The Influence of Government Expenditure, Infrastructure And Investment on Tourism Sector Development Case Study (West Nusa Tenggara, South Sulawesi, North Sulawesi, And Papua)

Budiansyah Tawang*, Abd Hamid Paddu, and Muh Djibril Tadjibu

Economic Development And Planning, Faculty of Economics and Business, Hasanuddin University, Makassar City, South Sulawesi, Indonesia
Email: tawangbudi5@gmail.com

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Abstract
This study aimed to analysis impact of government expending, investation and infrastructure toward development tourism sector in to four province. The analysis unit in this study is Papua, north Celebes, south Celebes, and west southeast island . collecting data using documentation study that is mixed into time series, cross section and pooled data. The data is analysed such as quantitative by using structural model method. Based on the result of study getting conclusion that infrastructure and government expending has significant positive effect toward of temporary investment tourism number uneffect to number of tourism. In other side number of tourism so significant positive effect in tourism sector worker with the two independents variable like expending of government and infrastructure, investment uneffect indirectly toward tourism sector worker through tourists.

1. Introduction
The weakening and uncertainty of the global economy that has not moved to a new balance point which is better for a negative impact on the weakening of the Indonesian economy in the last few years. From various information related to the latest global developments, this global uncertainty will last quite a long time. This was even more pronounced when China devalued its currency a few years ago which further confirmed the existence of a Currency War in the global economy. To anticipate this, the Indonesian economy can no longer depend solely on the commodity sectors or natural resources. It is time for the national economy to be supported by non-commodity sectors, one of which is tourism, which is not so affected by the global economy.

Furthermore, the tourism condition which is so fast has an impact on the Asia-Pacific region, in the past decade. During the period 2005 - 2015 tourist arrivals in this region grew by 6.1% - much faster than the development of world tourism which was only 3.9%. The South and Southeast Asian regions contributed the most with tourist growth rates of 8.4% and 7.9% respectively in the past decade. The Southeast Asian region contributes 8.8% of world tourist arrivals, and is second only to the Northeast Asia region, which was able to bring in tourists as much as 12% of the total world tourists in 2015. (Sutyastie, Sihono Dan Bagdja, 2016).

For the case of Indonesia, the development of the tourism sector continues to increase, and that is in line with Presidential Instruction No. 9 of 1969 which clearly states that this sector was built with the intention of increasing foreign exchange income, community income, expanding opportunities and employment and encouraging activities supporting industrial activities and other side industries. Graph 1 presents the value and growth of foreign exchange from the tourism sector for 2003 to 2017.
Apart from being a foreign exchange earner, the tourism sector also contributes to several macroeconomic indicators in a country. According to the Ministry of Tourism and Creative Economy (Kemenparekraf 2012), the tourism sector influences several macroeconomic indicators, namely: sectoral added value that contributes to Gross Domestic Product (GDP), wages and salaries that contribute to national wage levels and the creation of job opportunities that contribute to the number of national employment.

The tourism sector is also able to have a multiplier effect on improving the welfare of the community, because at every tourist visit, consumption is not only focused on one industry, but also for the entire industry of goods and services that it enjoys while in the destination (Andriansyah 2008). According to the World Tourism and Travel Agency (WTTC), in Indonesia, for every travel and tourism expenditure of USD 1 million supports around 200 jobs and contributes to GDP of USD 1.7 million. Graph 2 shows how the tourism sector contributes to macroeconomic indicators in Indonesia.

Eastern Indonesia has many tourism objects that need to be developed to serve as opportunities to increase regional GRDP. The tourism objects offered include nature tourism, historical tourism, as well as art and cultural tourism. The tourism object offered is a regional asset and requires every tourist to pay a fee if he wants to enjoy a tourist attraction in accordance with the existing Regional Regulation.

In graph 2, the highest growth in the number of tourists occurred in the province of South Sulawesi (7 million). This is in line with the expected condition that the increased spending by the government will have a positive impact on the increase in the number of tourists, but different conditions actually occur in several regions (NTB, North Sulawesi and Papua) the number of tourists tends to fluctuate while the amount of government spending continues to increase. The lowest tourist growth occurred in the province of Papua (10,516 people) for 2016.

Government spending is a means of government intervention against the economy that is considered the
most effective. Government expenditure distribution policies that are right on target and the right direction of investment to areas that can create job opportunities will stimulate economic growth, but if the distribution cannot be done evenly, then inequality of district / city income will still occur and tend to increase and no longer provide space for people, especially low-income people, take part in the development process.

