INOVATOR
Jurnal Manajemen
P-ISSN: 1978-6387
E-ISSN: 2623-050X
Vol. 14 No. 2 Page 51-58 http://ejournal.uika-bogor.ac.id/index.php/INOVATOR

Investigates the impact of the value of machinery and buildings on the allocation of maintenance expenditure in work units under the auspices of the Ministry of Education and Culture

Elida Murni*, Nurmala Ahmar, Darmansyah
Universitas Pancasila, Indonesia

Info Artikel

Keywords:
Equipment and Machinery, Buildings and Structures, Maintenance Expenditure Allocation.

ISSN (print): 1978-6387
ISSN (online): 2623-050X

Abstract

The objective of this study is to analyze the effect of machinery, equipment, and building values on the allocation of maintenance expenditures in work units within the Ministry of Education and Culture (period 2016-2019). The present study utilizes secondary data, in the form of financial reports, namely the Balance Sheets for the 2016 to 2018 Fiscal Years and the Budget Realization Reports for the 2017 to 2019 Fiscal Years, sourced from the Ministry of Finance website. The Ministry of Education and Culture comprises 96 work units within its purview. The data analysis techniques employed in this study encompass descriptive analysis, data quality testing, and hypothesis testing. The data were analyzed using SPSS (Statistical Package for the Social Sciences) and multiple regression analysis. The findings indicate that the value of machinery and building equipment exerts a significant and positive influence on the allocation of maintenance spending in work units within the Ministry of Education and Culture during the period 2016-2019.

Author Correspondence:
Elida Murni

Introduction

The government is currently engaged in efforts to enhance the effectiveness, efficiency, and optimization of the management of State Property (BMN) and the State Budget (APBN), with a focus on ensuring the quality of revenue and expenditure/spending.The planning of BMN needs is crucial for the management of the state budget, facilitating more measured spending, both in terms of procurement and maintenance.

This comprehensive planning encompasses the procurement, maintenance, utilization, transfer, and disposal of BMN, meticulously tailored to align with the operational demands of ministries and institutions, while accounting for the existing BMN.The formulation of the Procurement and Maintenance RKBMN is a critical aspect of this multifaceted process. The procurement of RKBMN is defined as the acquisition of land and/or buildings for government offices and state houses, while the maintenance of RKBMN encompasses the formulation of maintenance needs for BMN controlled, based on information regarding the existence, condition, and status of BMN use.The realization of RKBMN procurement and maintenance will result in an increase in the value of fixed assets and maintenance expenditures.

Maintenance expenditure is defined as any expenditure incurred for the purpose of preserving the integrity and functionality of fixed assets or other existing assets, irrespective of the amount expended.Maintenance expenditures encompass a wide range of expenses, including, but not limited to, land maintenance, building and office building maintenance, official residences, official motor vehicles, repair of building equipment and facilities, roads, irrigation networks, machine tools, and other facilities related to government administration (Government Accounting Standards Technical Bulletin Number 04).

The Ministry of Finance (MoF) reported that capital expenditure realization during the 2014-2019 period exhibited an average annual growth of 4.1%. This growth rate was the lowest when compared to other types of spending by ministries and agencies.The report received feedback from the board of leaders and members of the DPR RI Budget Committee at the 2020 Draft Central Government Budget Working Committee Meeting on Thursday (6/27). This discrepancy is attributable to the disparity between capital expenditure growth and that of other expenditure categories over the past five years.For instance, goods expenditure, encompassing maintenance expenditure, exhibited an average annual growth of 14.3% during the 2014-2019 period.Conversely, capital expenditure grew by a mere 4%, indicating that maintenance expenditure has surpassed capital expenditure in generating fixed assets (Ministry of Finance, 2020).

The Ministry of Education and Culture, a government agency, has allocated a budget for maintenance purposes. In 2016, the ministry's maintenance budget amounted to IDR 301,492,645,719.

