Analysis of Effectiveness and Efficiency of Budgets and Expenditures: A Study on Autoridade Munisipiu Dili, Timor Leste

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ABSTRACT

The results showed that (1) The effectiveness of the budget and expenditures of the Dili Municipal Autoridade was classified as quite effective (2) Efficiency is a measure of the success of an activity that is assessed based on the amount of costs or resources used to achieve the desired results of the calculation of the efficiency level of budgets and expenditures at the Dili Municipal Autoridade was classified as quite efficient from 2017 to 2021, and the average level from 2017 to 2021 was classified as efficient.

KEYWORDS: effectiveness, efficiency, budget, expenditure, Autoridade Munisipio Dili

1. BACKGROUND OF THE STUDY

After 21 years of independence, the Democratic Republic of Timor-Leste is currently in the process of building infrastructure. This is done to catch up with the development lag compared to other countries in Asia, making it crucial for the government to address development issues seriously.

The concept of Effectiveness and Efficiency in Good Governance means that processes and institutions should produce results that meet the needs of the community while optimizing resources. The idea of efficiency in the context of good governance also includes the sustainable use of natural resources and environmental protection. Accountability is a fundamental requirement for good governance.

According to Mahmudi (2019:86), effectiveness is the relationship between output and goals. The greater the contribution of output to the achievement of goals, the more effective the organization, program, or activity. Budget effectiveness can be measured by the level of realization (achievement). In government agencies, such as the Dili district, it is called expenditure realization. If expenditure realization approaches the budget amount, achieves targets, and is on target, it indicates good performance.
From previous researchers, Angelina Maria Ximenes, Ni Luh Putu Wiagustini Augusto da Conceicao Soares (2021), an analysis of the effectiveness and efficiency of budget absorption and the growth rate of budget expenditure (case study Ministry of Finance of Timor from 2015-2019). The study indicates that the average effectiveness of budget absorption is 90.3%, meeting the effective criteria, while the average efficiency level is 78.2%, indicating less efficiency. The Growth Rate has significantly increased by 54.8%, indicating quite successful criteria.

Epi Orleaes, Ni Luh Putu Wiagustini Augusto da Conceicao Soares (2021), an analysis of the effectiveness of budget absorption and the growth rate of budget income and expenditure of the Ministry of Health, Timor-Leste from 2015-2019. The study shows that the effectiveness of budget income and expenditure in the Ministry of Health is "effective" with an effectiveness rate of about 93%, ranging from 93% to 97% each year. The growth rate fluctuated between quite successful and very successful, with a growth rate ranging from 65% to 103% from 2015-2019.

The Dili district is one of the districts located in the capital of Timor-Leste, formed during the Indonesian administration in Timor-Leste. The selection of Dili district as the research object is based on data indicating its potential for economic self-sufficiency, meaning the region can carry out all government tasks independently. The Dili district government has sufficient resources to fund its administration, derived from sectors such as maritime, agriculture, and others.

Based on the issues or phenomena of Budget and Expenditure occurring in Autoridade Munisipiu Dili Timor-Leste, there is a tendency for fluctuation due to the inadequate implementation of budget allocation and expenditure from 2017 to 2021.

A. Problem Statement

Based on the description of the background of the problem, the main problems in this study can be formulated, among others: How is the effectiveness and efficiency of budgets and expenditures in Autoridade Munisipiu Dili.

B. Research Objectives

Based on the formulation of the core issues above, the research objectives are as follows: to determine the effectiveness and efficiency of budgeting and expenditure in Autoridade Munisipiu Dili.

C. Benefits of the Research

This research is expected to provide benefits to the following parties:

1) Theoretical Benefits

To enhance insights and knowledge regarding the effectiveness and efficiency of budget expenditure implementation at Autoridade Munisipiu Dili. This research is also expected to contribute to the development of management science, particularly in the realm of budget and expenditure effectiveness and efficiency.
2) **Practical Benefits**

This research is anticipated to serve as a consideration and input in efforts to enhance the effectiveness and efficiency of budgeting and expenditure at Autoridade Munisipiu Dili.

