Analysis of Regional Economic Values Development Based on Typology, Frequency of Visit and Population using Geographic Information System To determine Strategy Development of Semarang City Tourism Area

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Abstract. The city of Semarang has six tourism icons that have the potential as tourist attractions that continues to grow every year, namely Lawang Sewu, Sam Poo Kong, Vihara Buddhagaya Watugong, Masjid Agung Menara Jawa Tengah, Museum Maerokoco, and Kota Lama. Based on this, it is necessary to determine typology and calculate the regional economic value from year to year to determine tourism development strategies. Total Economic Value (TEV) is obtained from the sum of Travel Cost Method (TCM) and Contingent Valuation Method (CVM). TCM and CVM data are obtained from the sampling survey (respondents) in 2010 and 2018. The data processing method used is multiple linear regression analysis. Based on calculations, Total Economic Value (TEV) in 2010 and 2018 which experienced an increase was Lawang Sewu of 81.53%, Sam Poo Kong of 42.98%, Kota Lama of 49.93%, Museum Maerokoco of 64.74 %, and Menara Masjid Agung Jawa Tengah of 76.87%. While Candi Bodhagaya Watugong experienced a decrease by -4.40%. The results of the regression output that most affect the function of the average tourist area are education variables and frequency of visits. The most appropriate step to develop tourism is to increase tourism promotion, while the other steps that can be used in a row based on priority are to improve tourism facilities and infrastructure, improve the quality of tourist attractions, improve education and prevent damage to tourism sites.

1. Introduction
Semarang is the capital city of Central Java known as well as the industry, government center, and strategic tourist destination. It has the potential to be developed and marketed. Some of the well-known tourist destinations are Lawang Sewu, Sam Poo Kong, Buddhagaya Watugong Monastery, Kota Lama Tour, Maerokoco Museum and The Great Mosque of Central Java Tower. This places are often visited by many tourists and become the popular tourist objects in Semarang [11]. The tourist areas mentioned keep evolving annually based on the tourists visiting data graphically by showing significant increase year by year because of the strategic location in the central of the city and also have historic and religious values. Those are one of the main reasons tourist are attracted to visit. The development of Semarang City tourism is quite encouraging, this can be seen from the number of tourist visits which increased by 16%, wherein 2013 it reached 3,157,658 tourists increased compared to the number of...
visits tourism in 2012 was 2,712,442 tourists. The areas have economic value that can be calculates based from the typology. According to [10], the region is an area where the boundaries are functional. So the regions bordered by functional boundaries and utilities are known as the zone. Sector economic value is all aggregates of economic values. It directly uses value or indirect use value, optional value or selection, existence, value, and inheritance value outside of land value and every property included in the valued sector. Based on that, calculation of the economic value from year to year and the mapping to determine for the development strategy of the tourist areas are necessary. The study on the economic values is needed, which can be observed from visiting numbers by visitors to estimate the economic value obtained from the visitors from tourist areas that later will affect the tourist attraction. Many previous studies in economic valuation field like [5].

The TCM and CVM method to acquire TEV value also determining the variables that are affecting the most with visiting frequency data and population number by using data between 2010 and 2018. TEV is the accumulation of economic value based on use value (UV) that is obtained from CVM calculation and economic value based on non-use value (NUV) that is obtained from TCM calculation. Calculation by using different years data is intended to find out the economic value of the region in eight years period. Eight years period is significantly showing differences since the visitors keep increasing. The deviation of TEV of 2010 and 2018 is the percentage of value increase or decrease for six different tourist locations observed. According to [12]. Multiple regression analysis is the quantitative data analysis used to find out bigger correlation linearly between two or more independent variables (X1, X2, …Xn) equally take effect significantly towards dependent variable (Y). Multiple regression analysis to obtain a correlation between TCM data variable and CVM data, TCM and VCM from field survey by interview method to qualify valid data standard and reliable analysis in statistic test.

