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The Influence of Travel Costs on The Economic Valuation of Bokori Island Tourist Attraction

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Abstract

The effect of travel costs on tourism is useful in the development of tourism activities. In this case, travel costs aim to determine how much economic valuation is given by tourists to a natural resource, and the research objective of the benefits of economic valuation is to provide an overview of information for outside investors to assess the tourism potential of Bokori Island and other tourism, as well as to make a guideline or reference for decision making in government policies in developing the tourism sector. The analytical tool used in this study was simple linear regression with the help of the program. The results showed that the travel cost variable had a significant effect on the economic valuation variable for Bokori Island. This can be seen from the probability t-statistics of 0.000, which is smaller than the alpha value of 5% (0.05), with an economic valuation value of Rp. 9,104,683,500/year).

Keywords: *Economic Valuation, Tourist Attraction, Travel Costs.*

INTRODUCTION

Tourism is a commodity that is needed by every individual. This is because traveling activities for an individual can increase creative power, eliminate work boredom, relaxation, shopping, business, knowledge of the historical and cultural heritage of a particular ethnic group, and health and spiritualism tourism. Increased leisure time as a result of shorter working days and supported by increased income will increase tourism activities (Yakkin et al., 2010).

According to Law of the Republic of Indonesia Number 10 Year 2009 Tourism comprises a variety of tourist activities and is supported by various facilities and services provided by the community, entrepreneurs, government, and local governments. Tourism is the overall activity of the government, businesses, and society to organize, manage, and serve the needs of tourists. (Karyono, 1997; Ridwan, et al., 2020). Tourism is a series of activities carried out by humans, both individually and in groups, within the territory of another country. These activities use facilities, services, and other supporting factors provided by the government and/or community to realize the wishes of tourists.

According to Spillane, Ferra Ermawanti (2012), tourism is defined as the activity of traveling with the aim of seeking satisfaction, looking for something, improving health, enjoying sports or rest, fulfilling duties, making pilgrimages, and others. Kodhyat, in Ferra Ermawanti (2012), argues that tourism is a journey from one place to another, temporary, carried out by individuals or groups, as an effort to seek balance or harmony and happiness with the environment in the social, cultural, natural, and scientific dimensions. Spillane in Ferra Ermawanti (2012) suggested that tourism is an activity of traveling with the aim of getting pleasure, seeking satisfaction, knowing something, improving health, enjoying sports or rest, fulfilling duties, making pilgrimages, and others.

Economic valuation, in general, can be defined that it is basically an effort to provide quantitative value to goods and services produced by natural resources and the environment regardless of whether market value is available or not, according to Susilowati in Ferra E (2012). The roots of this valuation concept are based on the neoclassical economic theory, which emphasizes consumer satisfaction or needs. This neoclassical thinking argues that the valuation of each individual on goods and services is nothing but the difference between the willingness to pay (WTP), with the cost of supplying these goods and services Ferra E (2012).

Every company must have information about the costs that will or have been borne by the company. Accurate information about the cost of products and services is important at every stage of the management function, namely strategic management, planning and decision-making, management control and operational control, and making financial reports, including cost

analysis. Before conducting a cost analysis, it is necessary to understand the meaning and concepts of costs. From the perspective of costs, there are several definitions of costs, described as follows: a) Costs in managerial economics reflect the efficiency of the production system, So the concept of cost also refers to the concept of production, but if the concept of production, we talk about the physical use of inputs in producing production outputs, then in the concept of cost we calculate the use of inputs in economic values called costs (Gaspersz, 2003), b) Cost is the cost or part thereof that has been utilized or consumed to obtain income (Sunarto, 2003), c) Cost is the sacrifice made to produce or acquire a commodity. Sacrifices that have no purpose are called waste and are not included in costs (Gani, 1990). d) Cost is also often interpreted as the value of a sacrifice to obtain a specific output. The sacrifice can be in the form of money, goods, labor, time, or opportunity. In economic analysis, the value of the opportunity (to obtain something) that is lost due to doing another activity is also calculated as a cost called opportunity cost (Maidin, 2003).

