Fairness Analysis of the Technical Guidance Budget Activity, Socialization, and Training Using Activity Based Costing Approach: Empirical Study at the District Office in West Pasaman Regency

Halkadri Fitra¹, Henri Agustin², Erly Mulyani³
¹Universitas Negeri Padang, Padang, Indonesia, halkadri.feunp@gmail.com
²Universitas Negeri Padang, Padang, Indonesia, henri_feunp@yahoo.co.id
³Universitas Negeri Padang, Padang, Indonesia, erly1978@gmail.com

Abstract
This study aims to look at the reasonableness of the expenditure budget for technical guidance, outreach and training activities carried out by 11 sub-district offices in West Pasaman Regency in 2017-2018 using an activity based costing approach. The number of research objects was 24 activities, which were analyzed by descriptive quantitative analysis methods. Subsequent research data were analyzed using linear regression analysis based on 1 cost driver that is person day. The results showed that the budget for 24 activities of technical guidance, outreach and training were still in the reasonable category, because they were below the maximum limit and above the minimum threshold of the analysis of the established expenditure standards. Based on these results, West Pasaman Regency is advised to remain consistent in carrying out a reasonable budget of activities, by promoting economic, efficient and effective principles. For further research, it is expected to expand this budgetary reasonableness research by using multiple regression analysis with more than one cost driver.

Keywords: expenditure, cost driver, fair, standard

Introduction
At present the world has entered the era of the industrial revolution 4.0, one of which is Indonesia. Various technologies that marked the start of the 4.0 industrial revolution, have begun to be applied in various lines. The fourth industrial revolution is marked by increased connectivity, interaction, boundaries between people, machines and other resources increasingly converging through information and communication technology. Every industrial revolution is marked by a number of momentum that shows the development of human life over time.

Transparency and public accountability in the era of regional autonomy have become the most important goals of public sector reform in Indonesia. Commitments to improve the implementation of transparency and public accountability have been voiced since regional autonomy and fiscal decentralization in 1999. The main objective of the implementation of regional autonomy and fiscal decentralization is to create good governance, which is characterized by transparency, public accountability, participation, efficiency and effectiveness, as well as legal confirmation both at the provincial and district / city governments.

Pasaman Barat Regency is a regency in West Sumatra Province. The Regency has 11 sub-districts and 19 villages called Nagari, with an area of 3,887.77 km². In 2017 the district had a population of 428,641 people with a distribution of 110 inhabitants/km. This regency was formed from the results of the expansion of Pasaman Regency based on Law No. 38/2003 dated December 18, 2003, with the district capital in Simpang Ampek. The greatest potential of West Pasaman lies in the oil palm, orange, salak, rubber, coffee and cocoa plantation sectors (BPS Kabupaten Pasaman Barat Dalam Angka, 2019). In carrying out government activities, the Regent was...
assisted by 43 regional apparatus organizations, namely 18 regional apparatus agencies, 14 technical institutions and 11 sub-districts.

Government Regulation Number 17/2018 regarding Sub-Districts states that a sub-district or what is referred to by another name, is a part of an area of a regency / city that is led by a camat. According to the Government Regulation, the duties of the Camat include (1) organizing general government affairs at the district level in accordance with the provisions of the laws and regulations governing the implementation of general government affairs; (2) coordinating community empowerment activities; (3) coordinating efforts to manage peace and public order; and (4) coordinates the implementation and enforcement of Regional Regulations and Regional Head Regulations.

As a regional apparatus that helps the Regent’s tasks, causing the sub-district also carry out activities arranged in order to achieve the regional vision, mission and goals. The preparation of activities contained in the regional income and expenditure budget must refer to the performance-based budget. The enactment of Law Number 32/2004 concerning Regional Government, which was later replaced by Law Number 23/2014 and Law Number 33/2004 concerning Fiscal Balance between the Central Government and the Regional Government, brought a number of consequences for the region. In this case the region must be responsible for the allocation of funds held in an efficient and effective manner, especially in efforts to improve welfare and public services for the community.