It is worth noting that a number of studies have been conducted to explore the factors that influence maintenance spending. For instance, Dio Koes Brillianto and Rahadi Nugroho's work in 2019, titled "The Effect of Fixed Asset Value and Capital Expenditure on Maintenance Expenditure Allocation," offers insights into this area.According to the Financial Education and Training Agency, the value of

fixed assets appears to have an influence on maintenance spending, while capital expenditure does not seem to have a direct impact on maintenance spending.

In a similar vein, Grace Dona Harlita Tarihoran (2016) explored the factors influencing the SKPD maintenance expenditure budget in the Tebing Tinggi City Government, concluding that the value of fixed assets does have an effect on maintenance spending, while capital expenditure does not appear to have a significant impact. In a different study, Karro Karo (2006) explored the relationship between capital expenditure and operational and maintenance budgets in regency/city governments in Java in 2003 and 2004. Their findings indicated that capital expenditure did not have a significant impact on maintenance expenditure.

However, it should be noted that there are also studies that suggest a different relationship between capital expenditure and maintenance spending. For instance, Liana Ramadhani (2015) in her study titled "The Effect of Regional Original Revenue, Capital Expenditure and Value of Fixed Assets on Maintenance Expenditure" posits that the value of fixed assets does not impact maintenance spending, while capital expenditure does have an effect on maintenance spending.

Pujiastuty (2017) in her analysis of factors affecting the allocation of maintenance expenditure budgets at the Ministry of Finance's General Secretariat suggests that the value of fixed assets and capital expenditure do have an impact on maintenance expenditure. In a similar vein, Hasibuan (2015) in the study titled "The Effect of the value of fixed assets to be maintained, capital expenditure, and local original income on the district/city maintenance budget in North Sumatra Province from 2012 to 2014" points to a similar conclusion, suggesting that the value of fixed assets and capital expenditure have an impact on maintenance spending. H Anggaran Budi (2019) in his analysis of the Effect of Capital Expenditure and Regional Original Revenue on Maintenance Expenditure of Regency and City Governments in Aceh Province, suggests that capital expenditure may have an impact on maintenance expenditure.Lumbanraja, Rentina Murni (2019) in her analysis of the Relationship between Capital Expenditure and Maintenance Expenditure in the Serdang Bedagai Regency Government, indicates that capital expenditure could potentially influence maintenance expenditure. Ahmad, Rasyidi Fajrin (2016) regarding the Effect of Capital Expenditure on Maintenance Expenditure in the Regency/City Governments throughout West Sumatra Province states that capital expenditure has an effect on maintenance expenditure. Halimah, Tusa'diah (2015) presents an analysis of the effect of capital expenditure and regional original revenue (PAD) on maintenance expenditure in the realization of the regional government budget (case study on the city government), suggesting a potential impact of capital expenditure on maintenance expenditure. In a similar vein, Gede Widiasa, Edy Sujana, and Nyoman Ari Surya Darmawan (2014) in their study on Capital Expenditure and Regional Own Source Revenue (PAD) on

Maintenance Expenditure in the Realization of the Regional Government Budget (Case Study of Buleleng Regency Government) also suggest that capital expenditure has an effect on maintenance expenditure. Rustiyaningsih (2012) offers a nuanced perspective in her study, "The Effect of Capital Expenditure on the Maintenance Budget," which employs a case study approach in regencies and cities within the scope of the East Java Provincial Government. She suggests that capital expenditure has a significant impact on maintenance spending. Sembiring (2009) offers a nuanced perspective in his analysis of the Effect of Capital Expenditure and Regional Original Revenue on Maintenance Expenditure in the Realization of Regency and City Government Budgets in North Sumatra Province, suggesting that capital expenditure may have an impact on maintenance expenditure. Abdullah and Halim (2006) provide a complementary viewpoint in their study on capital expenditure in local government budgets in relation to maintenance expenditure and sources of income, proposing that capital expenditure could also have an effect on maintenance expenditure.

Research Method

Type of Research

This Research employs a quantitative approach, which prioritizes the empirical evaluation of theoretical concepts through the measurement and statistical analysis of research variables. The objective of quantitative research is to test hypotheses.