**II. LITERATURE REVIEW**

**A. Public Sector Budgeting**

Public sector budgeting is the financial planning of estimated expenditures and revenues that are expected to occur in the future by looking at data obtained from the past as a reference for budget setting. In public sector organizations, budgeting is a political process. Because in the public sector the budget must be informed to the public to be criticized, discussed, and given input. The use of budgets in government as a guiding tool for planning and controlling resources, whether financial or otherwise.

According to Halim (2016: 50), the budget for the public sector is a tool to achieve goals in order to provide services to the community/people whose purpose is to improve public services and public welfare. Based on the definition and objectives of the public sector budget, the public sector budget has the following characteristics:

- a. The budget is stated in financial units
- b. Budgets generally cover a specific period of time, one or several years, short, medium or long term.
- c. The budget contains the commitment or ability of management to achieve the goals set.
- d. The budget proposal is reviewed and approved by an authority higher than the budget preparer.
- e. Once compiled, the budget can only be changed under certain conditions.

**B. Formulation of the State Revenue and Expenditure Budget of Timor Leste**

Before determining the state budget for revenues and expenditures, of course, it begins with the process of preparing the state budget for the Democratic Republic of Timor Leste, requiring a budget (budget). The budget allocated from the State Revenue and Expenditure Budget consists of three (3) main components, namely:

- (i) Government (executive/planner),
- (ii) Parliament (legislature/controller), and
- (iii) President (approves to be APBN).

However, in the process there are several steps that must be passed by the government before the formation of the annual APBN, the following are the steps:

- a. Preparation for the Budget: Ministries begin to prepare their annual action plans that capture the main objectives and activities for the fiscal year around March each year.
- b. Considering Budget Submissions
- c. The budget committee reviews (Budget Review Committee Meets). After budget submissions are prepared, the Budget Review Committee meets in July and August.
- d. Approving the Proposed Budget
e. Spending the Budget: From 1 January, the ministry begins to spend the money approved in the budget to implement Government programs for the year. To ensure accountability quarterly reports of physical and financial progress of the budget are presented to Parliament.

C. Timor Leste’s State Revenue and Expenditure Budget (APBN)

The Government of Timor Leste has two types of Budget, namely the expenditure budget and the revenue budget, which consists of five types of categories, and each has certain items:

a. Budget (Expenditure). Funding for expenditures is made available to ministries and programs through the mid-budget update law & Annual Budget (donations) subject to approval by the National Parliament. The Directorate of Budget has the main task of coordinating funding data in their respective budget processes. Funding is budgeted for four general categories:

1. Salaries and Benefits (Salario e Vencimento): to pay salaries of government civil servants including Police & FFDTL
2. Routine Budget (Bens e Serviços): to provide consumables (such as office equipment, vehicle operating costs, medical supplies, school books, etc.) and services (consulting, printing, catering, and so on) needed to provide government services.
3. Capital Expenditure Budget (Capital Menor): to fund small capital needs needed to provide Government services such as printing machines, computers, other office equipment, and four-wheeled and two-wheeled vehicles.
4. Development Budget (Capital Desenvolvimento): Funds are allocated for main work such as maintenance & construction of government buildings, building new schools and hospitals as well as repairing bridges, roads, clean water and others

b. Revenue Budget (Receitas)


D. Effectiveness

Effectiveness is the success of achieving a goal that has been set before. effectiveness only talks about output problems. If the organization has succeeded in achieving its goals, then the organization is running effectively. Or in other words, effectiveness is the success or failure between outputs and goals or objectives that must be achieved.