The goal of this research is to calculate the raise percentage of the economic value of a region from the typology (DUV, NUV, and TEV). Another goal is to sort out the variable that affects the economic variable of the region the most in LawangSweu, Sam Poo Kong, Buddagaya monastery, Maerokoco Museum, Kota Lama and Great Mosque of Central Java Tower in 2010 and 2018

2. Material and methods

2.1. Study Area

The study area of this research is in Semarang City, Central Java, Republic of Indonesia. Semarang City is the capital of Central Java Province, Indonesia and also the fifth largest metropolitan city in Indonesia after Jakarta, Surabaya, Medan, and Bandung. As one of the most developed cities in Java Island, Semarang City has a population of nearly 2 million people and daylight can reach 2.5 million people. This means that there is a population movement every day in and out of the surrounding cities, the functional metropolitan area (Kendal, Demak, Ungaran - Semarang, Salatiga, and Purwodadi Regencies - Grobogan District) with a population of around 6 million. The city is located about 558 km east of Jakarta, or 312 km west of Surabaya, or 621 km southwest of Banjarmasin and is located at 6° 58'S 110° 25'E. The city has a dominant Javanese population. Semarang borders the Java Sea in the north, Demak regency in the east, Semarang regency in the south, and Kendal regency in the west. City area 373.67 km2. Studi area of this research shown in Figure 1.
2.2. Research data
The data in this study includes data spatial and non-spatial, they are:
a). Respondent data of each tourist locations at least 30 samples from TCM questionnaires or CVM questionnaires from the survey in 2010 and 2018.
b). Frequency data or visitors number in one year and area of region data used the 2010 and 2018 from each tourist location institution.
c). Variable weight value used in calculation refers to SPT directorate, BPN 2012.
d). Tourist Visits Frequency Data and the number of populations obtained from Semarang Government Based Department of culture and tourism and The Central Statistics Agency (BPS) Central Java Province in 2010 and 2018

2.3. Methods
Methods that are done in this research are calculating the economic value of region based on the typologies such as DUV from TCM data and EV from CVM data for 2010 and 2018. By applying statistic test approach with using value from the t distribution percentage table with df = total sample of each tourist location with confidence interval of 0.05 and terms of value of t calculated on the summary output result of regression is more than the value from the t table, so the independent variable that affects the tourist area the most can be determined. The method conducted in this research is to analyze the economic value of a regional shown in Figure 2.
2.3.1. Method of Assessment of Regional Economy

According to [8], in general, the method of assessing the economic benefits (environmental costs) of natural and environmental resources can basically be divided into two major groups, based on a market-oriented approach and survey-hypothesis assessment. A non-market value approach is implemented to calculate non-use value whether it is the value of existence, the value of choice, the value of inheritance depending on the natural resources/area to be assessed. Much literature in the field of economic valuation such as [4], uses the typology of economic value in the terminology of Total Economic Value (TEV). TEV from the land of the region itself, judged from the non-market value of the value of direct use (use value) and the use of indirect (non-use value), TEV can be formulated as follows equation (1).

$TEV = (DUV + IUV + OV) + (BV + EV)$  

(1)

Where TEV (total economic value), DUV (direct use value), IUV (indirect use value), OV (option value), BV (bequest value) and EV (existence value).

**Figure 2.** Flowchart method conducted in this research is to analyze the economic value of a region

**Figure 3.** Total Economic Value Typology
2.3.2. Travel Cost Method (TCM)
Travel cost method (TCM) is the oldest method of measuring indirect economic value. The travel cost method is a common method used to estimate the outdoor recreational value of a location or object [6]. This method is an indirect measurement method for goods or services that do not have market value, assuming that visitors to a tourist site bear the economic costs in the form of travel expenses and time to visit a place. The equation of TCM can be seen in equation (2).

\[ V = \beta_0 (\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6) \] (2)

Where : \( V \) (Frequency of Visit), \( X_1 \) (Travel Fees), \( X_2 \) (Age), \( X_3 \) (Education), \( X_4 \) (Revenue), \( X_5 \) (Visit Time), \( X_6 \) (Alternative Visit), \( \beta_1..\beta_6 \) (Regression coefficient X1 ... X6).