Performance-based budgeting is an approach in the budgeting system, which takes into account the relationship between funding and the expected outputs, results, or benefits. Performance-based budgeting also requires efficiency and effectiveness in achieving these results and outputs. Sembiring (2009) revealed that performance-based budgeting is a budgeting method for management to associate any costs poured into activities with the benefits generated. These benefits are described in a set of objectives and set forth in performance targets for each work unit. To carry out a performance measurement a number of indicators need to be determined in advance. For example the input indicators (input) in the form of funds, human resources and work methods. So that these inputs can be accurately informed in a budget, it is necessary to assess the reasonableness. For the implementation of performance-based budgeting to be operational, performance-based budgeting must use several instruments. Among the expenditure analysis standards, minimum service standards and performance indicators.

Article 298 paragraph 1 of Law Number 23/2014 Concerning Local Government, explains that regional expenditure is prioritized to fund compulsory government affairs, which are related to basic services determined by minimum service standards and a good spending system. The existence of a good spending system causes local governments to measure financial performance and work performance. In order for the system to run optimally, several crucial determinations need to be prepared. Such as price standards, performance benchmarks, and minimum service standards that are set based on legislation (Kawedar, 2008).

Local governments have many activities that are funded through spending. One such activity is the activities of technical guidance, outreach and training. Technical guidance, outreach and training activities are activities that are often carried out by regional government organizations such as offices and agencies. This activity is very useful for improving the ability of employees and the community. In its implementation, the amount of funds for this activity is affected by the components of implementation costs, such as the duration of the activity, the number of participants, transportation money, honorarium, consumption, official travel costs and other costs. The amount of costs for the activity will have an impact on the amount of the budget that must be provided by the implementer. The sub-district office as one of the executors, has included the expenditure component and the amount of funds budgeted for the purposes of this activity.
Information component of expenditure for an activity must be accurately displayed in a budget. Therefore it is necessary to make an assessment of the reasonableness. To assess the reasonableness of the inputs with the outputs produced, the role of the Expenditure Standards Analysis (in Indonesian it is called ASB-Analisis Standar Belanja) is needed. The existence of similar activities carried out by several agencies, but in the provision of funds for expenditure activities, allows the emergence of jealousy from one agency to other agencies. This is because there is no agreed equality model in the preparation of spending for an activity. One model that can be used for modeling expenditure is the principle of Activity Based Costing (ABC). The ABC approach will create a expenditure process that emphasizes activity. Thus, if the activity of an activity is not much, then the costs incurred are also not much.

As a new approach to calculating the standard analysis of expenditure in the preparation of regional expenditure budgets, the ABC concept can provide an overview of costs that can be treated as variable, semi-variable and fixed costs. Based on the description above, the formulation of the problem in this research is how is the fairness of the expenditure budget in the activities of technical guidance, outreach and training at the district office in the West Pasaman district government through the activity based costing model.

Performance-based budget is a budget that connects government budget with desired results (output and outcome), so that every rupiah issued can be accounted for benefits. Performance-based budgeting is designed to create efficiency, effectiveness in the use of public expenditure budgets, with outputs and outcomes that clearly align with development priorities. Thus all the budgets issued can be accounted for transparently to the wider community (Taufiq, 2013). Sembiring (2009) found that factors that influence performance-based regional budgeting and expenditure shows that the components of the entire organization, system improvement, administration, sufficient resources, firm rewards and sanctions, have a positive effect on the preparation of performance-based Regional Revenue and Expenditures Budget (APBD). Asropi (2007) found that performance indicators have a positive effect on the public service system.