Population and Sampling Techniques

The population of this study comprises the work units within the Ministry of Education and Culture.The study employs purposive sampling, a technique that involves the selection of work units based on specific criteria. Specifically, purposive sampling was utilized to select work units from the Echelon unit of the General Secretariat, the Directorate of Education and Culture, the Directorate General of Culture, and the Directorate of Teachers and Education Personnel. These units were chosen for their involvement in public services, education, teacher training, and cultural activities.

The study utilizes documentary data, defined as information that is obtained in a finished form, such as annual financial reports of work units within the Ministry of Education and Culture. The present study utilizes secondary data, manifesting as financial reports, specifically the Balance Sheets for the Fiscal Years 2016 to 2018 and the Budget Realization Reports for the Fiscal Years 2017 to 2019. These documents are accessible on the official website of the Ministry of Finance. The secondary data in this study includes the value of equipment and machinery and buildings obtained from book values, and the allocation of maintenance expenditures from net expenditures.

Results

Data Normality Test

Based on the results of the normality test in Table 1, it shows that the Asymp. Sig. (2-tailed) in the Unstandardized Residual column is 0.1727 and this value is greater than α = 0.05. Thus, it can be concluded that the research data meet the normality test requirements. If the results show a value less than 0.05, the research data is said to be abnormal. So, in this normality test it can be said that the data is normally distributed.

Table 1. Summary of Data Normality Test

Keterangan	N	Asymp. Sig. (2-tailed)	Kesimpulan
One-Sample Kolmogorov-Smirnov Test	96	0.727	H0 diterima (Data residual terdistribusi normal)

Source: Primary data

Hypothesis Testing

Equipment and machinery variables individually affect the maintenance expenditure variable. This can be seen from the t value of 2.768 and a significance of 0.007, while the t table at a significance of 0.05 = 1.661 with degrees of freedom df = n-k-1 or 96-2-1 = 93. The results obtained are the value of t count> t table (2.768> 1.661) with a regression coefficient of 0.339 (positive). So, it can be concluded that equipment and machinery have a significant positive effect on maintenance expenditure.

Building and building variables individually affect the maintenance expenditure variable. This can be seen from the t value of 3.122 and a significance of 0.002, while the t table at a significance of 0.05 = 1.661 with degrees of freedom df = n-k-1 or 96-2-1 = 93. The results obtained are the value of t count> t table (3.122> 1.661) with a regression coefficient of 0.276 (positive). So, it can be concluded that buildings and structures have a significant positive effect on maintenance expenditure.

The results of these statistical calculations indicate that all variables included in the model affect maintenance expenditures. These variables are equipment and machinery (PM) and buildings and structures (GB).

The model estimation results can be written in the equation below:

BP = 0.864+ 0.339 PM + 0.276 GB + e

The equation can be interpreted:

a. If the value of the variable equipment and machinery (PM) increases by one million while the value of other variables remains constant (ceteris paribus), it will result in an increase in the value of the variable maintenance expenditure (BP) by 0.339 million.

If the variable value of buildings and structures (GB) increases by one million while the value of other variables remains constant (ceteris paribus), it will result in an increase in the variable value of maintenance expenditure (BP) by 0.276 million.

The test results of the Determination Coefficient Test in Table 4.10 above show the coefficient of determination (R Square) of 0.481, which means that the value of maintenance expenditure (BP) can be explained by the model (with the independent variables of equipment and machinery and buildings and buildings) by 48%, while the remaining 52% is explained by other factors that are not modeled in this study. This shows that the contribution of the influence of the independent variables simultaneously on the dependent variable is quite strong.

Conclusions

The results of this quantitative research were obtained through quantitative research stages with the results of data processing, statistical calculations and hypothesis testing. From the results of testing the hypotheses, it can be concluded that The Value of Equipment and Machinery (PM) has a significant positive effect on the Maintenance Expenditure Allocation (MEA). The value of buildings and structures (GB) has a significant positive effect on Maintenance Expenditure Allocation (MEA).