2.3.3. Contingent Valuation Method (CVM)
The Contingent valuation method (CVM) methodology is one of the survey-based methodologies to estimate how much a person/society's assessment of goods, services, and equity. CVM essentially aims to determine the willingness to pay (willingness to pay) or WTP from the community and to know willingness to accept (WTA) [9]. The equation of CVM can be seen in the following equation (3).

\[ WTP = \beta_0 X 1\beta_1 X 2\beta_2 X 3\beta_3 X 4\beta_4 X 5\beta_5 X 6\beta_6 X 7\beta_7 X 8\beta_8 X 9\beta_9 \] (3)

where : \( X_1 \) (Average existence), \( X_8 \) (Average conversion), \( X_2 \) (Age average), \( X_9 \) (Average participation), \( X_3 \) (Education is average), \( \beta_0 - \beta_9 \) (Coefficient), \( X_4 \) (Average Family Amount), WTP (willingnessTo Pay), \( X_5 \) (Average revenue), \( X_6 \) (Average benefits), \( X_7 \) (Mean Interest).

2.3.4. Willingness to Pay
Willingness to Pay is the willingness of every individual or society to pay or spend money in order to improve environmental conditions in accordance with the standards it wants. This willingness to pay is based on the consideration of costs and benefits to be obtained by the consumer.

2.3.5. Multiple Regression Analysis
Multiple regression analysis is used to calculate how the state (up and down) of the dependent variable (criterium), if two or more independent variables as a predictor factor should be decreased in value. So multiple regression analysis will be done when the number of independent variables at least [12]. The regression equation for \( n \) predictors can be presented in equation (4).

\[ Y = a + b_1 X_1 + b_2 X_2 + ... + b_n X_n \] (4)

Where : \( a \) (Dependent Variables), \( b_n \) (Independent Variable Coefficient), \( X_n \) (Independent Variable)

2.3.6. Validity Test and Reliability Instrument Test
2.3.6.1. Validity test
Validity indicates the extent to which a measuring device can measure what it wants to measure. Testing the validity of data collection tools in the opinion of some experts can be classified into several types of test construct validity, content validity testing, external validity testing, predictive validity testing, and visual validity testing face validity). Because there are different types of data collection techniques and different types of validity, the validity of the test is limited to the preparation of attitude scales with construct validity.
2.3.6.2. **Test Reliability Instruments**
Reliability is a value that shows the consistency of a measuring device in measuring the same phenomenon. Each measuring device should have the ability to deliver consistent measurement results.

2.3.6.3. **Partial Test T**
Test $t$ is a partial regression coefficient test form used to determine the magnitude of the influence of each independent variable in influencing the change of dependent variable, in doing the assumption assumed other independent variables in a constant state.

### 3. Processing Data

3.1. **Secondary data collection Statistical Data**
Based on the survey data of each tourist location institutions, Department of culture and tourism of the Government of Semarang and The Central Statistics Agency (BPS) Central Java Province, the supporting data collected are:

1. The total population of Semarang in 2010 is 1,629,924 and in 2017 amounted to
2. The total population of Banyumanik District in 2010 is 136,453 and in 2017 is 136,544
3. Region area, visitors number and entrance price of each location as shown in Table 1.