E. Efficiency

Efficiency is the most important thing, because an organization is considered more efficient if the efficient ratio tends to be above one. The larger the number, the higher the level of efficiency. In absolute terms, this ratio does not indicate the financial position and performance of the organization.
F. Previous Research

Dwi Nofita Sari (2018) http://journal.lfeb.unmul.ac.id/index.php/KINERJA Analysis of Effectiveness and Efficiency of Budget Implementation, the results of the research show the results of the analysis of the calculation of the level of efficiency and effectiveness of expenditure seen the Samarinda City government has made efficient expenditure as evidenced by the level of efficiency in 2011 of 54.08% (Very Efficient), then in 2012 of 60.06% (Efficient), then in 2013 the efficiency level was 65.79 (Efficient), then in 2014 the efficiency level was 64.53% (efficient, and the last year 2015 the efficient level was 62.47% (Efficient).

III. THEORETICAL FRAMEWORK

The theoretical framework is presented in a diagram with a descriptive model, as illustrated in the following schema:

![Figure 1. Theoretical Framework](image)

As this study is descriptive in nature, the conceptual framework cannot be depicted visually but will be articulated in narrative form. The research focuses on the effectiveness and efficiency of budgeting and expenditure.
IV. RESEARCH METHODOLOGY

A. Research Type

The type of research used is quantitative descriptive research. According to Sugiono (2008), descriptive research is conducted to determine the values of independent variables, either one variable or (more independently) without making comparisons or connections with other variables.

B. Location and Time of Research

In this study, the location and place of research were conducted in Autoridade Munisipiu Dili. The research period spans from 2017 to 2021.

C. Variable Identification

a. Effectiveness
b. Efficiency

D. Operational Definition of Research Variables

According to Sugiono (2013:38), a variable is an attribute, property, or value of a person, object, or activity that has certain variations determined by the researcher for study and subsequent conclusions.

E. Data Collection Technique

The data collection technique is a crucial factor for the success of a research study. The quality of data is significantly determined by the tools or instruments used to collect it.

1) Non-Participant Observation

Non-participant observation in this research refers to the observation of the financial documents of the government of the Dili District, Timor Leste, from 2017 to 2021.

F. Types and Sources of Data

Types and Sources of Data used in this study include:

1. The type of data in this research is quantitative data.
2. The source of data in this research is derived from secondary data

G. Data Analysis Technique

3) Determining Effectiveness

Measuring effectiveness to assess budget management over several years. Halim (2014) defines effectiveness as the government's ability to realize planned expenditure compared to the set targets based on the actual potential of the government.

Formula:
4) **Determining Efficiency**

To analyze the level of efficiency in the management of local finances from the expenditure perspective, the formula calculates the ratio between the actual indirect expenditure and the total indirect budgetary expenditure. The higher the ratio, the more efficient the management of local finances.

Formula:

\[
\text{Efficiency} = \frac{\text{Actual Expenditure}}{\text{Actual Revenue}} \times 100\%
\]

### V. RESEARCH RESULTS AND DISCUSSION

#### A. Expenditure Budget Realization of Autoridade Munisipio Dili for the Years 2017-2021

In Billion US Dollars (USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Target ($)</th>
<th>Realization ($)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>6,568,136.00</td>
<td>5,030,881.16</td>
<td>77.9</td>
</tr>
<tr>
<td>2018</td>
<td>5,786,375.00</td>
<td>4,064,276.18</td>
<td>70.2</td>
</tr>
<tr>
<td>2019</td>
<td>6,229,094.00</td>
<td>5,641,245.96</td>
<td>91.6</td>
</tr>
<tr>
<td>2020</td>
<td>140,556.00</td>
<td>130,738.00</td>
<td>93.1</td>
</tr>
<tr>
<td>2021</td>
<td>8,667,122.00</td>
<td>6,750,339.12</td>
<td>78.8</td>
</tr>
<tr>
<td>Average Realization</td>
<td>27,391,283.00</td>
<td>21,617,480.42</td>
<td>79.2</td>
</tr>
</tbody>
</table>

