

ANALYSIS OF THE EFFECT OF THE TOURISM SECTOR ON THE ESTABLISHMENT OF MULTIPLIER OUTPUT AND MULTIPLIER INCOME DURING THE COVID-19 PANDEMIC IN CENTRAL JAVA

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Abstract: *Tourism activities in Central Java in recent years have increased. In the long term, where the tourism sector is expected to be the prima donna in development, a more intensive and comprehensive study needs to be carried out considering other development sectors which directly or indirectly have a large influence on tourism development. Likewise with tourism activities in Central Java Province which has been designated as one of the main tourist destinations in Indonesia. The data used is secondary data, especially from the input-output table of Central Java Province in 2016 and tourist expenditure data. From the research, it was found that tourist spending in Central Java Province had an impact on increasing sectoral output although with a relatively small increase. However, because the impact of tourist spending on output and indirectly created employment opportunities is greater, the impact of tourism on the economy is very dynamic and has long-term prospects.*

Keywords: *Tourism Sector, output multiplier. Income multiplier, input-output model.*

1. Introduction

As a tourist destination, Central Java Province has adequate tourism infrastructure facilities and is easily accessible either by land, sea or air. Besides that, Central Java Province has various tourist objects and is supported by conducive safety factors, under these conditions tourism development is directed to the development and utilization of tourism potentials to the fullest so that it can be an attraction that can encourage tourists to come and visit the object. Tourism in Central Java Province, so far the local government has made various efforts to maximize its tourism potential in order to increase tourism demand which will ultimately have an impact on increasing the economy considering that tourism can create a large multiplier. Because the tourism sector is a sector that is related to other sectors so that it provides a large multiplier effect. With good handling, the tourism sector will become a sector that deserves to be developed to be a mainstay for development

However, due to the economic crisis that has occurred since the beginning of 2020, the inflow of tourists in Central Java has decreased from the previous year by 61, 24%, while in 2020 there were 78,290 tourist inflows whereas previously there were 691,699 tourists in 2019, while for the flow of domestic tourists to around 87.9 million in 2019 and decreased again to 22.7 million which occurred in 2020 of course this has an impact on the decline in tourism foreign exchange earnings resulting from reduced revenues in the tourism sector, because the number of tourist visits is directly proportional with tourist spending which is closely related to economic development in an area and has a negative impact on the tourism industry in Central Java. This can be seen from the issuance of "travel warnings" by several countries of origin for foreign tourists, and the

cancellation of direct flights to Central Java by several foreign airlines. All of this has caused the flow of foreign tourists to enter Central Java to decrease drastically. This last condition of course has a negative effect on the tourism sector in Central Java, and ultimately has a negative effect on the regional economy, considering that this sector is the biggest supporter for the regional economy of Central Java.

2. Literature Review

The impact of tourists on the economy of a region/region

The impact of tourists on the economy of a region/region can be calculated through the tourist expenditure approach and the tourist demand approach. What is meant by tourist expenditure is expenditure made by tourists during their trip. Tourist expenditures can be in the form of accommodation, food consumption, tourist transportation or other services such as guides, exchange services and so on. (Siswahto, 2019)

Expenditures made by tourists in tourist destinations, like other consumption expenditures, will cause various economic effects. These expenditures affect employment opportunities, income, and foreign exchange earnings for tourist destination countries. Just as the export of traditional goods is generally able to have a dual effect on income and employment opportunities, so can the export of tourism services. (Malba & Taher, 2016)

The economic impact of tourism is very complex, because tourist spending is not directed at a particular industry, but to various industries or businesses that provide final needs for tourists during their visit to a particular tourist area. For example, a tourist rents a room to stay overnight, eats at a restaurant, rents a means of transportation to visit tourist attractions, buys souvenirs, and so on. (Islamy, 2019), the role of tourism to the economy in the communication services sector has the largest added value, the lowest is the rail transportation service sector, the trade sector has the highest level of additional output, the restaurant services sector absorbs the most labor, while the recreational services sector, culture and sport have the highest sensitivity and spreadability. (Lumaksono & Priyarsono, 2012)

3. Research Method

The data collection technique used in this research is to find information through secondary data from government agencies and other sources that discuss tourism issues, notes, economic journals, articles and other references that are still relevant to the research, input output analysis approach. In tourism, the first approach is multiplier analysis, which includes: (1) output multiplier analysis; (2) analysis of household income multiplier (income multiplier); As well as sectoral linkages. The analytical approach in this study was obtained from the calculations in the Central Java Tourism Input-Output table in 2016.