#### Table 1. Region Area, Visitors Number and Entrance Price of Each Location

| Locations                              | Area   | Visitors in 2010 | Visitors in 2018 | Entrance Price |
|----------------------------------------|--------|------------------|------------------|----------------|
| Lawang Sewu (Recreational and Cultural Site) | 1.39 Ha | 233,539 | 658,000 | Rp10,000 |
| Sam Poo Kong (Recreational and Religious Tourism) | 3.31 Ha | 180,000 | 278,008 | Rp3,000 |
| Vihara Buddhagaya Watugong Monastery (Recreational and Religious Tourism) | 2.25 Ha | 14,310 | 14,580 | Voluntarily |
| Kota Lama Tourism (Recreational and Cultural Site) | 3 Ha | 250,360 | 530,520 | Voluntarily |
| Museum Maerokoco | 23.84 Ha | 131,127 | 320,120 | Rp8,000 |
| Masjid Agung Menara Jawa Tengah | 10 Ha | 218,271 | 395,010 | Rp7,000 |

3.2. **Economic Value of Region Typology**
The value observed in this research consists of the value of existence, benefits of the information provider and aesthetic benefit economic value of region based on the function as tourism provider show in Table 2.

#### Table 2. Typology of Economic Value of Region

| Locations                              | Typology of Regional Economic Values |
|----------------------------------------|--------------------------------------|
| Lawang Sewu (Recreational and Cultural Site) | DUV IUV OV BV EV |
| 1. Existence Value                      | v                                    |
| 2. Tourism Value                        | v                                    |
| Sam Poo Kong (Recreational and Religious Tourism) | DUV IUV OV BV EV |
| 1. Existence Value                      | v                                    |
| 2. Tourism Value                        | v                                    |
| Buddhgaya Watugong Monastery (Recreational and Religious Tourism) | DUV IUV OV BV EV |
| 1. Existence Value                      | v                                    |
| 2. Tourism Value                        | v                                    |
| Kota Lama Tourism (Recreational and Cultural Site) | DUV IUV OV BV EV |
| 1. Existence Value                      | v                                    |
2. Tourism Value

Maerokoco Museum (Recreational and Cultural Site)

1. Existence Value
2. Tourism Value

Great Mosque of Central Java Tower (Recreational and Religious Tourism)

1. Existence Value
2. Tourism Value

3.3. Typology Calculation Results of Total Economic Value of Region

The calculation result based on the typology of the economic value of region obtained the value of existence beneficial such as DUV and tourism beneficial such as EV. DUV and EV result from 2010 and 2018 are shown in Table 3.

| Locations                        | 2010       | 2018       |
|----------------------------------|------------|------------|
|                                  | DUV (Rp)   | EV (Rp)    | DUV (Rp)   | EV (Rp)    |
| Lawang Sewu                      | 498,502,779,000 | 105,625,787,500 | 940,964,503,800 | 155,719,248,000 |
| Sam Poo Kong                     | 368,806,844,500 | 99,760,547,850  | 569,618,073,600 | 100,321,772,100 |
| Buddhagaya Watugong Monastery   | 1,859,627,753  | 47,227,691,940  | 1,885,881,911   | 45,039,201,350  |
| Kota Lama Tourist                | 602,100,646,000 | 35,230,086,600  | 920,350,680,000 | 35,230,086,600  |
| Maerokoco Museum                 | 280,200,408,000 | 39,100,154,000  | 450,240,108,000 | 39,100,154,000  |
| Great Mosque of Central Java Tower | 1,366,531,749,000 | 77,009,790,490  | 2,473,043,630,000 | 80,110,048,390  |

