

FACTORS AFFECTING THE EXPENDITURE OF FOREIGN TOURISTS THE EVIDENCE FROM INDONESIA

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ABSTRACT

Tourist expenditure could determine the probability obtained by the country, which will affect economic activities. This study examines the Length of stay, Accommodation, Travel Purpose, and Occupation that affect foreign tourist expenditure in Indonesia. The study uses secondary data from the Indonesia Ministry of Tourism from the year 2013 – 2016 of 34 countries with 136 total samplings. This study using quantitative research. Analysis of the data collected using multiple regression. The hypothesis testing analysis method uses the T-test, F-test, and coefficient of determination (R^2). This study says that all variables (Length of stay, accommodation, travel purpose, and occupation) have a significant effect on daily tourist expenditure partially and simultaneously; hence, Length of stay has a negative effect. The simultaneous effect was 58%, and 42% are affected by other variables.

Keywords: Foreign Tourist Expenditure, Length of stay, accommodation, travel purpose, occupation

1. Introduction

The tourism industry is one of the largest industries, with a global economic contribution (WTTC, 2018). A direct contribution is a transportation, entertainment, accommodation, attraction. Whereas, indirect contribution in terms of industries such as T&T investment spending, government collection T&T spending impact of purchases from suppliers. Additionally, induced contribution in terms of industries such as food & beverage, recreation, clothing, housing, and household goods. Furthermore, the total global economic contribution from the tourism industry in 2017 was 8.2 US dollars (WTTC, 2018). According to Jurdana & Frleta (2016), Tourism is one of the main factors contributing to economic and non-economic benefits. Additionally, the impact of tourism in the economy increases the country's foreign exchange earnings from foreign tourist consumption of goods and services (Tantowi, Suryani, & Barudin, 2016). In terms of economic and social development, tourism activities create jobs, increase community income, and improve community quality (Alan & Hidayah, 2017).

Indonesia is a country that has more than 16,000 thousands of islands. Having beautiful natural resources attracted international tourists to visit Indonesia. Additionally, varieties of cultures and tribes have their uniqueness (Suhariyanto, 2018). The number of foreign tourists visiting Indonesia keeps increasing in line with the foreign exchange earned (Alan & Hidayah, 2017). The impact of tourism activities had a good impact on the social community by increasing international tourist visits. It can help the tourist industry increase the probability, as we know with the increase in foreign tourists' visits to Indonesia, tourist spending will also increase, which plays a significant role in the tourism expenditure (Tantowi, Suryani, & Barudin, 2016). Foreign exchange or tools used in transactions between countries also related to tourist expenditure. Tourist expenditure is the expenses incurred by tourists during a visit to a country that could determine the country's profitability, affecting economic activities such as accommodation, transportation, restaurants, Length of stay, and others (Jurdana & Frleta, 2016).

Based on the previous study, travel-related and socio-demographic characteristics have been influential on tourist expenditure (Wang, Rompf, Severt, & Peerapatdit, 2006). The variable that includes travel-related characteristics can determine the tourist expenditure, such as Length of stay, travel purpose, accommodation, mode of transport, and others. Variable factors include socio-demographic factors that can determine tourist

expenditure such as education, age, gender, occupation, etc. (Frleta, 2017). The travel-related characteristics influence the pattern of spending on tourism activities such as Length of stay, accommodation, the purpose of travel, destination, travel packages, and other (Brida & Scuderi, 2013; Thrane, 2016). According to Frleta (2017), variables that include socio-demographics are age, occupation, nationality, education level, gender, etc. Added, occupation, or professional has a significant effect on tourist expenditure (Kim & Gon, 2011; Mercussen, 2011; Brida & Scuderi, 2013; Benini & Cracolici, 2015).