Mardiasmo (2009) states the definition of efficiency is closely related to the concept of productivity. Efficiency measurements are carried out using a comparison between the output produced against the input used (cost of output). The process of operational activities can be said to be efficient if a certain product or work result can be achieved with the lowest use of resources and funds. The definition of effectiveness is basically related to the achievement of policy objectives or targets (outcomes). Effectiveness is the relationship between outputs with goals or objectives that must be achieved.

According to Darsono (2010) Budget has the following functions:

a. Planning Tools. It is a tool for planning what actions the government will take, how much it will cost, and how much will be the result of government spending.

b. Control tool. It is a tool to provide detailed plans for government revenues and expenditures, so that they can be held publicly accountable.

c. Fiscal tool. A tool to encourage and facilitate community economic activities so as to accelerate economic growth

d. Political tool. Is a form of executive and legislative commitment to the use of public funds for certain interests.

e. Coordination and communication tool. To detect inconsistencies in a work unit.


g. Motivation tool. Motivating managers and staff to work economically, effectively and efficiently.

The basic criteria that underlie the current implementation of public management are economy, efficiency, effectiveness and transparency, and public accountability. The basic criteria that underlie the current
implementation of public management are economy, efficiency, effectiveness and transparency, and public accountability. The objectives desired by the community include accountability regarding the implementation of value for money, namely careful savings in procurement and allocation of resources, efficient use of resources (Ulum, 2009).

Expenditure Standards Analysis (ASB) will encourage the determination of costs and budget allocation for each work unit activity to be more logical, and encourage the achievement of efficiency on an ongoing basis. This is due to the existence of benchmarking costs per unit of each output and obtaining best practices in the design of activities (Kawedar, 2008). In general, the definition of Activity Based Costing System (ABC System) is a cost system that collects costs into activities that occur within a business or government entity, then imposes these costs or activities on products or services, and reports the costs of activities and the product or service is in management so that it can then be used for planning, cost control, and decision making.

Morse (1995) defines Activity-Based Costing (ABC), as a system of allocating and reallocating costs to cost objects on the basis of activities that cause costs. This ABC system is based on the thought that activity causing costs and activity costs must be allocated to cost objects, on the basis of which the activity costs are consumed. This ABC system traces costs to products as a basis for the activities used to produce these products. According to Rayburn (1999) Activity-Based Costing (ABC) is a system that recognizes that the implementation of activities results in the consumption of resources that are recorded as costs. In other words, the ABC is a transaction-based cost calculation approach. The ABC cost system itself is allocating costs to transaction activities carried out in an organization, and then allocating these costs appropriately to products in accordance with the use of activities of each product.

Methods

This research was conducted at the District Apparatus Organization (OPD) in the District Government of West Pasaman. The purpose of this study is to evaluate the reasonableness of the activity budget, using standard expenditure analysis, on the budget of technical guidance, outreach and training activities. The data needed in this study is secondary data, in the form of the Budget Change Implementation Document (DPAP), which contains the types of technical guidance, outreach and training activities in the 2017-2018 fiscal year, from all Sub-district Organizations (OPD) units in the west Pasaman Regency Government.

Data analysis method used in this research is descriptive quantitative analysis method. Data analysis was performed using linear regression analysis, with the Activity Based Costing System approach. by using this method, the cost of production of an item / service can be presented more precisely and actual. This information will then be used by management to measure the performance of activities and evaluate the fairness of the budget used, and whether it is in line with the objectives to be achieved and the applicable laws and regulations. If appropriate, it can be used as a basis for preparing budget plans for the next fiscal year.