Costs are sacrifices or expenses incurred by companies or individuals that are directly related to the output or products produced by the company or individual. According to Supriyono (2000), costs are the acquisition price sacrificed or used to obtain income or revenue, which will be used as a deduction from income. According to Henry Simamora (2002; 36), costs are cash or cash equivalent values sacrificed for goods or services that are expected to provide current or future benefits to the organization.

Furthermore, Maulani (2001) explained that this travel cost is mostly used to analyze the demand for outdoor recreation, such as beaches, fishing, hunting, and climbing. This method examines the costs incurred by each individual to visit these tourist attractions. The cost is an accumulation of transportation costs, documentation costs, consumption costs during recreation at tourist attractions, parking fees, and other costs included in recreational activities during one visit.

According to data (BPS Konawe Regency, 2020), the geographical condition of Konawe Regency within the scope of Southeast Sulawesi Province has a land area of 6,131.59 Km^2 or 10.87% of the total land area of Southeast Sulawesi Province. The seawater area is 1,960 Km^2 with a coastline length of approximately 295 Km. In addition, there are also small islands, namely, Bokori Island, Saponda Laut Island, and Saponda Darat Island, which have enormous tourism potential. One of the prima donna islands of Konawe Regency is Bokori Island, whose administration has been directly managed by a Regional Technical Implementation Unit (UPTD) since 2017. Through the management of this UPTD, it is hoped that Bokori Island can be recognized as a leading tourist destination in the country and abroad, of course, by involving local residents. Currently, 24 employees are working to manage Bokori Island, five of whom are ASNs, and the rest are honorary employees appointed based on the decree of the Head of the Southeast Sulawesi Provincial Tourism Office (*Kadis*). Other employees have duties, such as janitors, security speedboat operators, cleaning services, and supervisors. The majority of employees here are residents of Bajoe Village, Bokori Village, and Pemata Raya Village, (UPTD Bahteramas, Southeast Sulawesi Prov, 2020). The potential of entrance ticket retribution generated is seen from the number of visitors to Bokori Island's tourist attractions in the last five years as follows:

Table 1. Number of Tourist Visitors on Bokori Island, 2015-2019

No.	Year	Number of Visitors (Person)
1	2015	41.420
2	2016	54.620
3	2017	93.916
4	2018	90.619
5	2019	34.380
Total		314.955

(Source: Southeast Sulawesi Provincial Tourism Office, 2019)

Based on table 1 shows that the number of visitors to tourism on Bokori Island experienced an increase in 2015-2017 and–2018-2018. 2019 experienced a drastic decline in the number of visits from the previous year, and the decline in the number of visits in 2018-2019 is a phenomenon that needs to be observed.

The willingness to pay for travel can be explained by the concept of WTP for goods and services produced by natural resources and the environment, as well as economic value or economic valuation in general, which can be defined as a measurement of the maximum amount a person is willing to sacrifice goods and services to obtain other goods and services (Fauzi, 2010). Willingness to pay (WTP) is measured based on travel costs. Usually carried out through a visitor

questionnaire survey regarding travel costs that must be incurred at tourist sites, visits to other tourist sites (substitute sites), and socio-economic factors (Suparmoko in Ferra Ermawanti, 2012).

The phenomenon that occurs at the Bokori Island tourist attraction is interesting and important to study more deeply. Based on the phenomena that occur, it is necessary to conduct research with the title The Effect of Travel Costs on the Economic Valuation of Bokori Island Tourism Objects.

METHODS

According to Sugiyono (2010), a population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and draw conclusions. The population in this study is unlimited, namely, visitors who are visiting and have visited the Bokori Island tourist attraction targeted during observation within one week starting on the 15th. November 2020 to November 21, 2020. A total of 74 visitors met at the Bokori Island tourist attraction and were used as respondents.

Table 2. Population and Sample

No.	Gender	Number (soul)
1	Male	50
2	Female	24
	Sample Quantity	74

(Source: Direct Observation & Google Form)

Data Type

Qualitative data in this study are a description of the Bokori Island tourist attraction, the geographical location of Bokori Island, and the state of facilities and infrastructure. The quantitative data in this study are information on the number of visits to Bokori Island and the results of the questionnaire. Primary data are obtained from the distribution of questionnaires and direct interviews with respondents, namely visitors who visit Bokori Island Tourism Objects. Secondary data are obtained from other parties, and secondary data in this study are the number of tourist visits to Bokori Island tourist attractions in 2015-2019 obtained from the Southeast Sulawesi Tourism Office.