4. Results And Discussion

The importance of tourist spending/expenditure is shown not only by the amount but also by the quality of the spending, which means how it is distributed. What goods and services are purchased and consumed by tourists largely determine the effect of tourist spending on the economy. Purchases of goods and services that have backward linkages will indirectly produce large outputs. Meanwhile, concentration on spending on goods and services that have high added value will result in more added value for the economy. Spending on goods and services that have

added value to the economy. Labor-intensive spending on goods and services will create more job opportunities.

Based on macroeconomic theory (especially Keynes theory), if there are changes in demand, the output of each sector will also change. This change occurs through direct and indirect effects of demand on the entire supply sector (supply), so the existence of demand will result in additional output. Expenditures of foreign tourists and foreign tourists are part of demand so that the emergence of demand originating from tourist expenditures will have a positive impact on output even on all economic variables. In addition, tourist spending also has a direct impact on income in each sector or sub-sector of the economy of Central Java Province.

A general study conducted to analyze the impact of changes in tourist spending on output and income is to look at the situation during the Covid 19 period in Central Java.

Analysis of Output Multiplier and Income Multiplier

The results of the calculation of the Output multiplier number based on the Input Output table of Central Java province in 2016 for the tourism supporting economic sector. Meanwhile, for a more detailed and easy-to-understand discussion in order to find out which sectors have the Output multiplier number and the income multiplier number, a 4-dimensional matrix is compiled with the following classification

- (1) have a high output multiplier and income multiplier;
- (2) has a high output multiplier but a low income multiplier;
- (3) have a high income multiplier but a low output multiplier;
- (4) have the same low output multiplier and income multiplier.

High classification is if the number of sectoral links exceeds the average number of all sectors in the economy, and vice versa, low classification is if the number of sectoral links is less than the average of all sectors in the economy. The 4-dimensional matrix of numbers/values listed in the image matrix are numbers/values that have been normalized in advance because the nature of tourist spending from each sector is different from each other.

The output of a sector is the total value of the output or production produced by the economy to meet the consequences of a change in one unit of tourist spending money in a sector. An increase in tourist spending in a sector will not only increase the production output of that sector but will also increase the output of other sectors. This was created because of the direct and indirect effects of increasing tourist spending in the sector. In short, the value of the output multiplier can be seen from the value given by the total backward linkage. With a large output multiplier, the more capable the sector is in producing more output, the average output multiplier for Central Java's economic sectors in 2016 was 4.36092, so that sectors included in the above-average criteria can be mapped. or below the average, there are 5 sub-sectors that are in an above-average position while those that are in a below-average position are 5 sub-sectors. What the government must do is maintain the output of sectors that are above the average, because with the ability to produce large amounts of output it can expand employment opportunities so that it will increase Central Java's per capita income, but do not ignore sectors that are below the average. flat.

Table 1
Multiplier Matrix of output and income in Central Java Province

		Output Multiplier	
		HIGH	LOW
income multiplier	HIGH	- Building / construction - Industry and Processing - Other services	- Trade, Hotel & Restaurant - Electricity, gas and clean water - Mining and excavation
	LOW	- Agriculture - Consumption expenditure is not for tourism	- Transport & communication - Finance, Rental and Services

Source: Tourism Input-Output Table of Central Java Province 2016, data processed

From the table above, a linkage pattern can be drawn as follows, the output multiplier and the income multiplier are both high: Building/construction sub-sector, industry and processing sub-sector, other services sub-sector. Low output multipliers and high income multipliers are found in: the Trade, Hotel & Restaurant Sector, Mining and Excavation Sector, and the Electricity, Gas and Clean Water Sub-Sector. The high income multiplier in these sectors means that if the government's policy priority is to increase income, then government spending should be allocated to these sectors. Meanwhile, the low output multiplier indicates that these sectors are mostly primary and labor-intensive sectors. High output multiplier and low income multiplier are found in: Agriculture Sector. And the consumption expenditure sub-sector is not for tourism. The low income multiplier indicates that the agricultural sector due to global competition and increasing international price regimes, requires subsidies and protection from the government. Output and Income Multiplier Figures which are both low are found in: Transportation and Communications Sub-Sector, Finance, Rental and Services Sub-Sector. These sub-sectors are not only sensitive to increases in demand but are also unreliable for increasing output and income in Central Java Province, so that government budget expenditures should be limited to just enough in order to support the function of the government's role, namely functioning as a facilitator, dynamicator, regulator and or stabilizer. The low values of the output multiplier and the income multiplier of the above sectors indicate that the sector is small in scale.