#### B. Effectiveness Level of Budget Expenditure at Autoridade Munisipiu Dili from 2017 to 2021

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Target/Output ($S)</th>
<th>Realization/Outcome ($S)</th>
<th>Effectiveness Level</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>6,568,136.00</td>
<td>5,030,881.16</td>
<td>77.9</td>
<td>Less Effective</td>
</tr>
<tr>
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<td>4,064,276.18</td>
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<td>Less Effective</td>
</tr>
<tr>
<td>2019</td>
<td>6,229,094.00</td>
<td>5,641,245.96</td>
<td>91.6</td>
<td>Effective</td>
</tr>
</tbody>
</table>
### C. Efficiency Level of Expenditure Budget at Autoridade Munisipiu Dili from 2017 to 2021

**Table 3. Efficiency Level of Expenditure Budget**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Expenditure Type</th>
<th>Target/ Output ($)</th>
<th>Realization/ Outcome ($)</th>
<th>% Efficiency</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Goods &amp; Services</td>
<td>3,231,817.00</td>
<td>2,689,935.19</td>
<td>83,2</td>
<td>efficiency enough</td>
</tr>
<tr>
<td></td>
<td>Belanja Modal</td>
<td>2,046,974.00</td>
<td>1,622,179.72</td>
<td>79,2</td>
<td>efficiency</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5,278,791.00</td>
<td>4,312,114.91</td>
<td>81,6</td>
<td>efficiency enough</td>
</tr>
<tr>
<td>2018</td>
<td>Goods &amp; Services</td>
<td>2,785,164.00</td>
<td>1,793,682.85</td>
<td>64,4</td>
<td>efficient</td>
</tr>
<tr>
<td></td>
<td>Belanja Modal</td>
<td>1,726,866.00</td>
<td>1,632,556.58</td>
<td>94,5</td>
<td>less efficient</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4,512,030.00</td>
<td>3,426,239.43</td>
<td>75,9</td>
<td>efficient</td>
</tr>
<tr>
<td>2019</td>
<td>Goods &amp; Services</td>
<td>3,390,210.00</td>
<td>3,128,117.13</td>
<td>92,2</td>
<td>less efficient</td>
</tr>
<tr>
<td></td>
<td>Belanja Modal</td>
<td>1,899,985.00</td>
<td>1,668,890.58</td>
<td>87,8</td>
<td>efficiency enough</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5,290,195.00</td>
<td>4,797,007.71</td>
<td>90,6</td>
<td>less efficient</td>
</tr>
<tr>
<td>2020</td>
<td>Goods &amp; Services</td>
<td>2,718,441.00</td>
<td>2,648,076.15</td>
<td>97,4</td>
<td>less efficient</td>
</tr>
<tr>
<td></td>
<td>Belanja Modal</td>
<td>1,727,188.00</td>
<td>1,679,731.88</td>
<td>97,2</td>
<td>less efficient</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4,445,629.00</td>
<td>4,327,808.03</td>
<td>97,3</td>
<td>less efficient</td>
</tr>
<tr>
<td>2021</td>
<td>Goods &amp; Services</td>
<td>2,905,094.00</td>
<td>2,665,352.45</td>
<td>91,7</td>
<td>less efficient</td>
</tr>
<tr>
<td></td>
<td>Belanja Modal</td>
<td>2,096,424.00</td>
<td>2,080,650.70</td>
<td>99,2</td>
<td>less efficient</td>
</tr>
<tr>
<td></td>
<td>Capital &amp; Development</td>
<td>260,984.00</td>
<td>81,836.22</td>
<td>31,3</td>
<td>very efficient</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5,262,502.00</td>
<td>4,827,839.37</td>
<td>91,7</td>
<td>less efficient</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>24,789,147.00</td>
<td>21,691,009.45</td>
<td>87,5</td>
<td>efficiency enough</td>
</tr>
</tbody>
</table>
D. Recapitulation of the Results of the Calculation of the Level of Effectiveness and Efficiency of Budget and Expenditure at Autoridade Munisipiu Dili in 2017-2021