The data analysis tool used in this research was simple linear regression with the help of the Statistical Package for the Social Sciences (SPSS) Version 16.0, to obtain an overview of the relationship between the independent variable (independent) and the dependent variable (bound). To determine whether the Travel Cost variable has a significant influence on the Economic Valuation of Bokori Island Tourism Objects, a multiple linear regression model was used with the following formula:

$$\mathbf{Y = \alpha + \beta 1\ X1 + e} \text{ or } \mathbf{Y = f(X1)}$$

Description:
Y: Economic Valuation of Bokori Island Tourism Attraction
α: Constant
$\beta 1$: Regression direction coefficient
X1: Travel Cost
e: Confounding error

Analysis of Economic Valuation Calculation of Bokori Island Tourism Objects

Steps in applying *contingent valuation method* (CVM) analysis. According to Hanley and Spash (2010):

1. Creating a Hypothetical Market A hypothetical market is constructed to explain why people should pay for a good/service.
2. Obtaining a quote for the willingness to pay (WTP) value: A quote for the WTP value can be obtained using a questionnaire. This can be achieved through face-to-face interviews, telephone intermediaries, or mail. There are several ways to obtain the willingness to pay (WTP) value.
   a. *The Bidding Game* is a bargaining method where respondents are offered an offer value starting from the smallest value to the largest value until it reaches the maximum willingness-to-pay (WTP) value that the respondent can pay.
   b. *Closed-ended Referendum* is a method in which a single value is offered to the respondent, whether the respondent agrees or disagrees with the value.
   c. *A Payment Card*, where an offer value is presented in the form of a range of values on a card that may indicate the type of expenditure of the respondent on the public goods/services provided.
   d. *Open-ended questions* are open-ended questions about the maximum willingness to pay (WTP) they are willing to give in the absence of a previous offer value. However,

using this method usually makes it difficult for respondents to answer, especially those who are not willing to pay have no prior experience with the trade value of the commodity.

3. The Middle Value and Average Value of Willingness to Pay (WTP) After the WTP value data were collected. Calculation of the bid value using the average value will yield a higher value than the actual value; therefore, it is better to use the middle value to avoid being influenced by a sufficiently large range of bids. The middle value of the offer is always is smaller than the average bid value. Summarizing Data. Data summarization is the process by which the average offer is converted into the total population in question.

RESULTS AND DISCUSSION

Table 3. Calculation Results of Willingness To Pay (WTP) Value of Island Tourism Objects Bokori

Willingness To Pay (WTP)	Average Value WTP (IDR)	Average WTP X Population (IDR)
Sea Transportation Rental Price	43.716	1.502.956.080
Gazebo Rental Price	39.851	1.379.077.380
Villa Rental Price	175.473	6.032.761.740
Admission Price	5.785	198.888.300
Total WTP		9.104.683.500

Source: data processed, 2021

Based on the results of the calculation table above, the WTP value of the Bokori Island tourist attraction was Rp. 9,104,683,500, thus it is also stated as the value of the Economic Valuation of Bokori Island Tourism Objects per year, this is in accordance with research conducted by Jandry P, Fredrik B, Michael R (2015) on Ecotourism Economic Valuation of the Development of Tourism Objects in the Coastal Area of Lansiana Beach where the individual willingness to pay (WTP) value of environmental services is = Rp. 28,490 with the economic value of the existence of Lasiana coastal tourism objects per year based on the sample. 100 visitors from the total visitor population in the last 3 years amounted to an economic valuation of Rp1,974,962,723,102.

Travel Cost Analysis of Economic Valuation of Island Tourism Objects Bokori

The data analysis technique used in this research was simple linear regression analysis to determine the effect of a model's independent variables as the dependent variable. Data calculation in this study was supported by the SPSS-22 program.