However, foreign tourist expenditure in Indonesia was declined. Based on the Ministry of Indonesia Tourism stated, in 2015, Indonesia tourism reached the target of contributing to a GDP of 4.23%. In 2016, tourism contribution to GDP was 4.03% below the target at 5% (Tantowi, Barudin, & Suryani, 2018). These conditions led to the idea of this study about tourist expenditure based on Length of stay, accommodation, travel purpose, and occupation that affect Indonesia tourism's tourist expenditure.

The following research objectives of this study:

1. Is there any significant effect of tourist length of stay on Indonesia's foreign tourist daily expenditure?
2. Is there any significant effect of tourist accommodation toward foreign tourist daily expenditure in Indonesia?
3. Is there any significant effect of tourist travel purpose toward foreign tourist daily expenditure in Indonesia?
4. Is there any significant effect of tourist occupation toward foreign tourist daily expenditure in Indonesia?
5. Is there any significant simultaneous tourist length of stay, accommodation, travel purpose, and occupation toward foreign tourist daily expenditure in Indonesia?

2. Methodology

This study uses a quantitative method. This study uses sampling techniques through non-probability purposive sampling, which is selected on the objectives related to the variables such as Length of stay, occupation, accommodation, and travel purpose of foreign tourists in Indonesia. The theoretical framework of this study shows in Figure 1.

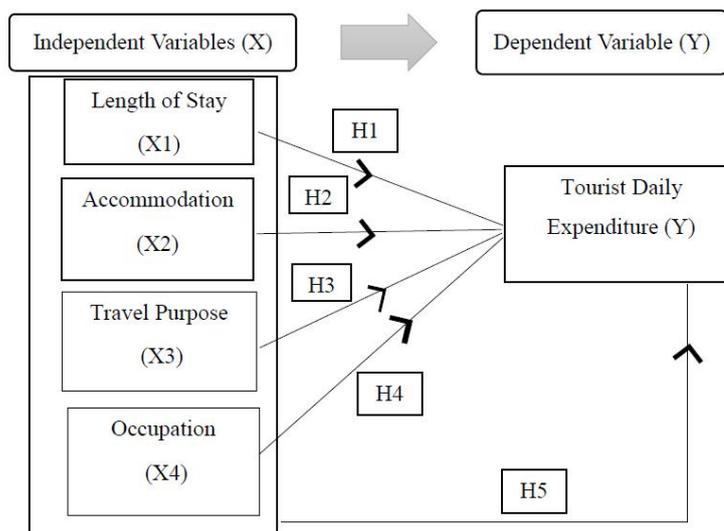


Figure 1: Theoretical Framework

Data were obtained from secondary data taken from passenger exit survey reports 2013-2016. Sample data is taken based on the country of origin of foreign tourists visiting Indonesia with complete data. There are 34 countries of foreign tourist residences from 2013 to 2016 (4 years), with the total number of samples is 136. This study uses data processed by the Indonesian Ministry of Tourism and the Indonesian

Central Bureau of Statistics for 2013, 2014, and 2015 conducted by Septia Awal Hidayah and Rayinda Citra Utami, for 2016 by Septia Awal Hidayah and I Dewa Gede Richard Alan Amory. The other data comes from journals, reports, and also books.

In this study, researchers will use the three analysis methods testing inferential statistics such as Multiple Regression Models, Classical Assumption Tests, and Hypothesis Testing Results, which began with a descriptive analysis of each variable. The Classic Assumption Test consists of Normality Test, Heteroscedasticity Test, Multicollinearity Test, and Autocorrelation Test. The study will also use T-Test, F-Test, and The Coefficient of Determination (R^2) to test the hypothesis using statistical software SPSS version 25.0

3. Result and Discussion

Descriptive analysis shows the fluctuation of foreign tourists' fluctuation on accommodation, travel purpose, and occupation in each category. Further descriptive statistics analysis shows the total data minimum, maximum, mean, and standard deviation of each variable: Length of stay, accommodation, travel purpose, and occupation (Table 1).