The detail of the steps taken in data analysis are as follows:

a. Collecting types of activities related to research along with the amount of the budget for these activities
b. Gather the details of the budget of the expenditure object for each activity related to the object of research
c. Determine the cost driver for each type of activity associated with the object of research
d. Processing data on activity budgets and cost drivers in order to obtain a simple regression equation
e. Determine standard error estimates
f. Determine minimum and maximum spending
g. Determine the percentage of average expenditure, minimum expenditure and maximum expenditure
h. Assessing the reasonableness of budget expenditures for each activity.
Standard expenditure analysis uses a statistical analysis approach, which is used to construct a cost equation. The most appropriate statistical instrument in preparing ASB is to use the simple regression method of the Ordinary Least Square (OLS) model, assuming that in the expenditure equation only has one independent variable. The goal of the simple regression method is to predict the dependent variable (Y) if the independent variable (X) is known. Simple regression can be analyzed because it is based on functional relations or causal relations (causal) independent variables (X) to the dependent variable (Y). In this case, the OLS formula used is (Tanjung, 2010):

\[ Y = a + bx \] \hspace{1cm} (1)

\[ b = \frac{n \sum XY - \sum X \sum Y}{n \sum X^2 - (\sum X)^2} \] \hspace{1cm} (2)

\[ a = \frac{\sum Y - b \sum X}{n} \] \hspace{1cm} (3)

To see the reliability of the estimated line equation, we can use standard error estimates (standard deviations). The purpose of this standard deviation in making the ASB model is to determine the maximum and minimum values. The formula used is:

\[ S_e = \sqrt{\frac{\sum (Y - \bar{Y})^2}{n-2}} \] \hspace{1cm} (4)

Note:
- \( S_e \) = Estimated default error value
- \( (Y - \bar{Y})^2 \) = squared error
- \( n \) = amount of data

Based on formula 4 above, the estimated minimum value of expenditure can be determined using the formula:

\[ T_{Bmin} = \bar{Y} - t_{p}.S_e \] \hspace{1cm} (5)

Note:
- \( T_{Bmin} \) = Estimated minimum expenditure
- \( t_p \) = value obtained from table t with degrees of freedom n-2
- \( S_e \) = Estimated default error value

Whereas the estimated maximum value of expenditure can be calculated using the formula:

\[ T_{Bmax} = \bar{Y} + t_{p}.S_e \] \hspace{1cm} (6)

Note:
- \( T_{Bmax} \) = Estimated maximum expenditure
- \( t_p \) = value obtained from table t with degrees of freedom n-2
- \( S_e \) = Estimated default error value
After the estimated minimum expenditure and estimated maximum expenditure have been known, the process of drawing conclusions is carried out in the following manner:

a. If the value of the activity budget is below the maximum estimated value and above the minimum estimated value, the activity budget is said to be reasonable

b. If the value of the activity budget is above the maximum estimated value and below the minimum estimated value, the activity budget is said to be unreasonable

**Results and Discussion**

Based on data collection and verification, 24 data units were obtained including the amount of budget and cost drivers used as research objects in the sub-district organization in West Pasaman in 2017-2018 related to technical guidance, socialization and training activities.

The available data is then processed using a regression approach and an activity based costing approach, to obtain a standard analysis model of expenditure and budget classification of technical guidance, socialization and training activities in the sub-district organization at the West Pasaman District Government in 2017-2018. The resulting model is as follows:

\[ Y = 14.165.680,48 + 572.314,18 X \]

After the above equation is obtained, the next step is to determine the standard error of the estimate. The results of data processing resulted in an estimated standard error rate of 25,377,645.70. The results of the calculation of average expenditure, minimum expenditure and maximum expenditure for each activity can be seen in Table 1 below.