Meanwhile, the pattern of tourist spending while in Central Java during the pandemic in Central Java turned out to be mostly still buying services in the trade, hotel and restaurant sectors, namely 64.54 percent, then buying services in the transportation and communication sector by 22.31 percent, and to buy in the industrial and processing sectors by 11.03 percent. This means that almost 97.88 percent of tourist spending in Central Java after the COVID-19 pandemic in Central Java was only to buy goods and services from the three economic sectors. This also means that tourist spending is too concentrated in these three sectors.

Overall, the impact of tourism in Central Java during the pandemic on output was 41,545 billion rupiah. Overall, the impact of tourist spending in Central Java for concentrated output on trade, hotels and restaurants is 10,852 billion rupiah (or about 26.05 percent of Central Java's total

output). The impact on added value/GDP is concentrated in trade, hotels and restaurants of 3,960 billion rupiah with a percentage of 39.10 percent of GRDP. While the impact on income is concentrated in trade, hotels and restaurants of IDR 483.177 billion with a percentage of 71.18 percent of GRDP, the increasing contribution occurred in the processing and transportation and communication and services industries. Meanwhile, other sectors experienced a decline in contribution. The increasing contribution to the highest added value is transportation and communication. This is due to the COVID-19 pandemic in Central Java, causing transportation and communication to increase, where after the COVID-19 pandemic crisis in Central Java there was an increasing flow of tourists. Meanwhile, the lowest contribution to GRDP was the trade, hotel and restaurant sectors. Where this decline is also due to the pandemic. Meanwhile, the pattern of tourist spending while in Central Java turned out to be mostly still buying services in the trade, hotel and restaurant sectors, namely 64.54 percent, then buying services in the transportation and communication sector by 22.31 percent, as well as buying in industrial and processing sector by 11.03 percent. This means that almost 97.88 percent of tourist spending in Central Java after the COVID-19 pandemic in Central Java was only to buy goods and services from the three economic sectors. This also means that tourist spending is too concentrated in these three sectors.

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In general, the impact of tourist spending on all sectors has experienced an increase in the degree of change that varies between sectors. Changes in the impact of tourist spending on tourists are concentrated/the biggest changes are in the transportation and communication sector then other services and the mining and quarrying manufacturing industry, each sector experienced a change of 22.28%, 19.59% and 18.95 %. With the distribution of changes to all sectors respectively 13.12%, 11.54% and 11.16%. This indicates that due to changes in tourist spending, the biggest changes are in the transportation and communication sector, then other services and the mining and quarrying sector processing industry. Based on the discussion of the results of the research and evaluation of the description above, there are several implications including the impact of tourist spending in Central Java Province on output which has a range, including sectors that directly receive tourist expenditures such as the hotel, restaurant, trade, transportation, and services sector. other sectors as well as sectors that do not receive tourist expenditures directly, but the outputs of these sectors are produced as intermediate inputs in the process of producing goods and services that are directly consumed by tourists. Even the agriculture, manufacturing and energy sectors (electricity, gas and water) benefit greatly from the indirect demand from tourism.

When compared with the impact of tourist spending on output formation nationally, the Output Multiplier Coefficient value in Central Java Province of 1.76 indicates a low value and needs to be increased so that the economic impact of tourism in Central Java Province develops stronger and larger policies need to be carried out which is not only oriented to increasing tourist spending, but also to efforts to encourage the production of goods and services that have strong industrial linkages with the tourism sector.