Total economic value (TEV) of 2010 is then calculated to find out the deviation. The deviation is the raise percentage or deflation of TEV. The rising percentage is shown in Table 4.
Table 4. Typology of Economic Value of Region in 2010 and 2018 and percentage or deflation TEV

| Locations                      | 2010          | 2018          | 2010-2018   |
|-------------------------------|---------------|---------------|------------|
|                               | TEV (Rp)      | TEV (Rp)      | TEV (Rp)   |
| Lawang Sewu                    | 604,128,566,500 | 1,096,683,751,800 | 492,555,185,300 | 81.53%   |
| Sam Poo Kong                  | 468,567,392,350  | 669,939,845,700  | 201,372,453,350 | 42.98%   |
| Buddagaya Watugong Monastery  | 49,087,319,693  | 46,925,083,261  | (2,162,236,432) | -4.40%   |
| Kota Lama Tourist             | 637,330,732,600  | 955,580,766,600  | 318,250,034,000 | 49.93%   |
| Maerokoco Museum              | 319,300,562,000  | 526,020,309,000  | 206,719,747,000 | 64.74%   |
| Great Mosque of Central Java Tower | 1,443,541,539,490 | 2,553,153,678,390 | 1,109,612,138,900 | 76.87%   |

Figure 5. TEV Chart

3.3.1. Economic Value of Lawang Sewu Tourist Region
Based on the table that shows, distributions of t points percentage with df = 40 (total samples) and confidence interval of 0.05, t table is 2.02108. If t counts on summary output regression result > 2.02108, the independent variables affect the people desire to pay to maintain the existence of Lawang Sewu in Semarang so the people are utilizing the area directly contributing to keeping the area existence. Analysis result shows X2 variable (age), X3 (education) and X5 (income) the most affecting variable toward the willing to pay is because the t count from regression result is bigger than t table, where X2 is 4.13112, X3 is 2.68483 and X5 is 3.30168.

3.3.2. Economic Value of Sam Poo Kong Tourist Region
Based on the table of distribution, t point percentage with df = 40 (total samples) and confidence interval 0.05, t table value is 2.02108. If the t count in summary output regression results > 2.02108, then the independent variables affect the tourist location functions of Lawang Sewu as a service provider in Semarang. Analysis result shows that V variable (visit frequency) that affect the region function the most because the t count from regression result is larger than t table, which is V for 2.97175.

3.3.3. Economic Value of Buddagaya Watugong Monastery Tourist Region
From the table of distribution of t points percentage with df = 40 (total samples) and confidence interval of 0.05, the t table value is 2.02108. If the t count in summary output regression results > 2.02108, then the independent variables affect the function of Vihara Buddagaya monastery as the tourism provider.
Analysis result shows that the visit frequency (V) most likely influenced the region function because the \( t \) count of regression result is bigger than \( t \) table, which is \( V \) for 4.50595043.

3.3.4. Economic Value of Kota Lama Tourist Region
From the table of distribution of \( t \) points percentage with \( df = 35 \) (total samples) and confidence interval of 0.05, the \( t \) table value is 2.056040. If the \( t \) count in summary output regression results > 2.04308, then the independent variables affect the function of Vihara Buddagaya monastery as the tourism provider. Analysis result shows that the visit frequency (V) most likely influenced the region function because the \( t \) count of regression result is bigger than \( t \) table, which is \( V \) for 4.806708.

3.3.5. Economic Value of Maerokoco Museum Tourist Region
From the table of distribution of \( t \) points percentage with \( df = 45 \) (total samples) and confidence interval of 0.05, the \( t \) table value is 2.04680. If the \( t \) count in summary output regression results > 2.03046, then the independent variables affect the function of Vihara Buddagaya monastery as the tourism provider. Analysis result shows that the visit frequency (V) most likely influenced the region function because the \( t \) count of regression result is bigger than \( t \) table, which is \( V \) for 4.680683.

3.3.6. Economic Value of Great Mosque of Central Java Tower Tourist Region
From the table of distribution of \( t \) points percentage with \( df = 40 \) (total samples) and confidence interval of 0.05, the \( t \) table value is 2.02108. If the \( t \) count in summary output regression results > 2.02108, then the independent variables affect the willingness to pay for the sake of preserve the Great Mosque of Central Java Tower in Semarang, so that the people can utilize the existence of the location to contribute in order to preserve the existential of the location. Analysis result shows that the existence variable (X1), urgency (X7) and participation (X9) affect the willingness to pay the most, because the \( t \) count from regression result is larger than \( t \) table which are 2.836626328, 2.857673785 and 3.088176963.

