



## **Role and Determinants of Domestic Tourism Demand in Indonesia**

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Tourism is a potential sector in the country's development strategy. Since the COVID-19 pandemic, Indonesian tourist visits have remained higher and more stable than foreign tourists. Domestic tourism is critical in defining an inward-looking national economic recovery strategy. However, few tourism studies still exist on the relationship between domestic tourism and regional economies. This study analyses the relationship between domestic tourism and Indonesia's regional economic growth and the determinants of Indonesian tourism demand in terms of domestic tourist expenditure. The data types used are secondary data provided by BPS, Kemenparekraf, Kemenkeu and Bank Indonesia. Analytical methods are the Granger causality test, fixed effect model and panel data regression analysis. The results show a one-way relationship between Indonesia's total tourism expenditure and regional economic growth. Based on research, the government's strategic priority is to increase domestic tourism expenditures by increasing per capita income, increasing tourist attraction and providing ATMs. ATMs facilitate the circulation of cash, influencing the increase in tourism expenditures. Stabilization of the consumer price index in tourist destinations should be maintained as it can negatively impact them.

## INTRODUCTION

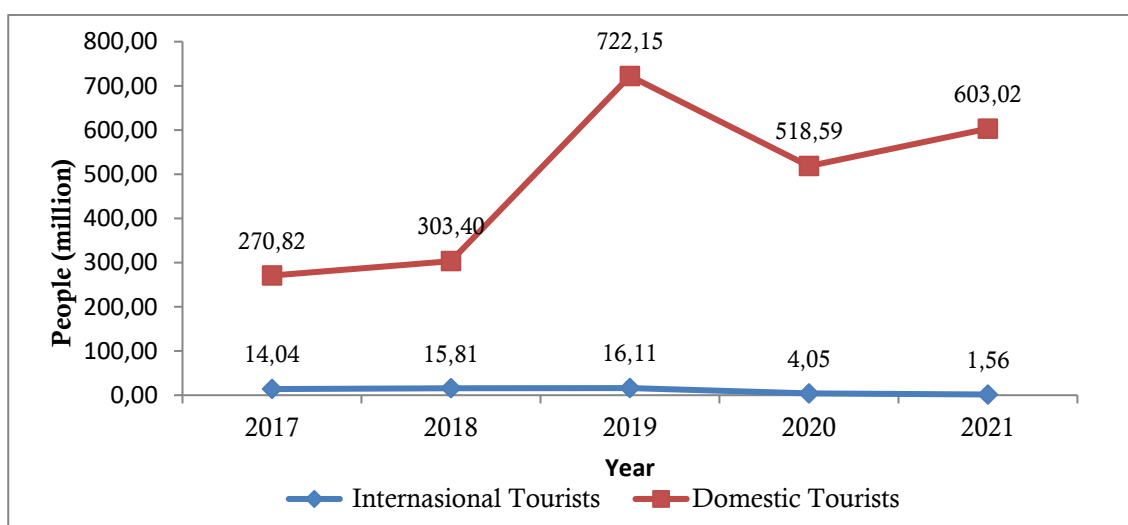
Tourism is a crucial sector in the country's development strategy. It has the potential to create jobs, increase income, stimulate growth in other industries, and act as a source of foreign exchange, thereby enhancing economies in both developed and developing countries (Tung, 2021; Devi, 2022). Tourism plays an essential role in indirectly developing local economies through a multiplier effect. As an economic sector with a wide range of products and services and extensive links with various other industries, it has a significant impact on fostering economic growth and development (Mazumder *et al.*, 2013). This indicates that the tourism sector can emerge as a primary industry, serving as a new source of growth to enhance the country's economy (Mahiroh, 2019).

In late 2019, the coronavirus disease 2019 (Covid-19) was first detected in Wuhan City, Hubei Province, China. The virus rapidly spread to various countries, presenting challenges to all social and economic sectors that needed to be addressed. To combat the Covid-19 outbreak in Indonesia, the government implemented comprehensive social restrictions (PSBB), work/school/worship from home policies, social distancing measures, and new normal policies. However, these measures have led to a slowdown in economic activity, worsening the country's economy. The impact of PSBB implementation

has resulted in a sharp decline in economic activity due to restrictions on production, distribution, and other business activities. Consequently, foreign tourism to Indonesia has also been affected (Mursalina *et al.*, 2022).

According to BPS (Central Agency on Statistics), foreign tourist visits to Indonesia significantly declined since the first quarter of 2020, plummeting up to 82% in the second quarter of 2020 compared to the annual average of the preceding quarter, as mentioned in the BPS report. The decline was substantial, and visitor numbers did not recover until the second quarter of 2021, remaining exceptionally low. In contrast, changes in domestic tourist visitor numbers to Indonesia remained relatively stable when compared to the numbers of foreign tourists (Figure 1). In the post-pandemic period, Indonesia's domestic tourism grows more rapidly.