2. Tourism Demand And Supply Theory

Every human being has unlimited needs, but it is unfortunate that the goods of human needs are very limited (limited resources), therefore consumers always choose satisfying products according to the money they have. Whenever the desire to buy an item or product for a certain amount of money, it can be called demand. Generally, consumers see a product in the form of a series of benefits (Yoeti, 2003). Demand is a number of economic goods that consumers will buy at a certain price within a certain time or period. In economics, demand is a person’s desire for a certain item followed by purchasing power. Demand as a concept implies that the law of behavior applies to several variables including product quality, price, and the use or benefits of goods for the wearer (Yoeti, 2006).

2.1 Government Expenditure

Government spending reflects government policy. If the government has established a policy to purchase goods and services, government spending reflects the costs that must be incurred by the government to implement the policy. (Mangkoesoebroto, 1994). Government spending has a theoretical basis which can be seen from the identity of the balance of national income, namely \( Y = C + I + G + (X-M) \) which is a source of legitimacy for the Keynesian view of the relevance of government intervention in the economy. From the above equation it can be seen that an increase or decrease in government spending will increase or decrease national income. There are many considerations that underlie government decisions in regulating spending. It is not enough for the government to just achieve the ultimate goal of each of its spending policies. But also must take into account the intermediate targets who will enjoy the wisdom. Increasing spending with the sole purpose of increasing national income or expanding employment opportunities is not sufficient. But it must be taken into account who will be employed or increase in income. The government also needs to avoid increasing its role in the economy from undermining the activities of the private sector. (Dumairy, 1997).

2.2 Tourism

The word “tourist” refers to people. The difference with non-tourists is their behavior, so the determination of tourists is based on observable behavioral prejudices. Pitana (2009) states that there are four essential attributes of tourists in the context of tourist behavior that can be widely accepted, namely: (1) tourists are people who travel far from their place of residence to visit other places or countries, (2) each tour has minimum duration but is temporary and not to settle in a new destination, (3) tourism behavior appears in leisure time, and (4) travel involves an emotional relationship between tourists and some characteristics of the place visited.

2.3 Infrastructure

The role of transportation is very important, namely as a means of connecting, bringing closer and bridging between parties who need each other. (Adisasmita, 2011). The role of infrastructure in the transportation sector, among others, is to overcome obstacles that interfere with the smooth flow of goods and people through land, sea and air modes (Susanto, 2009). Canning and Pedroni stated that infrastructure has an external nature. Various infrastructures such as roads, education, health, etc. have positive externalities. Provide support that the facilities provided by various infrastructure are positive externalities that can increase the productivity of all inputs in the production process. Positive externalities in infrastructure are in the form of the spillover effect in the form of increased production of companies and the tourism sector without having to increase capital and labor input or also increase the level of technology. With the construction of infrastructure, the level of productivity of companies and the tourism sector will increase. One of the most visible is road construction (Hapsari, 2011).

2.4 Investment

Investment is a crucial factor for the continuity of the economic development process (Sustainable Development), or long-term economic growth. Economic development involves production activities in all economic sectors, and for these development activities, funds are needed to finance them which are called investment funds. (Tambunan, 2001). Investment is an investment in a particular company. Investment originates from domestic investment and foreign investment. With the addition of investment both from within the country and abroad, it can absorb labor. This is because in the process of production of goods and services increases, which in turn will absorb the workforce. So that the workforce gets wages, and the
workforce has purchasing power. With more and more investment that is used to carry out the process of producing goods and services, more labor can also be absorbed, resulting in an even distribution of income per capita (Sukirno, 2000).

According to Sadono Sukirno (2004) investment is expenditure to buy capital goods and production equipment with the aim of replacing and especially adding to capital goods in the economy which will be used to produce goods and services in the future. Meanwhile, according to Case and Fair (2007), investment is a flow that increases the capital stock. Even though capital is measured at a certain point in time (an inventory), investment is measured over a period of time (a flow). Investment flow increases the stock (savings) of capital.

The Harrod-Domar growth model clearly states that the GDP growth rate \((\Delta Y/Y)\) is determined collectively by the national saving ratio, \(s\), as well as the national capital-output ratio, \(k\). Simply put, in order to grow rapidly, every economy must save and invest as much of its GDP as possible. The more that is saved and then invested, the faster the economic growth rate will be. (Todaro, 2006).

Investment (investment) is the first step in the production process. With such a position, investment is essentially the first step in economic development. Investment dynamics affect the level of an economic sector. In an effort to grow the economy, every country always tries to create a climate that can stimulate investment. The targets aimed are not only the public or the domestic private sector, but also foreign investors (Dumairy, 1996).