This study has limitations that require improvement and development in subsequent studies, as for the limitations in this study, namely the selection of the range of years of data collection only from 2016 to 2019 due to limited information obtained, the variables studied only use two variables that affect the allocation of Maintenance Expenditure (BP), namely Equipment and Machinery (PM) and Buildings and Buildings (GB). And the sample consists of only 35 work units because not all work units have data.

References

Abdullah, & Halim. (2006). *Capital expenditure in local government budgets in relation to maintenance expenditure and revenue sources*. Jakarta: Gramedia Publisher.

Ahmad, Rasyidi Fajrin. (2016). *The Influence of Capital Expenditure on Maintenance Expenditure in Regency / City Governments in West Sumatra Province *. Journal of Public Accounting, 8(2), 45-60.

Dio Koes Brillianto, & Rahadi Nugroho. (2019). *The Influence of Fixed Asset Value and Capital Expenditure in the Allocation of Maintenance Expenditure of the Financial Education and Training Agency*. Journal of Economics and Finance, 5(1), 12-25.

Gede Widiasa, Edy Sujana, & Nyoman Ari Surya Darmawan. (2014). *Capital Expenditure and Local Revenue on Maintenance Expenditure in Local Government Budget Realisation (Case Study of Buleleng Regency Government)*. Journal of Regional Economics, 3(2), 34-45.

Grace Dona Harlita Tarihoran. (2016). *Factors Affecting SKPD Maintenance Expenditure Budget in Tebing Tinggi City Government*. Journal of Regional Accounting, 4(3), 67-80.

Hasibuan. (2015). *The Influence of the Value of Fixed Assets to be Maintained, Capital Expenditure, and Local Revenue on Regency / City Maintenance Expenditure Budgets in North Sumatra Province in 2012-2014*. Journal of Economics and Public Policy, 6(1), 22-35.

Karro Karo. (2006). *The Relationship between Capital Expenditure and Operating and Maintenance Budgets of Regency/City Governments in Java in 2003 and 2004*. Journal of Government Economics, 3(1), 12-22.

Liana Ramadhani. (2015). *The Influence of Local Revenue, Capital Expenditure and Fixed Asset Value on Maintenance Expenditure*. Journal of Public Management, 2(3), 55-70.

Lumbanraja, Rentina Murni. (2019). *An Analysis of the Relationship between Capital Expenditure and Maintenance Expenditure at the Serdang Bedagai Regency Government*. Journal of Public Administration, 5(2), 45-58.

Pujiastuty. (2017). *Analysis of Factors Affecting Maintenance Expenditure Budget Allocation at the Secretariat General of the Ministry of Finance*. Journal of Accounting and Finance, 7(1), 21-35.

Rustiyaningsih. (2012). *The Influence of Capital Expenditure on Maintenance Expenditure Budget with Case Studies in Districts and Cities within the East Java Provincial Government*. Journal of Regional Finance, 4(2), 30-45.

Sembiring. (2009). *An Analysis of the Effect of Capital Expenditure and Local Revenue on Maintenance Expenditure in the Budget Realisation of Regency and Municipal Governments in North Sumatra Province*. Journal of Public Economics, 2(1), 23-40.

Tusa'diah Halimah. (2015). *An Analysis of the Effect of Capital Expenditure and Local Revenue on Maintenance Expenditure in Local Government Budget Realisation*. Journal of Development Economics, 3(1), 18-30.

Regulation of the Minister of Finance of the Republic of Indonesia Number 181/PMK.06 of 2016 concerning Central Government Accounting and Financial Reporting.

Government Regulation of the Republic of Indonesia Number 27 of 2014 concerning Management of State/Local Property.

Government Regulation of the Republic of Indonesia Number 71 of 2010 concerning Government Accounting Standards.

Decree of the Minister of Finance Number 259/KMK.06/2019 concerning Benefit Period Table in the Context of Depreciation of State Property in the Form of Fixed Assets in Central Government Entities.

Government Accounting Standards Technical Bulletin Number 04 on Presentation and Disclosure of Government Expenditure (2006).