This is one of the reasons domestic tourism is a critical area that the government needs to pay more attention to in developing inward-looking policies towards economic recovery. Research focusing on domestic tourism is still relatively rare and limited compared to studies on international tourism, indicating the need for further research to support policies in this area. International tourism is commonly regarded as a significant source of foreign currency earnings for a country.



**Figure 1.** Number of Domestic and International Tourists in Indonesia 2017-2021

Source: Data Processed, 2022

**Table 1.** Most Populous Country in the World, 2021

| No | Country       | Number of Population (people) |
|----|---------------|-------------------------------|
| 1  | China         | 1.412.360.000                 |
| 2  | India         | 1.393.409.033                 |
| 3  | United States | 331.893.745                   |
| 4  | Indonesia     | 276.361.788                   |
| 5  | Pakistan      | 225.199.929                   |

Source: World Development Indicators, 2021

According to Mariyono (2017), as a potential source of foreign currency earnings, the decline in domestic tourism is less critical than international tourism. However, Azzam (2022) points out that in countries with large populations, the contribution of domestic tourism expenditures is relatively significant compared to foreign tourists. In 2021, Indonesia ranked as the fourth most populous country in the world (Table 1). Since the COVID-19 pandemic, domestic tourism has become one of the Indonesian government's inward-looking focuses to improve Indonesia's post-pandemic economy. The pandemic has had a significant economic impact on the tourism sector. Tourism demand can be influenced by both economic and non-economic factors (Massidda & Etzo, 2012; Wamboye et al., 2020; Mukaffi, 2022). Economic variables influencing tourism behaviour can be revealed through the demand side of tourism, which helps to explain tourism flows (Khadaroo & Seetanah, 2008; Massidda & Etzo, 2012). Tourist visits and expenditures are the main factors influencing tourism demand (Blake & Cortez, 2007; Taupikurrahman, 2019; Azam, 2022).

Previous literature on the export-led growth hypothesis (ELGH) has found that export expansion can boost economic growth in addition to increasing labour and capital. This motivated subsequent research to analyze the tourism-led growth hypothesis (TLGH) (Balaguer and Cantavella-Jorda 2002). Research on the relationship between tourism and economic growth initially focused on international tourism relations and trade. However, more recent research has revealed that the economic impact of the tourism sector on

international tourism relations contributes to long-term economic growth (Tung 2021). Studies examining the long-term causal relationships between tourism and the economy have been conducted in various developed and developing countries (Wardhana et al. 2019, and Lee 2021).

Wardana et al. (2019) used the EGLS method to examine the validity of TLGH in 8 ASEAN countries with an international tourism panel dataset from 2008 to 2016. They found indications of the TLG hypothesis for research in eight ASEAN countries. Lee (2021) uses annual time series data for domestic and international tourism in China from 1993 to 2017 and uses the ARDL model, the results show that international tourism does not affect economic growth, but domestic tourism has a positive impact on economic growth.

Ramadhaniah (2020) uses quarterly time series data for 2000-2014 for international tourist visits to Indonesia and uses the Vector Error Correction (VEC) method to show that the hypothesis of growth relying on tourism is not proven in Indonesia. Devi (2022) uses the Autoregressive Distributed Lag panel (ARDL panel) and an international tourism panel dataset from 10 ASEAN countries from 1995 to 2019. The results show a two-way causality between inbound tourism and economic growth. Meanwhile, research for Indonesia was conducted by Suryandaru (2019) using time series data from 1974 to 2017 with a linear ARDL model and only using bivariate variables, using international tourism and Indonesia's economic growth. The results show that TLGH has not been detected in Indonesia.

Tourism studies generally target only foreign tourists. Studies on the Tourism Led

Growth Hypothesis (TLGH) and the determinants of tourism demand, including domestic tourism, are still scarce in Indonesia. Also, using panel data in studies is rare, and inconsistent findings on the determinants of domestic tourism still exist.

Considering the progress of digital financial technology, the study investigated how cash circulation can affect the increase in tourists. The study included various variables. Using Internet user variables, researchers explored the contribution of digital information convenience to the growth of tourism. According to the authors, this is a novelty of this study as these two additional variables have not been investigated before.

Based on the problem formulation above, this study focuses on the determinants of TLGH and tourism demand using a domestic tourism approach and panel data from 34 provinces in Indonesia. Indonesia is a developing country that has integrated tourism into its economic growth strategy. Since the COVID-19 pandemic, the number of domestic tourists has remained stable compared to foreign tourists. Domestic tourism is one of the Indonesian government's inward-looking priorities to revitalize the Indonesian economy post-pandemic. Therefore, research is necessary to discover how the domestic tourism sector is related to Indonesia's regional economic growth and which factors determine Indonesia's tourism demand from domestic tourists' expenditures in Indonesia.