3.4. Statistics Test
From the research survey data, the questionnaire as a measuring instrument is tested to find out the validity level and reliability of the used questionnaires. If the data is valid and reliable then the research can proceed. If otherwise, the measuring instruments need to be re-examined to obtain valid and reliable data.

3.4.1. Validity Test
Validity test is done by using SPSS statistics 17.0 software for windows. The result from the validity test is then compared with \( r \) table with \( df = 1 \). For CVM of Lawang Sewu, the \( df = 1 \) (38-1=37) is 0.325, CVM of Sam Poo Kong \( df = 1 \) (35-1=34) is 0.339, CVM of Buddhagaya Watugong monastery \( df = 1 \) (35-1=34) is 0.339 and CVM of Great Mosque of Central Java Tower, \( df = 1 \) (36-1=35) is 0.334. If the \( r \) count > \( r \) table, then the data s invalid and need to go through a validity test again. From the recapitulation result above, all the items questions are valid from all of the researched tourist locations shown by \( r \) count > \( r \) table.

3.4.2. Reliability Test
From the criteria by Kaplan and Saccuzzo, minimum reliability is 0.7. If \( r_{\alpha} > 0.7 \), then the variable is not reliable. The reliability test result for the average of 2010 and 2018 shows the CVM of Lawang Sewu, Sam Poo Koong, Buddhagaya Watugong monastery and Great Mosque of Central Java tower are reliable because the alpha Cronbach or \( r_{\alpha} \) value is 0.721 for CVM of Lawang Sewu, 0.707 for CVM of Sam Poo Kong, 0.758 for CVM of Buddhagaya Watugong monastery, 0.765 for CVM of Kota Lama Tourist 0.720, 0.754 for CVM of Maerokoco Museum and 0.769 for CVM of Great Mosque of Central Java Tower Conclusions.
3.5. Analysis of population development and frequency of tourist visits with TEV

In Figure 6 below is a 3D graph between the Population of the City of Semarang, the Frequency of Visits and the Total Economic Value of the Region periodically from 2010-2018. The 3D graph above shows in Figure 6 that in 2010 and 2018 there was an increase in population, frequency of visits and economic value of the region. Explanation of these facts can be predicted that the three variables will continue to increase in the coming year. Population as much as 1,629,924 million in 2010 and 1,634,600 million in 2018, the frequency of visits to each tourist location in 2010 and 2018 as in Table 1 and the total economic value of the region in as shown in Table 3 and Table 4.

![Figure 6. Relation of population development and frequency of tourist visits with TEV](image)

The presentation of 3D graphics with 3 variables from 2010-2018 above has increased every year and it can be concluded that there is a correlation between each variable with the following explanation:

1. The greater the population of Semarang City, the more likely the frequency of visits to locations tourist will increase due to many factors that cause a person to need entertainment or vacation.
2. The increasing frequency of visits to locations tourist, the economic value of locations area will increase or increase and vice versa. If the frequency of visits decreases, the economic value of the locations tourist area will also decrease.
3. The increasing population of Semarang City, it is likely that the frequency of visits to locations tourist will increase and affect the economic value of the locations tourist area to be obtained.

3.6. Total Economic Value (TEV) Map

Map of Total Economic Value is obtained from the results of direct use value (DUV) merging obtained from TCM calculations and indirect use values (EV) obtained from the CVM calculation. The Map of Total Economic Value is shown in Figure 7.
Figure 7. The Map of Total Economic Value (TEV), (a) plotted on Quickbird satellite imagery and (b) overlaid with settlement maps

4. Conclusions
From this research, we can conclude that:

1. From the calculation completed, Typology Value in 2010 and 2018 of Tourist location of Lawang Sewu in TEV obtained raise percentage of 81.53%. For Sam Poo Kong, there is a raised percentage of 42.98%. Meanwhile, Buddhagaya Watugong monastery obtained decrease of -4.40%. For Old Town Tourism obtained decrease of 49.93%, for Maerokoco Museum obtained raises the percentage of 64.74%, and For Great Mosque of Central Java Tower obtained raised by 76.87%.