<table>
<thead>
<tr>
<th>Num</th>
<th>Activities</th>
<th>Budget (IDR)</th>
<th>Expenditure based on ASB (IDR)</th>
<th>Minimum Expenditure Limit Based on ASB (IDR)</th>
<th>Maximum Expenditure Limit Based on ASB (IDR)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technical guidance on the implementation of laws and regulations</td>
<td>42.000.000</td>
<td>30.190.477,59</td>
<td>(17.504.431,06)</td>
<td>77.885.386,23</td>
<td>Reasonable/Fair</td>
</tr>
<tr>
<td>2</td>
<td>Licensing service socialization</td>
<td>22.641.000</td>
<td>61.095.443,44</td>
<td>(35.423.122,22)</td>
<td>157.614.009,11</td>
<td>Reasonable/Fair</td>
</tr>
<tr>
<td>3</td>
<td>Technical guidance on the implementation of laws and regulations</td>
<td>49.065.000</td>
<td>30.190.477,59</td>
<td>(17.504.431,06)</td>
<td>77.885.386,23</td>
<td>Reasonable/Fair</td>
</tr>
<tr>
<td>4</td>
<td>Socialization of laws and regulations</td>
<td>78.350.000</td>
<td>49.076.845,61</td>
<td>(28.454.742,32)</td>
<td>126.608.433,54</td>
<td>Reasonable/Fair</td>
</tr>
<tr>
<td>5</td>
<td>Counseling to prevent the circulation and use of alcohol and drugs</td>
<td>19.250.000</td>
<td>34.196.676,86</td>
<td>(19.827.224,36)</td>
<td>88.220.578,08</td>
<td>Reasonable/Fair</td>
</tr>
<tr>
<td>6</td>
<td>Technical guidance on the implementation of laws and regulations</td>
<td>41.240.000</td>
<td>37.058.247,78</td>
<td>(21.486.362,43)</td>
<td>95.602.857,98</td>
<td>Reasonable/Fair</td>
</tr>
<tr>
<td>7</td>
<td>Counseling to prevent the circulation and use of alcohol and drugs</td>
<td>12.640.750</td>
<td>28.473.535,04</td>
<td>(16.508.948,21)</td>
<td>73.456.018,29</td>
<td>Reasonable/Fair</td>
</tr>
</tbody>
</table>
Equation of the regression model \( Y = 14,165,680.48 + 572,314.18\ X \) implies that technical guidance, socialization and training activities have a fixed cost of Rp. 14,165,680.48 and have variable costs that will increase by Rp.
572,314.18 for each people day activities. Based on the data in table 1 above, it can be seen that all activities of technical guidance, socialization and training carried out by the district apparatus organization in West Pasaman Regency in the period 2017-2018 are in the reasonable category.

The reasonableness of the expenditure can be seen from the value of the activity budget that does not exceed the maximum spending limit and the expenditure limit. The data in table 1 above also shows that there is a difference in the calculation between the budget made and the calculation using the ASB regression equation. However, this difference does not make the budget compiled by the sub-district organization said wrong, because the budget compiled is still below the maximum limit and above the minimum limit.

Conclusions
The conclusions of this study are as follows:

a. The activity budget in the form of seminars, technical guidance, training and workshops conducted by the district apparatus organizations in West Pasaman Regency has mostly used a budget that is categorized as fair
b. Budget use is more efficient than using the activity budget before using the standard expenditure analysis model

c. There is a relationship between the level of budget efficiency with the level of reasonableness of the activity budget based on the standard expenditure analysis model. This implies that the efficient use of the budget shows the fairness of the level of budget use. Conversely, the use of inefficient budgets will show the irregularities of the activity budget based on the standard expenditure analysis model.

d. The standard expenditure analysis model helps policy makers and budget managers in preparing budget plans, as well as tracking what costs in budget expenditure activities can cause waste, as well as evaluating the implementation of the budget so that it is effective, efficient and does not violate state financial regulations.

e. By using the budget based on the standard expenditure analysis model, the budget allocation can be shared more equitably and has a clear reason. This is due to the allocation of the budget based on performance targets and outputs produced in accordance with the concept of efficiency, namely pareto efficiency or pareto optima.

Suggestions
a. Regional apparatus organizations need to apply the standard model of activity expenditure analysis in preparing annual activity budgets, so as to facilitate the evaluation of the activity budget used, as well as an indicator of the performance of implementing activities
b. The efficiency of the implementation of the activity budget can be started from the arrangement of the length of time of the activity and place of activity, by optimizing the available resources and infrastructure.

References