## RESEARCH METHODS

The study uses secondary data from the BPS-Statistics Indonesia, the Ministry of Tourism and Creative Economy Republic of Indonesia (Kemenparekraf), Bank Indonesia (BI) and the Ministry of Finance Republic of Indonesia (Kemenkeu). In addition, supplementary data were obtained from the United Nations World Tourism Organization (UNWTO), the World Travel and Tourism Council (WTTC), results of previous studies, journals, and other literature to complete the required data. The data used in this study is panel

data for 34 provinces in Indonesia from 2016-2020.

The analytical methods used are descriptive and quantitative. The descriptive analysis describes the state of domestic tourism in Indonesia as seen from the component or variable data deployments used in this study. Quantitative analysis is performed to answer the research goals. The first aim is to use the Granger causality test to determine the relationship between domestic tourism and the local economy of Indonesia. The test is performed in four phases, data stationarity tests to avoid false regression problems where R<sup>2</sup> and partial t-tests are high but unrelated, cointegration tests to identify equilibrium long-term relationships between variables and determination of optimum value. To determine the lag for determining the accuracy of determination, the importance of tests that show how long it takes one variable to respond to another, and the long-term relationship between domestic tourism and the local economy of Indonesia. Granger causality test. Long-term estimation using panel data regression. The second objective is to use panel data regression to analyze the determinants of domestic tourism demand in terms of total domestic tourism expenditure.

The hypotheses in this study are (1) there is a suspicion that the overall expenditure of domestic tourists from their province of origin has a positive impact on Indonesia's regional economic growth, (2) Estimated per capita income in the state of origin, total government spending budget dedicated to culture and tourism used to promote tourism in the destination, number of accommodations in the destination, cash machines in the destination ( number of ATMs), CPI of the destination, percentage of unique netizens in the state of origin have a positive impact on domestic tourism demand, percentage of tourist attraction objects (natural, cultural, artificial) in the destination has a positive impact on domestic tourism expenditures.

This study uses two previous research models but with modifications based on research needs. The first model references work by

Balaguer and Cantavella-Jorda (2002), Seetanah (2011), Kyophilavong et al. (2018) and Tung (2021) using regional data for Indonesia.

$$\text{GROWTH}_{it} = \alpha + \beta_1 \text{Ln\_EXPD}_{it} + e_{it} \dots\dots\dots (1)$$

The second model references the work of Taupikurrahman (2019) by adding variables for ATMs, accommodations, internet users, and tourist attractions.

$$\begin{aligned} \text{Ln\_EXPD}_{it} = & \alpha + \beta_1 \text{Ln\_CAPITA}_{it} + \\ & \beta_2 \text{Ln\_PROMO}_{it} + \beta_3 \text{ATM}_{it} + \\ & \beta_4 \text{Ln\_AKOMODASI}_{it} + \\ & \beta_5 \text{IHK}_{it} + \beta_6 \text{INET}_{it} + \\ & \beta_7 \text{NATURE}_{it} + \beta_8 \text{CULTURE}_{it} + \\ & \beta_9 \text{ART}_{it} + e_{it} \dots\dots\dots (2) \end{aligned}$$

The methods used to estimate the panel fixed effects model (FEM) and random effects

model (REM) differ significantly. Statistical tests for selecting the best model with efficient predictive results are performed using Hausman's (FEM vs REM) test. After selecting the best model, classic regression assumption testing is performed to determine the model requirements to use. Assumption tests are performed to detect violations of model assumptions in order to obtain efficient and consistent models. Common violations in regression equations are residuals that do not follow a normal distribution (normality), the variance of the residual variances (heteroscedasticity), high correlations between independent variables (multicollinearity), and correlation between observations of each variable (autocorrelation).

**Table 2.** Description of the Variables in the Model

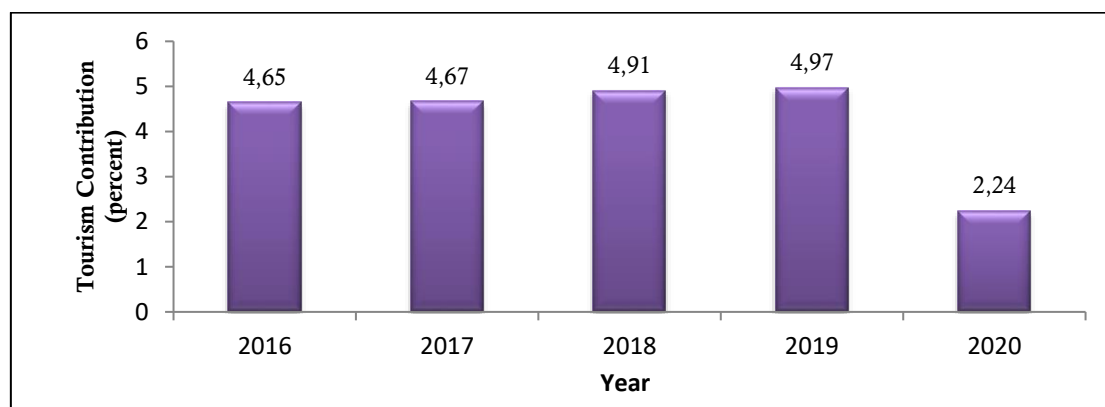
| Variable  |   | Description  |
|-----------|---|--|
| GROWTH    | : | GRDP growth (per cent)   |
| EXPD      | : | Total expenditure of domestic tourists (thousand rupiahs)                                      |
| CAPITA    | : | Income per capita (thousand rupiahs)   |
| PROMO     | : | Total marketing expenditure or government expenditure for tourism promotion (thousand rupiahs) |
| ATM       | : | Number of ATMs (units)   |
| AKOMODASI | : | Number of Accommodations (units)   |
| IHK       | : | Consumer price index (per cent)  |
| INET      | : | Percentage of individual internet users (per cent)   |
| NATURE    | : | Percentage of Natural Tourism Attraction Objects (per cent)                                    |
| CULTURE   | : | Percentage of Cultural Tourism Attraction Objects (per cent)                                   |
| ART       | : | Percentage of Artificial Tourist Attraction Objects (per cent)                                 |
| i         | : | Province i   |
| t         | : | Period t   |
| $\alpha$  | : | Intercept  |
| $\beta$   | : | Slope  |
| $e$       | : | Error  |