Table 1: Descriptive Statistic of Dependent and Independent Variable

	N	Minimum	Maximum	Mean	Std. Deviation
Length of stay (Day)	136	4.16	16.93	10.12	3.69
Accommodation (US\$)	136	232.83	1000.05	548.59	123.38
Travel Purpose (US\$)	136	305.17	2683.82	928.57	362.88
Occupation (US\$)	136	356.64	1752.57	1034.43	249.07
Tourist daily expenditure (US\$)	136	88.12	211.52	139.14	25.75

Length of stay is one of the independent variables, which has an average value of 10.12 days, while the maximum length of stay for foreign tourists is 16.93 days, and the minimum length of stay for foreign tourists is 4.16 days. The minimum of tourists spending their money on accommodation is US\$ 232.83, and the maximum is 1000.05. The average of tourists spending their money on accommodation is US\$ 548.59 with a standard deviation of 123.38. Travel purpose is also the independent variable that has the minimum of travel purpose is US\$ 305.17 with the maximum of travel purpose is US\$ 2683.82. The average travel purpose is US\$ 928.57, with a standard deviation of 362.88. Occupation is also an independent variable that has a minimum of occupation is US\$ 356.64, with a maximum of occupation of US\$ 1752.57. The average occupation is US\$ 1034.43, with a standard deviation of 249.07. Lastly, Tourist daily expenditure is a dependent variable that uses in this research. The minimum total expenditure for foreign tourists in Indonesia from 2013 to 2016 was US\$ 88.12, and US\$ 211.52 was the maximum expenditure for foreign tourists. The average expenditure of foreign tourists in Indonesia is 139.14, with a standard deviation of 25.75.

The subsequent analysis is multiple regression analysis to show correlations between dependent and independent variables that produced the variables' strengths and weaknesses. This study uses a standard coefficient to determine the effect of independent variables on the dependent variable. The result of multiple regression analysis shows in Table 2.

Tabel 2. Multiple Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	113.487	10.598		10.708	0.000
Length of stay	-3.116	0.451	-0.447	-6.915	0.000
Accommodation	0.029	0.451	0.138	2.128	0.035
Travel Purpose	0.011	0.005	0.157	2.076	0.040
Occupation	0.030	0.007	0.290	4.221	0.000

The significant value of the regression analysis equation is $P < 0.05$. In table 2 shows that the variables possessed in this study are involved in multiple regression equations below.

$$\text{Tourist Daily Expenditure} = -0.447 \text{ length of stay} + 0.138 \text{ accommodation} + 0.157 \text{ travel purpose} + 0.290 \text{ occupation}$$

Classic assumption test consists of three. There are a normality test, heteroscedasticity test, and multicollinearity test, the classical assumption test. The normality test is used to analyze the dependent variable and the independent variable that is usually distributed. This study uses histograms and probability plots to test the normality of dependent and independent variables. This study has a normal distribution; it is suitable for multiple regression models. A scatter plot where the pattern on the scatter plot spreads means that the data produces a good regression model. This result also shows that there is no heteroscedasticity in homoscedasticity. Multicollinearity test is divided into two, first Tolerance where the value in the Tolerance must be lower than zero (0). The second Variance Inflation Factor (VIF) Value or value in VIF must be lower than 10. Both of these multicollinearity tests are used to measure multicollinearity found in the regression model. This study shows that at Tolerance and VIF, there is no multicollinearity in the regression model, where the factors found in Tolerance are between .542 and .745. The values found on VIF are 1.342 and 1.844. Last is Autocorrelation is used to analyze the correlation between variables. In Durbin- Watson, the value between -2 to 2 shows no autocorrelation as the result of Durbin-Watson is 1.538.

The subsequent analysis is hypotheses testing. T-test was used to test each independent variable on the dependent variable. This study has four independent variables; thus, four hypotheses were analyzed using a t-test.

