education employees. The categories range from very highly educated to less educated. It can be seen that a ministry with highly educated employees gets the highest average score (71.96), followed by a ministry with very highly educated employees (71.06). In contrast, ministries with less-educated employees have the lowest average score (68.68). Although education level favorably influences performance accountability, the data shows that several ministries still have low-performance accountability scores. Consequently, this indicates that ministries with very highly educated employees do not fully optimize their high human capital to generate better performance accountability.

Table 7. Employee Education Level

No	Scores	Categories	Average Performance Accountability Scores in 2019
1	100 > 90	Very highly educated employee	71.06
2	90–80	Highly educated employee	71.96
3	80–70	Well-educated employee	70.87
4	60–70	Fair educated employee	68.81
5	less than 60	Less-educated employee	68.68

Source: Compiled by the author from MoSABR and National Civil Service Agency

In contrast with the above findings, the organizations' structure and the leaders' affiliations do not significantly affect performance accountability based on regression output. The insignificance of ministries/agencies' structures is likely due to centralized accountability systems in vertical and non-vertical ministries/agencies; therefore, there is no substantial difference between performance accountability in non-vertical and vertical ministries/agencies. In terms of leaders' affiliations, the president often replaced the ministers/agencies leaders with various affiliations to be in charge of specific ministries/agencies; consequently, a ministry/agency can be led by different officers with different affiliations within a short period. This circumstance likely causes the insignificance of leaders' affiliations.

4. Conclusion

This study explores the factors that affect performance accountability in the Indonesian central governments, focused on expenditure budget and BSC implementation. The statistical result shows that the total expenditure budget and BSC implementation significantly and positively influence performance accountability in the Indonesian ministries/agencies. The random effect regression also found that ministries/agencies working in economic services have higher performance accountability than ministries/agencies working in politics, laws, and security. Additionally, the results show that the better the education level of employees, the better performance accountability.

The Ministry of Social Services, the National Agency for Disaster Countermeasure, and the State Ministry for Development Planning efficiently and effectively utilize their spending and high human capital to produce significant performance accountability growth. However, other ministries and agencies still do not efficiently and/or effectively utilize their expenditure budget to generate better performance accountability. As a result, some ministries, for instance, Ombudsman and National Nuclear Energy Agency, still experience declining performance accountability despite having an increased expenditure budget. Furthermore, the results show that ministries in economic services, for instance, the Ministry of Finance and the Financial Audit Board, are more efficient in their budget spending and more aware of conducting performance management tools (BSC) which enhances their performance accountability. Therefore, it can be inferred that NPM-based bureaucratic reforms in the Indonesian central government have not been appropriately implemented in all ministries/agencies.

This study suggests several policies to enhance central government performance accountabilities based on the above findings: 1. The ministries/agencies should efficiently and effectively exercise their budget through better strategic planning, scrutiny, and audits; 2. The ministries/agencies should consider implementing performance management tools such as BSC to improve their performance measurements; 3. The ministries/agencies should strengthen their employee education and training, specifically performance management; and 4. Finally, the ministries/agencies should be more accountable and publicly publish their performance reports; notably, many do not publish their performance reports on their websites even though the laws are already regulated.

Due to COVID-19 restrictions, only a limited amount of secondary data could be employed for this study, particularly the performance accountability data from 2017 to 2019; thus, this research could not comprehensively capture and examine the development of the central government's performance accountability. Furthermore, this research only focuses on the total budget without compromising the allocated budget. Therefore, further studies should adopt primary data collection methods (surveys/interviews), address additional aspects of the budget, such as the budget absorption rate, and consider specific shares of the expenditure budget, such as employee's salary spending.

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