Source: Data Processed, 2022

## RESULTS AND DISCUSSION

Since 2016 to 2019, the tourism sector's contribution to the Indonesian economy increased, reaching the highest contribution in 2019 at 4,97 per cent. The COVID-19 pandemic in Indonesia has adversely affected the tourism sector's performance. The decline in tourist arrivals has impacted overall expenditures on tourism products, resulting in a decline in the

tourism sector's contribution to the Indonesian economy. In 2020, the tourism sector's contribution declined sharply, falling only 2,24 per cent, or 2,53 per cent, from 2019 (Figure 2). In 2020, the food and drink supply industry dominated the domestic tourism sector with 47.79 per cent, followed by accommodation at 15.42 per cent and air passenger transport at 11.34 per cent. The structural dominance of the tourism industry has not changed significantly between 2016 and 2019.



**Figure 2.** The Contribution of Tourism to Indonesia's Economic Growth

Source: BPS data processed, 2022

The first step in the research is to conduct a unit root test. This test is performed to determine if the variable under examination has a root of 1, indicating stationarity (no root of 1), or is nonstationary (has a root of 1). The purpose of conducting this test is to avoid spurious regressions, which may produce results that suggest a relationship between variables when there is none. The variables tested in this study are total domestic tourism expenditures and Indonesia's economic growth.

The unit root test is initially performed at the first level, and if the variable remains nonstationary (has a root of 1), further analysis can be conducted using the first or second difference of the variable. To determine if there is a root of 1, can examine the probability value (p-value) resulting from unit root test. The unit root test results in Table 3 show that the GROWTH and EXPD variables are stationary at the Levin, Lin & Chu (LLC) method and at the individual level using Phillips-Peron (PP) method.

**Table 3.** Result of Unit Root Levin, Lin & Chu and Phillips-Perron Test

| Method                 | GROWTH    |         | LOG(EXPD) |         |
|------------------------|-----------|---------|-----------|---------|
|                        | Statistic | Prob.   | Statistic | Prob.   |
| Levin, Lin & Chu t*    | -5,60904  | 0,0000* | -11,6452  | 0,0000* |
| PP - Fisher Chi-square | 112,437   | 0,0006* | 118,038   | 0,0002* |

Source: Data Processed, 2022

Note: \* Express rejection of unit root at the 1% significance levels

Cointegration tests determined long-term relationships between economic growth variables and total domestic tourism expenditure (EXPD). The results of the cointegration test using the Phillip Perron (PP) and Augmented Dickey-Fuller (ADF) methods show that the two variables are in a long-term relationship as determined by the probability ( $0,0001 < \alpha (0,05)$ ).

Determining the optimum lag uses several information criteria, the likelihood ratio (LR), final prediction error (FPE), Akaike information criterion (AIC), Schwartz information criterion (SC), and Hannan-Quinn information criterion (HQ). The best model has the lowest error rate. Based on Table 5, the optimum lag chosen was 3. This lag was used in the Granger causality test.

**Table 4.** Cointegration Test Results Between Domestic Tourism and Regional Economic Growth

| Method              | GROWTH    |         | LOG(EXPD) |         |
|---------------------|-----------|---------|-----------|---------|
|                     | Statistic | Prob.   | Statistic | Prob.   |
| Panel PP-Statistic  | -4,249107 | 0,0000* | -3,841358 | 0,0001* |
| Panel ADF-Statistic | -4,280907 | 0,0000* | -3,855817 | 0,0001* |

Source: Data Processed, 2022

Note: \* Express rejection of unit root at the 1% significance levels

**Table 5.** Result of Determining Optimum Lag

| Lag | LR        | FPE       | AIC       | SC        | HQ        |
|-----|-----------|-----------|-----------|-----------|-----------|
| 0   | NA        | 7,21e+21  | 56,00550  | 56,09529  | 56,03612  |
| 1   | 44,97622  | 2,14e+21  | 54,78995  | 55,05931  | 54,88181  |
| 2   | 43,78406  | 6,00e+20  | 53,51545  | 53,96438  | 53,66855  |
| 3   | 28,08989* | 2,70e+20* | 52,71038* | 53,33888* | 52,92471* |
| 4   | 1,537680  | 3,26e+20  | 52,88416  | 53,69224  | 53,15974  |

Source: Data Processed, 2022.