Table 4. Recapitulation of the Results of the Calculation of the Level of Effectiveness and Efficiency

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Expenditure Effectiveness</td>
<td>77.9</td>
<td>70.2</td>
<td>91.6</td>
<td>93.1</td>
<td>78.8</td>
</tr>
<tr>
<td>Criteria</td>
<td>Less effective</td>
<td>Less effective</td>
<td>Effective</td>
<td>Effective</td>
<td>Less effective</td>
</tr>
<tr>
<td>Budget Expenditure Efficiency</td>
<td>81.6</td>
<td>75.9</td>
<td>90.6</td>
<td>97.3</td>
<td>91.7</td>
</tr>
<tr>
<td>Criteria</td>
<td>Efficient enough</td>
<td>Less Efficient</td>
<td>Less Efficient</td>
<td>Less Efficient</td>
<td>Less Efficient</td>
</tr>
</tbody>
</table>

Source: Analysis Result 2023

E. Performance Achievement

In general, Autoridade Munisipiu Dili has carried out its duties to achieve the goals and targets set in the 2021-2022 development plan. Performance targets for the established strategic objectives will be measured by comparing performance targets with actual performance. The key performance indicators for Autoridade Munisipiu Dili in 2022 are as follows: Rural and Urban Development, Tourism, Education and Training, and Health.

F. Research Implications

1) Theoretical Implications

Based on the above research results on effectiveness and efficiency, there are two theoretical implications: the effectiveness and efficiency of budget expenditure in Autoridade Munisipiu Dili using effectiveness and efficiency ratio.

2) Practical Implications

Based on the research findings on effectiveness and efficiency using the data analysis technique of effectiveness and efficiency ratios, it is expected that Autoridade Munisipiu Dili can use this information as a reference or guide in policy-making for planning and utilizing the allocated budget.

G. Limitations

In the implementation of this research, the researcher acknowledges several limitations, including:
1) Limited information provided by the employees of Autoridade Munisipiu Dili regarding the allocation of budget expenditures. As a result, the author relies solely on information from the freebalance Sumari Report, leading to a lack of detailed information related to the realization of the national budget.

2) For future research development, it is recommended to extend the time period, for example, to 7 or 8 years, in order to incorporate more variables and financial ratios. This extension would enhance the validity and detail of the research findings.

VI. CONCLUSION AND RECOMMENDATIONS

A. Conclusions

Based on the research findings and discussions, the following conclusions can be drawn:

1) The effectiveness of the budget expenditure of Autoridade Munisipiu Dili from 2017 to 2021 tends to be less satisfactory. The analysis of effectiveness indicates that, on average, the budget expenditure is somewhat effective due to significant differences between the actual expenditure and the targeted budget. This difference is attributed to some activities that were not implemented. However, when considering the target realization, there has been progress in 2019 and 2020, deeming these years effective, as the planned activities were accomplished and aligned with expectations.

2) The efficiency of the budget expenditure of Autoridade Munisipiu Dili from 2017 to 2021 is generally good. The results show that, on average, the budget of Autoridade Munisipiu Dili is fairly efficient. However, looking at the development in 2019 and 2020, there is a decrease, indicating a less efficient level. The overall average level of budget expenditure is considered sufficiently efficient, meaning minimal funds are used to achieve maximum results.

B. Recommendations

Based on the above discussion, the recommendations to enhance the effectiveness and efficiency of budget expenditure in Autoridade Munisipiu Dili are as follows:

1. Improve effectiveness and efficiency in budget expenditure in the upcoming years. It is recommended to adjust budget levels in various categories to evaluate the achievable budget expenditure annually. Increase supervision of employees regarding budget expenditures to ensure expenditures are organized according to the budget set for each period.

2. Create alternative sources of revenue and expenditure budgets from other sectors to reduce dependence on petroleum funds.

Establish standardized alternatives for measuring the level of effectiveness and efficiency in budget expenditure to enhance effectiveness and efficiency in the future.


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