2. Based on the percentage table of $t$ distribution with $df = total$ samples, each tourist location with confidence intervals of 0.05 and $t$ count on summary output from regression result is larger than the $t$ table, then the independent variable impact the function of the tourism object region. Analysis result shows that variable X3 (education) affect the function of Lawang Sewu. For variable V (visit frequency affects the function of Sam Poo Kong the most. Buddhagaya Watugong monastery is affected by the V variable (visit frequency). Kota Lama tourist is affected by the income variable count most influence, Maerokoco museum is affected by the frequency variables and length of visits. Meanwhile, visit frequency variable (V) and alternative location variable (OPT) are giving more impacts for the Great Mosque of Central Java Tower.

3. The consumer surplus that represents the net benefits derived from recreational activities in Tourism Objects on this demand request model. The most appropriate strategy (first priority) to develop the Object is to increase tourism promotion. Strategies that can be consecutive back-up based on priority are improving tourism facilities and infrastructure, improving the quality of tourist attractions, and based on education and preventing damage to tourist sites.

References
[1] Anonim 2010 Kota Semarang,Dalam Angka 2010 (Badan Pusat Statistik Kota Semarang)
[2] Anonim 2010 Kota Semarang,Dalam Angka 2017 (Badan Pusat Statistik Kota Semarang)
[3] Direktorat BPN 2012 *Survey Potensi Tanah Buku Panduan Latihan Hitung Penilaian Kawasan*.

[4] Dixon J A Hifschmidt M M eds. 1986 *Economic Evaluation Techniques for the environment: A Case Study Workbook* (Baltimore: Johns Hopkins University Press)

[5] Freeman A M 2003 *The Measurement of Environmental and Resource Values: Theory and Methods* (Washington, DC: Resources for the Future)

[6] Hausman J A 1993 *Contingent Valuation: A Critical Assessment North-Holland*. (New York)

[7] Hanemann W M 1991 Willingness to Pay and Willingness To Accept: How Much Can They Differ?, *The American Economic Review* 81(3): 635-647

[8] Hufschmidt M M James D E Meister A D Bower B T and Dixon J A 1983 *Environment, Natural Systems, and Development: An Economic Valuation Guide*. (Baltimore: Johns Hopkins University Press)

[9] Hoevenagel R 1994 *The Contingent Valuation Method: Scope and Reliability* (Economics Department, Free University of Amsterdam: Amsterdam)

[10] Pontoh N K and Iwan K 2008 *Pengantar Perencanaan Perkotaan* (Bandung: ITB Press).

[11] Qadarrochman 2010 *Analisis Penerimaan Daerah Dari Sektor Pariwisata Di Kota Semarang Dan Faktor-Faktor Yang Mempengaruhinya*. (Semarang: Fakultas Ekonomi Universitas Diponegoro)

[12] Sugiyono 2012,*Statistika untuk Penelitian*. Cetakan ke-1. (Bandung: Alfabeta)

[13] Smith V K 1987 Nonuse values in benefit cost analysis. *Southern Economic Journal* 54(1):19-26.

[14] Salazar S D S Marques J M 2005 Valuing cultural heritage: The social benefits of restoring and old Arab tower. *Journal of Cultural Heritage*, 6: 69–77. doi: 10.1016/j.culher.2004.09.001

[15] Seip K Strand J 1992 Willingness to pay for environmental goods in Norway: A contingent valuation study with real payment *Environmental and Resource Economics*, 2(1): 91–106. doi: 10.1007/BF00324691