Note: \* selected optimum lag; NA: not available data

The next step is to perform a Granger causality test for variables that have a cointegrated relationship between variables and are stationary at that level. The results show a one-way relationship between Indonesia's total tourism expenditure and regional economic growth at the 5 per cent significance level. This proves that domestic tourism can impact Indonesia's regional economic growth. The results of this test are consistent with the TLGH theory, a research line by Balaguer (2002). The

TLGH theory states that tourism can be an essential factor in economic growth in the long run, affecting economic activity and creating a multiplier effect. This indicates that domestic tourism in Indonesia could become a policy focus within the Indonesian government's post-pandemic national economic recovery (PEN) efforts. The results of this study are consistent with Brida and Risso (2010), Hye and Khan (2013), Jalil et al. (2013), Al-Mulali et al. (2014), Wardana et al. (2019) and Tung (2021).

**Table 2.** Granger Causality Test Results

|   | F-Statistic | Prob.   |
|---|-------------|---------|
| LOG(EXPD) does not Granger Cause GROWTH | 8,26340     | 0,0001* |
| GROWTH does not Granger Cause LOG(EXPD) | 0,35111     | 0,7885  |

Source: Data Processed, 2022

Note: \* significance at the test level  $\alpha$  (1%)

The long-term regression between domestic tourism and Indonesia's economic growth is estimated using panel data regression. Hausman tests were used to determine the best model. The results of the Hausman test indicate

a probability value of 0.0000, which is below the 5 per cent significance level, leading to the rejection of  $H_0$ . This means that the FEM model is the best.

**Table 3.** The Best Model Selection Test Results for Model 1

|              | Hipotesis | Model 1        |
|--------------|-----------|----------------|
| Hausman Test | H0 : REM  | Prob > F (FEM) |
|              | H1 : FEM  | 0,0000*        |

Source: Data Processed, 2022

Note : \* significance at the test level  $\alpha$  (1%)

The results for panel data regression show that the domestic tourism variable (Log(EXPD)) significantly impacts economic growth. Increasing domestic tourism expenditures by 1 per cent increased economic growth by 2.36 per cent when *ceteris paribus*. The coefficient of determination (R-squared) of 0,89 indicates that 89 per cent of Indonesia's economic growth (GROWTH) can be explained in terms of total domestic tourism expenditures (EXPD). These

results follow research by Wardhana et al. (2019), Jacob (2019) and Tung (2021), but this contradicts the results of research by Suryandaru (2019) and Ramadhaniah (2020).

These results suggest that the domestic tourism sector may positively impact Indonesia's economic growth in the short and long term. Through strategic and comprehensive local-level tourism planning and development, domestic tourism can become Indonesia's primary source

of tourism expansion. Efforts to attract more domestic tourists need special attention from the government so that they can contribute to improving the Indonesian economy. This

empirical evidence shows that a domestic tourism development strategy to boost the Indonesian economy is an excellent long-term development plan.

**Table 4.** Results of Regression Estimation of Tourism Expenditure on Indonesia's Economic Growth

| Variable           | Coefficient | Prob.   |
|--------------------|-------------|---------|
| C                  | -46.994340  | 0.0000  |
| LOG(EXPD)          | 2.3676280   | 0.0000* |
| R-squared          | 0.889457    |         |
| Adjusted R-squared | 0.861617    |         |

Source: Data Processed, 2022

Note : \* significance at the test level  $\alpha$  (1%)

The Hausman tests are again used to determine the best model for testing the tourism determinants of total domestic tourist expenditure. Based on Table 9, the Hausman test shows a probability value of 0,0496 below the 5 per cent significance level. From the analysis,  $H_0$  was rejected, favouring the use of the FEM

model over the REM model. Based on the results of these two tests, it can be concluded that the fixed effects model (FEM) is the most suitable for examining the determinants of tourism in terms of total domestic tourist expenditure. The FEM model utilizes the section weighting method (EGLS) to address heteroscedasticity.

**Table 5.** The Best Model Selection Test Results for Model 2

|                     | Hipotesis   | Model 2        |
|---------------------|-------------|----------------|
| <b>Hausman Test</b> | $H_0$ : REM | Prob > F (FEM) |
|                     | $H_1$ : FEM | 0,0496**       |

Source: Data Processed, 2022

Note: \*\* significance at the test level  $\alpha$  (5%)

The results show that per capita income, number of ATMs and tourist attractions (both natural, cultural and artificial) positively impact the total expenditure of domestic tourists. Income per capita is a powerful indicator of an individual's ability to spend their income. Higher per capita income translates into more extraordinary shopping ability, leading to increased expenditures, including on domestic tourism (Hariyani, 2018; Muryani et al., 2020; Sahoo et al., 2022; Azzam, 2022; Hosseini and Akhlik, 2022). According to Mankiw (2009), increased income allows people to consume more variety.