2.5 Employment

The employer's demand for labor is different from the public's demand for goods and services. People buy goods and services because these goods and services provide satisfaction to them. Meanwhile, entrepreneurs employ someone because that person helps produce goods and services to be sold to the community. In other words, the increase in demand for labor depends on the increase in public demand for goods and services produced. Demand for labor like that is called a derived demand (Simanjuntak, 1985).

Entrepreneurs employ someone to help produce goods and services to sell to the community. Therefore, the increase in the demand for labor by employers depends on the increase in public demand for goods produced. In analyzing demand it is necessary to be aware of the difference between the terms "demand" and "quantity of goods requested". Simanjuntak (1985) defines what is meant by demand is the overall relationship between various levels of wages and the amount of demand. While the amount demanded means the number of requests at a certain price level.

According to Sudarsono (1988) in Subekti (2007), labor demand is related to the amount of labor required by a business unit. Demand for labor is influenced by changes in wage levels and other factors that affect demand for production, namely market demand for products from a business unit, which is reflected in the large volume of production and the price of capital goods such as machines or production process tools.

Referring to the description above, it can be concluded that there is a difference between the demand for labor and the number of workers requested or in this case the labor absorbed by certain business sectors in a region. Demand for labor is the overall relationship between various levels of wages and the number of workers asked to be employed. Meanwhile, the number of workers requested is more focused on the quantity and quantity of labor demanded at a certain wage level. So what is meant by employment in this research is the number or number of people who work in various sectors.

3. Method

This research was conducted in several provinces in Eastern Indonesia. Due to limited data, this study determined only 4 provinces in Eastern Indonesia, namely West Nusa Tenggara, North Sulawesi, South Sulawesi, Papua which were the objects of research. The type of data to be analyzed in this study is secondary data based on time series and cross section simultaneously. Cross section data is data consisting of data from 4 provinces in KTI, while time series data is data from one entity with a long time period dimension or not only one time period.

The method used in this research is quantitative descriptive analysis. Furthermore, the quantitative method in this study uses the two stage least square model, Simultaneous Equation Model to see the effect of government spending on employment in the tourism sector in KTI. The data were analyzed using the AMOS 22 program and the results were interpreted. The interpretation of these results is carried out by looking at the suitability of the results obtained with several economic reviews.

This study aims to see the effect of the relationship between the independent variable on the dependent variable through the intermediate variable. The dependent variable in this study is the Tourism Sector Workforce, the independent variable in this study is government spending, infrastructure and investment, the intermediary variable, namely the number of tourists, where the analysis method used to test the truth of the proposed hypothesis is a simple linear regression model TSLS (Two Stage Least). Square) through the help of the AMOS 22 computer program. This model was developed using the Cobb-Douglas Production Function model. The function forms are as follows:
\[ Y_1 = f (X_1, X_2, X_3, ) \]
\[ Y_1 = a_0X_1 + a_1X_2 + a_2X_3 + \mu_1 \]

The direct effect of government spending, infrastructure and investment on the Tourism Sector Workforce is formulated as follows:

\[ Y_2 = f (Y_1, X_1, X_2, X_3, ) \]
\[ Y_2 = \beta_0X_1 + \beta_1X_2 + \beta_2X_3 + Y_1 + \mu_2 \]

\[ \ln Y_2 = \ln \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \ln Y_1 + \mu_2 \]

\[ \ln Y_2 = \ln \beta_0 + \ln a_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \mu_1 + \mu_2 \]

Simplified to:
\[ Y_2 = X_0 + \lambda_1X_1 + \lambda_2X_2 + \lambda_3X_3 + \hat{e} \]

Where:

- \( X_1 \): Government Expenditure (Rupiah)
- \( X_2 \): Infrastructure (Rupiah)
- \( X_3 \): Investment (Rupiah)
- \( Y_1 \): Number of Tourists
- \( Y_2 \): Labor
- \( \alpha_0, \beta_0, \lambda_0 = \) Each as an intercept in each model used.
- \( \mu_1, \mu_2, \hat{e} = \) respectively as the error term in the model used.

### 4. Results and Discussion

The collected data is then processed using Amos 22 software. After the data is processed, the output produced by the software shows that the model is recursive, which means that the model is only one-way.