5. Conclusion

To increase the number of declining foreign tourist arrivals and revive the tourism sector which was slumped as a result of the economic crisis, the government and related parties in the tourism industry must improve, maintain and develop the main infrastructure (supporting facilities and infrastructure) of tourism so that it is adequate. This sector is a sector that has a very complex business because there are many supporting elements from the related tourism industries and of course everything must be done by human workers, "the more services are provided to tourists, the number of workers needed automatically increases a lot", improve policies in the field of immigration such as increasing the number of countries that get access to Visa On Arrival (VKSK) or Visa On Arrival, visa services at arrival airports also need to be improved to be more practical and efficient, increase funds or tourism promotion budgets so that they can carry out various forms of promotion tourism through participation in various international events both at home and abroad, providing up-to-date information on existing tourism information sites, carrying out marketing strategies that are building tourism itself which means the strength of the destination (image of a destination). ation) from existing Tourist Destinations (DTW) by selling themes, locations, products, stories, and so on which of course provide new touches that revolve around the local area so as not to seem monotonous and neglected, the need to restore security conditions to be more conducive because This will indirectly affect foreign tourists visiting, such as the issuance of travel warnings by several countries to their citizens as a result of the negative Indonesian situation even though the tourism sector is believed to be a sector that can accelerate recovery due to the economic crisis that occurred. Overall, this security factor affects all existing real sectors, so the government must be able to convince the international community about the security situation in Indonesia, namely changing the bad image that is displayed in foreign media reports in order to regenerate investment in all these real sectors.

References

- Annas, M. (2018). Analisa Input Output Sektor Pariwisata Di Kabupaten Banyuwangi. *Jurnal Istiqro: Jurnal Hukum Islam, Ekonomi Dan Bisnis*, Vol.4 / No(2), 130–150.
- Antara, M. (2008). Dampak Pengganda Usaha Kecil Sektor Pariwisata Terhadap Pertumbuhan Perekonomian Bali: Suatu Pendekatan Model Input-Output. *SOCA: Socioeconomics of Agriculture and Agribusiness*, 8(2), 1–24.
- Arianti, D. (2014). Pengaruh Sektor Pariwisata Terhadap Perekonomian dan Keruangan Kota Bukittinggi. *Jurnal Wilayah Dan Lingkungan*, 2(3), 183–196.
- Hermastho, B., & Irhamni, M. R. (2021). Development of Company Value Based Digitalization: A Study At State Owned Water Company. *AKSES: Jurnal Ekonomi Dan Bisnis*, 16(1), 18–26. <https://doi.org/10.31942/akses.v16i1.4468>
- Islamy, N. (2019). Analisis Sektor Potensial, Dapatkah Pariwisata Menjadi Lokomotif Baru Ekonomi Nusa Tenggara Barat? *Journal of Indonesian Tourism, Hospitality and Recreation*, 2(1), 1–10.

- Kartiko, N. D. (2020). Insentif pajak dalam merespons dampak pandemi covid-19 pada sektor pariwisata. *Jurnal Pajak Dan Keuangan Negara*, 2(1), 124–137.
- Lumaksono, A., & Priyarsono, D. S. (2012). Dampak Ekonomi Pariwisata Internasional pada Perekonomian Indonesia. *Forum Pascasarjana*, 35(1), 53–68.
- Malba, E., & Taher, I. M. (2016). Analisis Input-Output atas Dampak Sektor Pariwisata terhadap Perekonomian Maluku. *Bina Ekonomi*, 20(2), 213–229.
- Marlinah. Lilih. (2021). Jurnal IKRA-ITH Ekonomika Vol 4 No 2 Bulan Juli 2021 Jurnal IKRA-ITH Ekonomika Vol 4 No 2 Bulan Juli 2021. *Memfaatkan Insentif Pajak UMKM Dalam Upaya Mendorong Pemuliahan Ekonomi Nasional*, 4(98), 73–78.
- Sanjaya, M. N. (2019). *The Role Of Tourism In The Economy Of Bali And Indonesia. An Input-Output Analysis*.
- Sarjana, P. S., Statistika, D., Matematika, F., & Data, D. A. N. S. (2018). *Pemodelan Produk Domestik Regional Bruto Di Provinsi Jawa Timur Dengan Pendekatan Ekonometrika Data Panel Spasial Dengan Pendekatan Ekonometrika*.
- Siswahto, E. (2019). *Analisis Input Output: Sektor Pariwisata Provinsi Sulawesi Utara*. 1–15.
- Utama, I. G. B. R. (2011). Kajian Dampak Ekonomi Dan Keunggulan Pariwisata Kabupaten / Kota Di Provinsi Bali. *Jurnal Ekonomi Universitas Udayana*, 3(5), 1–23.