The tourism attraction objective is the most effective pull factor with a coefficient of 12,8. Due to the large number of tourist attractions that can be visited, there are more

opportunities for local tourists to visit, and tourism expenditure is increased by conducting tourism visit activities to these objects, increasing tourism expenditure. These pull factors can be strengthened by providing better services and products that benefit the Indonesian economy. Many ATMs make it easier for domestic tourists to obtain cash, especially for tourism in remote areas. Generally, payment must be made in cash due to poor signal coverage in remote areas.

Moreover, the use of cash is more readily accepted at all levels of society. Easier access to cash increases tourist spending, which, in turn, affects domestic tourism expenditures. Simply procuring cash increases the amount of cash in circulation within the region, thereby improving the local economy.



**Table 10.** Estimation Results of Tourism Determinants of the total Consumption of Domestic Tourism

| Variable           | Coefficient | Prob.    |
|--------------------|-------------|----------|
| C                  | -1285,680   | 0,0107   |
| LOG(CAPITA)        | 1,990987    | 0,0001*  |
| LOG(PROMO)         | 0,005865    | 0,8433   |
| LOG(AKOMODASI)     | -0,010408   | 0,9602   |
| LOG(ATM)           | 1,558808    | 0,0263** |
| IHK                | -0,034703   | 0,0000*  |
| INET               | -9,36E-05   | 0,9859   |
| NATURE             | 12,79738    | 0,0112** |
| CULTURE            | 12,80289    | 0,0111** |
| ART                | 12,80081    | 0,0112** |
| R-squared          | 0,975670    |          |
| Adjusted R-squared | 0,967624    |          |

Source: Data Processed, 2022

Notes: \*significance at the test level  $\alpha$  (1 %), \*\*significance at the test level  $\alpha$  (5 %),\*\*\*significance at the test level  $\alpha$  (10%)

According to research by Yazdi and Khanalizadeh (2016) and Yakup (2019), the consumer price index (CPI) has a negative impact on total domestic tourism expenditures. CPI is the price of tourism in the destination area. The use of CPI indirectly considered the impact of inflation on the prices of goods and services in the target region (Yakup 2019). Domestic tourists spend less as the CPI rises because prices in destination regions rise. This also shows that domestic tourism expenditures are still based on prevailing destination goods and services prices.

On the other hand, the government's promotion of tourism, the number of accommodation facilities and the percentage of internet users do not affect the overall expenditure of domestic tourists. Although the government's promotion of tourism has not directly impacted the increase in tourism expenditures, it has impacted the increase in domestic tourist visits. The purpose of advertising is to present tourist information that is of interest to potential tourists, especially domestic tourists. This information can take the form of natural, cultural, or artificial tourism branding (Handayani, 2021). The number of accommodation facilities does not affect domestic tourism expenditures. This is probably

because the number of lodging facilities in each region is not evenly distributed, and judging tourism expenditures solely based on the number of lodging facilities may be misleading. Although rare, the activities of domestic tourists are still visiting relatives/family/close relatives and staying with relatives/close relatives (Yap, 2010). The percentage of internet users of origin does not affect tourism expenditures, as internet use is used not only for financial transactions but also for accessing information, knowledge, education, communication and entertainment. Because the study uses data from internet users in the region of origin, there are few financial transactions for tourism activities in the destination region.

An R-squared value of 0,975 indicates that 97,5 per cent of the variation in domestic tourism expenditures can be explained by variation in the independent variables.

## CONCLUSION

The study supports the Tourism-led Growth Hypothesis (TLGH), which implies that domestic tourism can long-term impact Indonesia's economic growth, especially on Indonesia's regional economies. Objects of tourist attraction (natural, cultural and man-made) in tourist destinations are the most

effective pull factors to positively influence domestic tourism. On the other hand, per capita income in the region of origin of tourists is the most effective driving factor for increasing domestic tourism in Indonesia. The availability of ATMs in tourist areas can affect the overall spending of tourists as they can quickly obtain cash for more tourist shopping transactions. Conversely, the number of accommodations available does not affect tourism expenditures. The consumer price index (CPI), which serves as a reference price for travel destinations, has a negative impact on domestic tourism. On the other hand, fluctuations in the proportion of individual internet users have no impact on the total domestic tourism expenditures.

Each state is expected to increase both local and per capita income, so the national framework facilitates a balance with increased domestic tourism expenditures. Programs that create jobs and develop micro, small and medium enterprises (MSMEs) can focus on increasing per capita income. These activities require the role of government a facilitator in their implementation. Tourist attraction objects are practical pull factors to increase domestic tourism expenditures.