#### Table 1. Estimation Results of Direct Effects

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Tourists &lt;- Government Expenditure</td>
<td>.597</td>
<td>.194</td>
<td>3.071</td>
<td>.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Number of Travelers &lt;- Infrastructure</td>
<td>.850</td>
<td>.041</td>
<td>20.973</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>Number of Travelers &lt;- Investment</td>
<td>-.034</td>
<td>.008</td>
<td>4.081</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>Tourism Sector Workforce &lt;- Number of Tourists</td>
<td>.030</td>
<td>.075</td>
<td>.392</td>
<td>.695</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Tourism Sector Workforce &lt;- Government Expenditure</td>
<td>.316</td>
<td>.102</td>
<td>3.093</td>
<td>.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Tourism Sector Workforce &lt;- Investment</td>
<td>.003</td>
<td>.005</td>
<td>.741</td>
<td>.459</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Tourism Sector Workforce &lt;- Infrastructure</td>
<td>.157</td>
<td>.067</td>
<td>2.344</td>
<td>.019</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: Primary data processed

Table 5.6 shows the results of the statistical analysis of the effect of government spending, infrastructure and investment on the number of tourists. the influence of the number of tourists on the tourism sector workforce.

The estimation results of government spending on the number of tourists are 0.597 with a probability of 0.002, this means that government spending has a positive and significant effect on the number of tourists. Each 1 percent increase in government spending will increase the Number of Tourists by 0.597 percent. Likewise, every decrease in government spending by 1 percent will reduce the number of tourists by 0.597 percent.

The results of this statistical analysis have shown consistency with the findings of previous research conducted by Prideaux (2000), the results of this study indicate that government spending to finance the availability of infrastructure, accommodation is the main determinant in attracting tourists.

The results of the infrastructure estimate for the number of tourists are 0.850 with a probability of 0.000, this means that infrastructure has a positive and significant effect on the number of tourists. Every 1 percent increase in Infrastructure will increase the Number of Tourists by 0.850 percent. Likewise, every 1 percent decrease in infrastructure will reduce the number of tourists by 0.850 percent. In line with the results of research at the Ministère de l'Économie, des Finances et de l'Industrie in 1990 that the large number of foreign tourists coming to France is caused by three factors, the first is advances in information technology, second is...
accommodation and the third is transportation. which is an important aspect in the French tourism industry because it relates to how tourists can reach tourist destinations and how these transportation facilities can facilitate tourists during their tour.

The estimation result of investment on the number of tourists is -0.034 with a probability of 0.000, this means that investment has a negative and significant effect on the number of tourists. Every 1 percent increase in investment will decrease the number of tourists by 0.034 percent. Likewise, every decrease in investment of 1 percent will increase the number of tourists by 0.034 percent. This result is in line with the findings of Ahmad Jafari Samimi et al in developing countries who found that in the short term there is no relationship between investment and an increase in the number of tourists, the need for government intervention, such as trade shows and also empowerment of tourism internet sites (cultural and heritage sites or ecotourism) is a good step in supporting the increase in tourism potential in these countries.

The estimation results of the number of tourists to the tourism sector workforce is 0.030 with a probability of 0.695, this means that the number of tourists has a positive and insignificant effect on the tourism sector workforce. Any change in either an increase or decrease in the number of tourists has no effect on an increase or decrease in the tourism sector workforce. According to Austriana (2005), the more tourists who rent hotel rooms, the more income they get for the hotel occupancy rate. Room Occupancy Rate is a condition to what extent the number of rooms sold, when compared with the total number of rooms that can be sold. With the availability of adequate hotel rooms, tourists will not hesitate to visit an area, especially if the hotel is comfortable to stop by.

The estimation result of government expenditure on labor is 0.316 with a probability of 0.002, this means that government spending has a positive and significant effect on the labor force in the tourism sector. Each 1 percent increase in government spending will increase the tourism sector workforce by 0.316 percent. Likewise, every decrease in government spending by 1 percent will reduce the workforce in the tourism sector by 0.316 percent. results of research findings by Wan Ji Qing for the case of South Korea, Alegre and Cladera (2012), Chou (2013) for the case of countries in eastern Europe and Corrie et al. (2013) for the State of Australia which found that tourist expenditure is the main determinant in encouraging economic activity in the tourist areas visited, high tourist expenditure will have an impact on foreign exchange earned in the tourism sector so that it will increase economic growth, absorb labor and promote the welfare of the community.

The estimation result of investment in labor is 0.003 with a probability of 0.459, this means that investment has a positive and insignificant effect on labor in the tourism sector. Any change either an increase or decrease in investment has no effect on an increase or decrease in the tourism sector workforce.

The results of the infrastructure estimate for the tourism sector workforce is 0.157 with a probability of 0.018, this means that infrastructure has a positive and significant effect on the tourism sector workforce. Each 1 percent increase in infrastructure will increase the tourism sector workforce by 0.157 percent. Likewise, every decrease in government spending by 1 percent will reduce the workforce in the tourism sector by 0.157 percent.