H1: There is a significant effect of tourist length of stay per day on Indonesia's foreign tourist expenditure. In table 2, Multiple Regression Analysis shows that the Length of stay's significant value is .000, which means that the hypothesis H_{a1} is accepted and H_{o1} is rejected because of a significant effect of the Length of stay toward foreign tourist daily expenditure in Indonesia. The Length of Stay result shows that the length of stay has a significant negative effect on foreign tourist expenditure. Where the longer foreign tourists stay, the lower the expenditure spent by foreign tourists. This condition could be affected by several factors. As tourists feel comfortable with the destination, it might impact them to an extent their vacation. Therefore, they need to adjust their expenditure. This will reduce their daily expenditure, another factor due to the occurrence of adaptation carried out by foreign tourists. Previous studies also produced significant negative effects on tourist expenditure (Rahasia, 2018; Frleta, 2017; Jurdana & Frleta, 2016). Based on the result of (Brida & Scuderi, 2013) stated, Length of stay has a significant positive effect on tourist expenditure.

H2: There is a significant effect of tourist accommodation toward foreign tourist daily expenditure in Indonesia. In table 2, Multiple Regression Analysis shows that the significant value of the accommodation is .035, which means that the hypothesis H_{a2} is

accepted and Ho2 is rejected because of a significant effect of accommodation toward foreign tourist daily expenditure in Indonesia. The result of accommodation show that it has a significant value toward foreign tourist expenditure in Indonesia. This happened because of a strategy implemented by the government, such as BAS. The more tourists arrive in Indonesia, the more expenditure on accommodation increases. Based on descriptive results, the most increasing accommodation from 2013 – 2016 is a star hotel and villa. This study is supported by several researchers, namely (Rahasia, 2018; Brida & Scuderi, 2013; Marcussen, 2011; Frleta, 2017), which also has significant positive results.

H3: There is a significant effect of tourist travel purpose toward foreign tourist daily expenditure in Indonesia. In table 2, Multiple Regression Analysis shows that the significant value of travel purpose is .040, which means that the hypothesis Ha3 is accepted and Ho3 is rejected because of a significant effect travel purpose toward foreign tourist daily expenditure in Indonesia. Previous research stated that most travel purposes on personal like vacation are higher than business (Brida & Scuderi, 2013; Marcussen, 2011; Rahasia, 2018; Frleta, 2017). This study shows the different results with previous studies that most of the travel purposes of foreign tourist visit Indonesia are business.

H4: There is a significant effect of tourist occupation toward foreign tourist daily expenditure in Indonesia. In table 2 Multiple Regression Analysis shows that the significant value of occupation is .000, which means that the hypothesis Ha4 is accepted and Ho4 is rejected because of a significant effect of occupation toward foreign tourist daily expenditure in Indonesia. This study found that the high contribution of foreign tourist visits to Indonesia based on occupation is manager, employee, and private employee. Therefore, even though occupation data shows a decreasing number from year to year, it still significantly affects tourist expenditure.

The F-test is used to analyze the value of the relationship between the independent and dependent variables (Table 3). The F test was used to test the significant simultaneous effect of all independent variables on dependent variables. In this study, F test was used to test the Fifth Hypothesis (H5).

H5: there is a simultaneous effect of tourist length of stay, accommodation, travel purpose, and occupation toward foreign tourist expenditure in Indonesia during 2013-2016. Table 4.5 shows that the significant value of the simultaneous effect of tourist length of stay, accommodation, travel purpose, and occupation toward foreign tourist expenditure in Indonesia is .000. That means Ha5 is accepted and Ho5 is rejected because of a significant influence of simultaneous effect of tourist length of stay, accommodation, travel purpose, and occupation toward foreign tourist expenditure. The result of Length of stay has a negative significant on the expenditure of foreign tourists in Indonesia. While accommodation, travel purposes, and occupation have a positive significant effect on foreign tourists' expenditure in Indonesia. Previous research also examined the same thing as (Sanchez & Garcia, 2013; Frleta, 2017; Rahasia, 2018).