To maintain the sustainability of these destinations, the government undertakes conservation, restoration, and infrastructure development of endowed natural and cultural attractions. Man-made tourist attractions, on the other hand, require extensive expansion and development, including playgrounds, gourmet tours, halal tourism, artificial forest tours, nature sports tourism, agricultural tourism, livestock tourism, etc. The availability of automated teller machines (ATMs) is a way for tourists to obtain cash. This makes it easier for tourists to spend money, especially in remote areas. Easier access to cash has increased domestic tourism expenditures and promoted cash circulation in local communities. Therefore, with the rapid development of digital banking, providing ATMs is still considered necessary.

Finally, local governments that benefit from tourism should increase the positive impact of tourism determinants to increase local tourism exports (tourism expenditures) to boost local

economic growth. More emphasis should be placed on

This study uses national data, so the analysis results are generally only available for the Indonesian region. Future research should be able to use regional data (particularly by state) to provide information on the relationship between regional economies and tourism and the determinants of tourism in each region.

## REFERENCES

- Al-Mulali, U., Fereidouni, H.G., Lee, J.Y.M., & Mohammed, A.H. (2014). Estimating the tourism-led growth hypothesis: A case study of the Middle East countries. *Anatolia: An International Journal of Tourism and Hospitality Research*, 25(2), 290-298. <https://doi.org/10.1080/13032917.2013.843467>.
- Azam, M. (2022). Microeconomic Determinants of Domestic Tourism Expenditure in India. *Discussion Paper Series*. ISSN: 2365-9793. Germany: IZA – Institute of Labor Economics.
- Balaguer, J., & Cantavella-Jorda, M. (2002). Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics*, 34, 877–884.
- Blake, A., & Cortes-Jimenez, I. (2007). The Drivers of Tourism Demand in the UK. *Tourism & Travel Research Institute*.
- Borrego-Domínguez, S., Isla-Castillo, F., & Rodríguez-Fernández, M. (2022). Determinants of Tourism Demand in Spain: A European Perspective from 2000–2020. *Economies*, 10(276). <https://doi.org/10.3390/economies10110276>
- Brida, J.G., & Risso, W.A. (2010). Tourism as a determinant of long-run economic growth. *Journal of Policy Research in Tourism, Leisure and Events*, 2(1), 14-28. <https://doi.org/10.1080/19407960903542276>
- Devi, I. (2022). Tourism and Economic Growth: Evidence From Asean Countries. *Journal Of Indonesian Applied Economics*, ISSN: 2541-5395, 10(2), 100-131.
- Dogru, T., Sirakaya-Turk, E., & Crouch, G.I. (2017). Remodeling International Tourism Demand: Old Theory and New Evidence. *Tourism Management*, 60, 47-55. <https://doi.org/10.1016/j.tourman.2016.11.010>.
- Gormus, S., & Gocer, I. (2010). The Socio-Economic Determinant of Tourism Demand in Turkey: A Panel Data Approach. *International Research*