<table>
<thead>
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<th>Table 2. Estimation Results of Indirect Effects</th>
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<tbody>
<tr>
<td><strong>Label</strong></td>
</tr>
<tr>
<td>Tourism Sector Workforce by Number of Tourists</td>
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<tr>
<td>Tourism Sector Manpower by Number of Tourists</td>
</tr>
<tr>
<td>Tourism Sector Employment by Number of Tourists</td>
</tr>
</tbody>
</table>

Source: Primary data processed

The estimation results of the indirect effect of government spending on the labor force of the tourism sector through the number of tourists are 0.018 with a probability of 0.001, this means that Government Expenditures have a positive and indirect effect on the workforce in the tourism sector Any increase in Government Expenditure of 1 percent will increase the workforce of the tourism sector by 0.018 percent. Likewise, every decrease in government spending by 1 percent will reduce the workforce in the tourism sector by 0.018 percent. This is in line with the theory put forward by Keynes that an increase in government spending will increase economic growth which in turn absorbs labor. The tourism sector is one of the strategic sectors in the economic development of a region. Tourism with all its aspects can contribute to various aspects of life, both economically and non-economically. Economically, the contribution of tourism has a great potential in the
country’s foreign exchange earnings in the form of the consumption of foreign tourists for goods and services in the four provinces.

The estimation results of the indirect effect of infrastructure on the tourism sector workforce through the number of tourists of 0.025 with a probability of 0.000, this means that infrastructure has a positive and indirect effect on the workforce in the tourism sector. Each 1 percent increase in Government Expenditure will increase the tourism sector workforce by 0.025 percent. Likewise, every decrease in government spending by 1 percent will reduce the labor force in the tourism sector by 0.025 percent. These results are in line with the theory put forward by Haryanto (2012) which reveals that an increase in transportation infrastructure is expected to be a stimulant for increased investment, both domestic and foreign investment. It is believed that the provision of good transportation infrastructure such as roads, bridges, ports and others can trigger investment spill-over from the region. The territorial dimension is considered so that the development of transportation infrastructure can accelerate economic growth in the region, absorb labor and improve income distribution. Broadly speaking, the stimulus in the form of investment in transportation infrastructure is expected to trigger an increase in the regional and national economy. This theory has shown consistency with the findings of research conducted by Ali and Pernia (2003) showing that infrastructure project development can reduce poverty and the number of unemployed in a country.

The estimation results of the indirect effect of investment on the labor force in the tourism sector through the number of tourists of -0.001 with a probability of 0.000, this means that investment has a negative and significant indirect effect on the labor force in the tourism sector. Every 1 percent increase in investment will reduce the tourism sector workforce by 0.001 percent. Vice versa, every 1 percent decrease in investment will increase the tourism sector workforce by 0.001 percent. The results of this study are in line with the theory put forward by Todaro (2004) which states that an unsynchronized relationship between investment and job opportunities occurs due to the accumulation of capital for the purchase of technology and other sophisticated equipment which not only wastes domestic finance and foreign exchange but also hinders efforts—efforts in order to create growth and create new jobs. Then it is supported by the findings of research conducted by Sandika et al. (2014) which revealed that investment does not have a significant effect on labor absorption. As it is known that developed countries have a capital-intensive production factor, so the investment they invest in developing countries such as Indonesia follows the techniques they apply in their home countries, which tend to be capital intensive. Because of these factors, the level of foreign investment tends to reduce labor absorption, because high-tech, capital-intensive techniques tend to have better productivity and efficiency so that to produce the same output, only a small amount of labor is needed.

5. Conclusions and Suggestions

Based on the data processed and analyzed, it can be concluded:

Government and infrastructure spending have a positive and significant effect on the number of tourists. Meanwhile, investment has a positive and insignificant effect on the number of tourists in the four provinces. Government spending, infrastructure and investment have a positive and significant effect on the tourism sector workforce. Meanwhile, the number of tourists does not have a significant effect on the workforce in the tourism sector in West Nusa Tenggara, South Sulawesi, North Sulawesi and Papua. Government spending and investment have a negative and insignificant effect on the labor force in the tourism sector through the number of tourists. Meanwhile, infrastructure has a negative and significant effect on the workforce in the tourism sector through the number of tourists.

Based on the results of the discussion and conclusions above, there are several suggestions that can be given regarding the results of this study, namely:

In terms of investment, local governments should make and direct investment not only in capital-intensive industries, but also in labor-intensive industries, given the large number of workers that should be absorbed. Local governments are expected to increase domestic investment (PMDN), foreign investment (PMA) through policies to maintain domestic economic, political and security stability, improve infrastructure facilities and infrastructure that support and simplify investment regulations so as to increase employment opportunities.

References

Tourism Economics.