Table 3. F Test Result

ANOVA	Sum of Square	dF	Mean Square	F	Sig.
Regression	53093.668	4	13273.417	47.666	0.000
Residual	36479.260	131	278.468		
Total	89572.928	135			

a. Dependent Variable: Tourist Daily Expenditure

b. Predictors: (Constant), Accommodation, Length of Stay, Travel Purpose, Occupation

The Coefficient of Determination (R²) shows that the value of adjusted R square is .580 or 58% of the daily expenditure of foreign tourists in Indonesia from 2013-2016

effect by Length of stay, accommodation, travel purpose, and occupation. About 42% of foreign tourist expenditure in Indonesia from 2013 until 2016 was effect by other variables.

4. Conclusion and Recommendation

Based on analysis and discussion above, this study was concluded that all hypotheses were accepted. However, this study shows that the longer duration of foreign tourist stay will affect the daily tourist expenditure, and the daily expenditure of tourists will be reduced. Aside from Length of stay, accommodation, travel purpose, and occupation show a positive significant impact. Star hotel and villa are higher rather than non – start hotel and family. Based on the result occupation has a higher contribution than other variables to determine foreign tourist daily expenditure were come from manager, employee and private employee are higher than other occupation categories. Based on the result analysis, Length of stay, accommodation, travel purpose, and occupation have a simultaneous effect on foreign tourist daily expenditure in Indonesia. Tourist activity can gain daily tourist expenditure to calculate tourist duration stay, the accommodation they use, purpose visit to measure tourist activity on travel, and how much money they spend based on occupation.

Recommendation given from this study is that the tourism industry should create innovation to attract foreign tourists to stay longer in Indonesia and spend more during their visit. By increasing accommodation facilities such as in start hotel, non-start, hotel, transportation, and others. Further, expanding tourism packages and further developing the local tourism industry sector to keep maintaining foreign tourists' daily expenditure. Added, provide various events that can attract long-stay tourists and increase their expenditure in Indonesia.

5. References

- Brida, J. G., & Scuderi, R. (2013). Determinants of Tourist expenditure: A review of macro-econometric models. *Tourism Management perspectives*, 6(2013).
- Frleta, D. S. (2017). Analysing off-season tourist expenditure. *European Journal of Tourism Research*.
- Hidayah, S. A., & amory, I. G. (2017). *Statistik Profil Wisata Macanegara 2016*. Jakarta: Ministry of Tourism Indonesia.
- Hidayah, S. A., & Utami, R. C. (2015). *Statistik Profil Wisata Macanegara 2014*. Jakarta: kementrian pariwisata.
- Jurdana, D. S., & Frleta, D. S. (2016). Factors affecting the expenditure of domestic and foreign tourists. *Tourism & Hospitality industry*, 2014.
- Kim, & Gon, W. (2011). Factor affecting the travel expenditure of visitor to Macau, China. *Tourism Economics*, 17(4), 9.
- Marcussen, C. H. (2011). Determinants of tourist spending in cross-sectional studies and at Danish destinations. *Tourism Economics*, 17(4).
- Rahasia, C. R. (2018). The Analysis of Foreign Tourist Daily Expenditure.
- Sanchez, & Garcia, A. (2013). Daily expenses of foreign tourists, Length of stay and activities. *Tourist economics*, 617.
- Suhariyanto, D. (2018). *Statistik Indonesia 2018*. Jakarta Indonesia : Badan Pusat Statistik.
- Tantowi, A., Suryani, E., & Barudin. (2017). *Neraca Satelit Parawisata Nasional 2016*. jakarta: Nespasnas 2016.
- Thrane, C. (2016). The determinants of Norwegians summer tourist expenditure: foreign and domestic trips. *Tourism Economics*, 20(1).
- Wang, Y., Rompf, P., Severt, D., & Peerapatdit, N. (2006). Examining and identifying the Determinants of Travel Expenditure Patterns. *International journal of tourism research*, 8(5).
- WTTC. (2018). *Travel & Tourism economic impact 2018 world*.