- Journal of Finance and Economics*, 1450-2887, 55, 88-99
- Handayani, R.N. (2021). [*Tingkat Daya Saing dan Faktor-Faktor yang Memengaruhi Permintaan Pariwisata Indonesia di Pasar Potensial Asia*]. [Tesis]. Bogor (ID) : Institut Pertanian Bogor.
- Hariyani, H.F. (2018). Tourism Sector Performance on Indonesia's Economic Growth. *Jurnal Ekonomi Pembangunan*, 169,01.
- Hosseini, S.A., & Akhlik, M.R. (2022). Identifying the factors affecting tourism expenditure with emphasis on the family life cycle. *Journal of Urban Tourism*, 9(2). <https://doi.org/10.22059/JUT.2021.324257.905>
- Hye, Q.M.A., & Khan, R.E.A. (2013). Tourism-led growth hypothesis: a case study of Pakistan. *Asia Pacific Journal of Tourism Research*. 18(4), 303-313. <https://doi.org/10.1080/10941665.2012.658412>.
- Jalil, A., Mahmood, T., & Idrees, M. (2013). Tourism-growth nexus in Pakistan: evidence from ARDL bounds tests. *Economic Modelling*, 35, 185-191. <https://doi.org/10.1016/j.econmod.2013.06.034>
- Khadaroo, J., & Seetanah, B. (2008). The Role of Transport Infrastructure in International Tourism Development: A Gravity Model Approach. *Tourism Management*, 29, 831-840. <https://doi.org/10.1016/j.tourman.2007.09.005>
- Kyophilavong, P., Gallup, J.L., Charoenrat, T., & Nozaki, K. (2018). Testing tourism-led growth hypothesis in Laos?. *Tourism Review*. ISSN: 1660-5373, 73(2), 242-251. <https://doi.org/10.1108/TR-03-2017-0034>.
- Lee, CG. (2021). Tourism-led growth hypothesis: International tourism versus domestic tourism- Evidence from China. *International Journal of Tourism Research*. 23, 881-890. <https://doi.org/10.1002/jtr.2450>.
- Leitao NC. (2015). Portuguese Tourism Demand: A Dynamic Panel Data Analysis. *International Journal of Economics and Financial Issues*. 5(3):673-677.
- Mahiroh, G. (2019). [*Analisis Hubungan Sektor Pariwisata terhadap Pertumbuhan Ekonomi Indonesia*]. [Skripsi]. Malang (ID) : Universitas Brawijaya.
- Mankiw, N.G.. (2009). *Macroeconomics*, 7th Edition. Worth New York.
- Mariyono, J. (2017). Determinants of Demand for Foreign Tourism in Indonesia. *Jurnal Ekonomi Pembangunan*. ISSN 1411-6081. E-ISSN 2460-9331, 18 (1), 82-92.
- Massidda, C., & Etzo, I. (2012). The Determinants of Italian Domestic Tourism: A Panel Data Analysis. *Tourism Management - Tourism Manage*, 33, 603-610. <https://doi.org/10.1016/j.tourman.2011.06.017>.
- Mazumder, M.N., Sultana, M.A., & Al-Mamun, A. (2013). Regional Tourism Development in Southeast Asia. *Transnational Corporations Review*, 5(2), 60-76. <https://doi.org/10.5148/tncr.2013.5205>
- Mukaffi, Z. (2022). [*Tinjauan Analitis Studi Permintaan Pariwisata Periode Tahun 2000- 2021*]. *Jurnal Cendekia Ilmiah*. ISSN : 2828-5271, 1(3), 160-168.
- Mursalina, Masbar, R., & Suriani. (2022). Impact of Covid-19 Pandemic on Economic Growth of the Tourism Sector in Indonesia. *International Journal of Quantitative Research and Modeling*. p- ISSN 2722-5046, 3(1), 18-28.
- Muryani, Permatasari, M.F., & Esquivias, M.A. (2020). Determinants of Tourism Demand in Indonesia: A Panel Data Analysis. *Tourism Analysis*. E-ISSN 1943-3999, 25, 77-89. <https://doi.org/10.3727/108354220x15758301241666>.
- Noonan, L. (2022). The Role of Culture as A Determinant of Tourism Demand: Evidence From European Cities. *International Journal of Tourism Cities*. ISSN 2056-5607, 9(1), 13-34. <https://doi.org/10.1108/IJTC-07-2021-0154>.
- Ramadhaniah MA. 2020. The Role of Tourism in The Indonesian Economy. *Jurnal Riset Pembangunan*, 2(2), doi: <https://doi.org/10.36087/jrp.v2i2.60>.
- Sahoo, B.K., Nayak, R., & Mahalik, M.K. (2022). Factors Affecting Domestic Tourism Spending In India. *Annals of Tourism Research Empirical Insights*, 2666-9579. <https://doi.org/10.1016/j.annale.2022.100050>.
- Seetanah. (2011). Assessing The Dynamic Economic Impact Of Tourism For Island Economies. *Annals of Tourism Research*, 38(1), 291-308. <https://doi.org/10.1016/j.annals.2010.08.009>
- Suryandaru R. (2019). Measuring Tourism-Led Growth Hypothesis In Indonesia. *International Journal of Culture, Tourism and Hospitality Research*. ISSN: 1750-6182. 14(2), 295-300. <https://doi.org/10.1108/IJCTHR-03-2019-0055>.
- Taupikurrahman. (2019). Positioning Pariwisata Indonesia Di Asean: Pendekatan Jumlah

- Kunjungan Dan Pengeluaran [Thesis]. Bogor (ID) : Institut Pertanian Bogor.
- Tung, L.T. (2021). The Tourism-Led Growth Hypothesis In Transition Economies? Empirical Evidence From A Panel Data Analysis. *Geojournal Of Tourism And Geosites*, 38(4), 1076–1082. <https://doi.org/10.30892/Gtg.38412-746>.
- Wamboye, E.F., Nyaronga, P.J., & Sergi, B.S. (2020). What are the determinant of international tourism in Tanzania?. *World Development Perspectives*, 2452-2929. <https://doi.org/10.1016/j.wdp.2020.100175>.
- Wardhana, A., Kharisma, B., & Stevani, M. (2019). [*Dampak Sektor Pariwisata Terhadap Pertumbuhan Ekonomi (TLG Hipotesis, Studi Kasus : 8 Negara Asean)*]. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*. [diakses 30 Mei 2022]. ISSN : 2337-3067. 8(10):1193-1208. doi: 10.24843/EEB.2019.v08.i10.p04
- Yakup, AP. (2019). [*Pengaruh Sektor Pariwisata Terhadap Pertumbuhan Ekonomi Indonesia*].[Tesis]. Surabaya (ID): Universitas Airlangga.
- Yazdi, S.K., & Khanalizadeh, B. (2016). Tourism Demand: A Panel Data Approach. *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2016.1170772>