Table 4. Recapitulation of Simple Linear Regression Results

Model		Unstandardized Coefficients		Standardized Coefficients				
		B	Std. Error	Beta				
1	(Constant)	41773.715	22734.714		1.837			
	TRAVEL (X)	2.331	.479	.498	4.869	.498a	.248	.000

a. Dependent Variable: ECONOMIC VALUATION

Based on the estimation results in the table using the SPSS 22 obtained the following regression model.

Y = 41.773 + 2.331 X

a. The constant in this study has a value of 41,773, which means that if it is assumed that the travel cost variable is zero, the number of economic valuations of Bokori Island's tourist attractions increases by 42,000.

b. The coefficient X = 2.331 means that if there is an increase in travel costs of Rp.1,000, it will increase

the economic valuation of the Bokori Island tourist attraction by Rp. 2,331.

c. Figure R = 0.498 shows that the relationship between the travel cost variable and the economic valuation of Bokori Island tourist attraction is fairly strong.
d. R2 = 0.248 or equal to 24.8%. This means that the travel cost variable in explaining changes in the level of economic valuation of 24.8%, while the rest is explained by non-examined variables 74.2%.

Individual Parameter Significance Test (t Statistical Test) Travel Costs Against Economic Valuation of Bokori Island Tourism Objects

To determine the effect of the Travel Cost variable on the Economic valuation of Bokori Island Tourism Objects, the test criteria were used, and the probability t-statistics value was compared against alpha. If the t-statistics <0.05 (5%) then the independent variable has a significant effect on the dependent variable. Based on the results of data processing in Table 4.12, the probability t-statistics value of the travel cost variable is 0.00 <0.05. Thus, it can be concluded that the travel cost variable has a partially significant effect on the economic valuation variable of the Bokori Island tourist attraction, thus accepting the hypothesis made.

Discussion

The tourism sector is a source of regional income that can provide multiple economic effects for the community around the tourism environment, and the tourism sector's beauty and services are of interest to both domestic and foreign tourists. Travel costs are a consideration for visitors to visit the intended tourist attraction, based on the results of the calculation it is known that the regression coefficient is 2.331 with a significance value of probability t-statistic of 0.000 Because the probability t-statistic value is smaller than the alpha 5%, it can be stated with a confidence level of 95% that the travel cost variable has a significant effect on the economic valuation of the Bokori Island tourist attraction, the coefficient value of 2.331 means that if there is an increase in travel costs of Rp.1,000 this will increase the economic valuation of the Bokori Island tourist attraction by Rp.2,331,000.

The results of this study are in line with Nurjenika's (2017) Economic Valuation of Trikora Beach Tourism Objects in Bintan Regency: Travel Cost Method, which shows that the variable cost of travel from residence to Trikora Beach tourist attraction has a significant influence on the economic valuation of Trikora Beach tourist attraction.

According to (Fauzi; 2004): The travel cost method assumes that travel costs define the price of a recreation area, the travel cost method is used to analyze the demand for recreation in nature. Such as fishing, hunting, or hiking. In principle, this method examines the costs incurred by individuals to visit recreational sites. The travel cost method is a popular method for describing the demand for natural resources and services associated with recreational sites. Examples include wildlife areas, ecological parks, fishing and hunting grounds, and natural scenery. People come to these sites from various distances. This method examines travel behavior (travel behavior), which is used to evaluate people's willingness to spend money to visit the region. In principle, this method examines the cost incurred by each individual to visit recreational places. For example, to channel a fishing hobby, a consumer will sacrifice costs in the form of time and money to visit the place. By knowing the spending patterns of these consumers, it can be determined how much value (value) they give to natural resources and the environment.

CONCLUSION

Based on the results of the above discussion, the following conclusions can be drawn:

1. Travel costs have a significant influence on the economic valuation of Bokori Island Tourism Objects, and they have a positive influence on increasing the economic valuation of Bokori Island Tourism Objects. Every increase in travel costs is followed by an increase in the economic valuation of Bokori Island Tourism Objects.
2. Economic Valuation of Bokori Island Tourism Objects with willingness to pay (WTP) visitors shows the potential economic value of Bokori Island tourism objects of Rp9,104,683,500/year

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